

## Housepit 90 Excavations

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### **Introduction**

As part of the program at Keatley Creek to examine the difference between small and large housepits, HP 90 was selected for extensive excavation as an example of a smaller housepit. HP 90 is about 7 m in diameter, and is situated on the northwest periphery of the site core, adjacent to HP 89 (**Figs. 1 and 2**--see also This Volume, Preface, **Fig. 1**). In addition to its small size, HP 90 was selected for excavation because preliminary tests showed that it was a single occupation structure, uncomplicated by crosscutting building events or other occupations. Such single occupations occur most frequently on the site periphery. Moreover, the floor deposits in HP 90 were relatively easy to distinguish, and although no diagnostic artifacts were recovered from the initial test, it was hoped that the occupation would be Kamloops in age given the relatively fresh appearance of artifacts and interior pit slopes and the recovery of what appeared to be a Kamloops point preform from the bottom of the roof deposits. This hope was to be subsequently dismissed as evidence of a Plateau horizon age emerged after most of the housepit had been excavated. We subsequently obtained a radiocarbon date of 1410 ±60 BP from a roof beam laying on the floor (Vol. I, Chap. 2). Given the age of a large roof timber at the time of cutting, the actual occupation age may be closer to 1,300 BP. However, in spite of the fact that the HP 90 occupation was not strictly contemporaneous with the Kamloops floors of the other

excavated housepits, this structure is still of interest in terms of understanding variations in households during the previous Plateau period.

### **Stratigraphy**

The surficial, roof, and floor deposits of HP 90 exhibited considerable variation within each strata. The following discussion relates to the most common characteristics.

#### **Stratum I and III**

These strata (**Fig. 1**) are moderately compact, light brown (10 YR 4/2) sandy silt with less than 5% pebbles and cobbles. These deposits become more pebbly upslope as one approaches the rim, and are more finely sorted toward the middle of the structure, indicating that these sediments are largely washed and sorted materials originating from roof deposits possibly enriched with aeolian silts. Stratum I differs from III only by the presence of a root matting. In general, few or no cultural materials are associated with these strata.

#### **Stratum II**

This stratum constitutes the floor deposits, which are generally darker (blackier) than overlying roof or surface deposits, especially near the walls of the structure where this stratum becomes soft, black (10 YR 2/1) and charcoal rich with a markedly lower level of pebbles and cobbles (less than 20%), but a high silt content (50–70%) and little sand or clay. Toward the center of the house, the floor becomes more gravelly and more compact, and the color approaches that of the roof deposits (Stratum V). In general, few artifacts

occur on the floor, although some concentrations occur near the walls. In fact, almost all of the unusual artifacts from HP 90 were recovered from near the walls, frequently associated with "dump" deposits. These artifacts included: a sandstone abrader with a bone awl lying directly underneath, fragments of another abrader, a short nephrite adze that had sustained significant damage to the cutting edge, a large piece of a broken sculpted maul, a beaver tooth, an ochred flat stone, two bifaces, two cores, an endscraper, clusters of large flakes laying on top of each other, some large sized retouched flake tools, and a charred broken piece of worked wood. The distribution of these and other significant artifacts are shown in **Fig. 2**.

The fact that many of these items were broken or heavily damaged (such as the adze), as well as the peripheral location of these objects and their association with rich organic dumps, all strongly indicates that these items were placed in storage or provisional discard locations, very probably under bench platforms that extended around the perimeter of the floor inside the structure. This aspect becomes significant when analyzing the nature and meaning of the "dump" deposits, which I shall discuss next. Some of the more useful items recovered from the peripheral "storage" area, such as the nephrite celt and the bone awl, may have been obscured by dirt or refuse and forgotten about at the time of abandonment.

Small dump-like mounds rich in charcoal, beams, charred twigs, but little else occur close to and usually parallel to the walls. Precisely what these accumulations represent is not clear. They may be hearth sweepings thrown underneath sleeping platforms, although the rarity of gray ash and the long segments of charred wood and twigs make this seem doubtful. The only other apparent explanation is that these accumulations rich in particulate

charcoal may have resulted from the burning of the house, either as organic material that was stored near the walls and subsequently burned when the house was burned, or, less probably, as combustible material that was placed against the wall of the structure in order to burn it down.

The body of these “dump” deposits rarely seemed to contain artifactual materials; artifacts only seemed to be found at the base of these deposits within 1-2 cm of the floor. One important exception to this pattern was the occurrence of what appeared to be a Shuswap point blank at the interface of the top of a dump and the bottom of the roof deposits in Square I, Subsquare 6. Given the later point styles associated with this housepit and the short nature of the single occupation that is evident, it seems that this point either was being recycled or was incorporated by chance from a previous Shuswap occupation in the general vicinity of the housepit, or that it is not in fact a Shuswap preform. The recovery of a typical Shuswap point from a till-colored section of the roof (Stratum VB) strongly indicates that HP 90 was excavated at a location where a previous Shuswap occupation had existed and that some of the Shuswap artifacts were removed during the excavation for the housepit and subsequently incorporated in the roof and perhaps other deposits of HP 90.

The pebble and gravel content of the dumps (10–20% with no cobbles except those immediately associated with the floor) was much more similar to the floor deposits than to the roof deposits. Given the lack of orientation of the small wood elements that are so abundant in these deposits (**Fig. 2**), and the very “greasy” black aspect of the bulk of the deposits, it seems likely that these “dump” areas were serving as storage zones for small kindling as well as for other bulky types of “soft,” easily combusted organic materials,

such as bundles of sage brush bark for clothes or reeds for mats. If these dumps were, in fact, bundles of stored organics, kindling, and miscellaneous stored items, it indicates two important things. First, it indicates that there was undoubtedly some sort of platform above the storage area, such as the sleeping platforms recorded ethnographically (vol. II, Chap. 2). The presence of a number of large cobbles, evenly spaced and sometimes upright in this same zone (**Fig. 2**) also seems to indicate some sort of support system for a low platform, perhaps no more than 15–25 cm high. The second important indication is that these dumps appear to occur in a more or less continuous fashion around the entire floor periphery, except in the zone immediately in front of the side entrance (**Fig. 2**). This indicates that benches or sleeping platforms would also have been more or less continuous around the entire perimeter of the floor. This contrasts with the patterning implied in the deposits of HP 9, where platforms seem only to occur on one half side of the floor (Vol. II, Chap. 6; Vol. III, Chap. 7).

The very unique kinds of deposits represented by these black, greasy dumps seem to be especially characteristic of smaller housepits such as HP 90 and HP 9. Their occurrence may therefore be related to some economic aspect of small housepit residents (perhaps the heavy reliance on sage brush bark clothing and blankets in poorer houses versus the furs and buckskin clothing and blankets used in larger, richer houses), or to the tighter structural constraints on storage space in the smaller housepits (bundles of organics being stored under platforms in the smaller houses instead of overhead racks in the larger housepits).

Sometimes, extending up from the dumps against the walls, was a steeply sloping deposit that seemed in places almost to be plastered against

the wall (in Sq. E, Ssq.'s 12, and 16, and Sq. I, Ssq. 4). This may represent accumulations on the walls from material filtering through the roof over time, or, more likely, soil that trickled down the wall from points higher up. Or, it may be a form of crude plastering meant to prevent the walls from eroding. Occasional accumulations of this type of material at the base of the walls seems to indicate a trickling down or sloughing off of higher deposits as the most likely origin.

### **Stratum V**

This stratum comprises dirt placed on the roof for insulation. The stratum is a gravelly silty loam that varies in compactness from extremely loose to extremely compact pockets. Compactness increases markedly upon drying the soil, indicating possible accumulation of carbonates over time, and thus a considerable age for roof deposits. Color and artifact content both vary considerably. Color ranges from medium gray (10 YR 5/2) to brown (10 YR 5/3) depending on the origin of material thrown on the roof. In some parts of the roof deposits near the rim, it was possible to distinguish several distinct types of deposits, although in areas closer to the center of the house, such discrimination was generally not possible. At the top of the wall in Square E, Subsquare 12, there was a compact loessic deposit that resembled the fine surface silts that occur in the area today. This appears to represent the original *in situ* surface. Above this silt were much looser, more gravel and pebble rich brown sediments that resembled undisturbed till deposits in every respect except their looseness. No artifacts or charcoal were recovered from these deposits. They appear to be redeposited till, probably dug out

from the center of the housepit when it was originally excavated and used for covering the base of the roof.

### **Stratum VA**

In some places it was possible to subdivide the roof deposits. Near the walls it was usually possible to distinguish slightly darker till-like deposits of the upper roof that sometimes had lenses, pockets, or mottled areas of darker sediments. These deposits were referred to as Stratum VA.

The concentrations of large gravels and pebbles tended to vary from 25–35%, with about 5–15% cobbles; but in both VA and VB, localized areas (e.g., Sq. I, Ssq. 10) reached remarkable levels of 50% pebbles and 30% cobbles, the latter areas being like veritable rock dumps. Whether the dark color was a product of anthropogenic staining from refuse discard and mixing, or whether it derived from surface till that was stained dark brown by natural organic processes is difficult to determine; in the field, we assumed that it was anthropogenic.

Since Stratum VA could be difficult to distinguish from the overlying colluvial deposits of Stratum VI, there may be some question as to whether Stratum VA was, in fact, part of the roof or whether it was colluvium that subsequently washed in after the collapse of the roof. In addition to the dispersed occurrence of artifactual material in Stratum VA that indicates a cultural origin, a clear distinction could be observed between the two deposits in a number of areas, especially near the north wall. In some cases, flakes seemed to lay in clusters on the top of Stratum VA as though it had been a surface (Sq. I, Ssq. 4) and there were small ash dumps at the top of the deposits near the rims (Sq. I, Ssq. 4). It was also observed that tree and

shrub roots often followed the contact between Strata VA and VI (Sq. E, Ssq. 12; Sq. F, Ssq. 4; Sq. H, Ssq.'s 3, 5, and 7), and in a number of cases large rocks, such as those frequently associated with the upper parts of roofs (used for roof beam braces or anchors), were observed at the top of Stratum VA (e.g., Sq. H, Ssq. 5). Moreover, flakes from a distinct type of brown chert occurred at multiple levels within the roof deposits of some squares (e.g., Sq. I, Ssq. 3), indicating not only that these deposits formed a unified depositional unit, but also that some churning of the roof had taken place such as might be expected from at least one re-roofing event.

### **Stratum VB**

We called the relatively light-colored basal part of the roof, Stratum VB. It had a relatively high gravel and pebble and cobble (25-30%) content. Stratum VB was also unusually unconsolidated in most areas and could strongly resemble redeposited till (e.g., Sq. G, Ssq. 12). Artifactual material including charcoal fragments was not abundant, but it was clearly present. In some areas (Sq. F, Ssq.'s 8, 12, and 16; and Sq. H, Ssq. 1), large charred pieces of wood extended into this stratum, probably representing roof beams that only partially collapsed when the structure was burned. This stratum seems to represent an initial roof covering which may have been cycled through at least one re-roofing event given the scattered occurrence of artifacts throughout the deposit and the slight discoloration throughout most of the deposit. There were a number of instances where lenses of black charcoal, gray ash, flakes, cobbles, and even lighter till occurred at the top of

Stratum VB and clearly separated it from the overlying Stratum VA (e.g., Sq. F, Ssq.'s 4, 11, and 12; Sq. H, Ssq.'s 1, and 2; Sq. K, Ssq. 13; and Sq. I, Ssq. 2). These instances are important because they clearly showed that there were two separate depositional events comprising the roof deposits and that the surface of Stratum VB was exposed long enough to accumulate a number of dumped ash or other deposits.

### **Stratum VI**

In other areas, there was only a gradual transition from Stratum VI to VA. Stratum VI was interpreted as colluvium that had been washed into the housepit basin by episodic heavy rains. Housepit 90 is, in fact, situated in the bottom of a shallow ravine with a considerable catchment area upslope (Vol. III, Preface, **Fig. 1**). Stratum VI deposits are thickest and most distinct near the north wall of the housepit, which is the upslope side of the housepit where water would have entered. Stratum VI deposits are notable for their high sand and gravel content (30–50%) and somewhat lower pebble content (20–30%), although sorting such as that which occurs with substantial flows of running water is not evident. The color of Stratum VI is dark brown, and no anthropogenic origin is suspected here; the dark color most likely derives from the sheet wash of brown colored surface soils in the catchment area and their deposition in HP 90. Lithic artifacts were extremely rare in this stratum. A relatively large boulder (greater than 30 cm) was uncovered at the surface of Stratum VI in Square F, Subsquare 4. This most likely was associated with the early historic occupation that occurred in the overlying deposits of Stratum III.

### **Stratum X**

Stratum X is perhaps the most enigmatic of the strata in HP 90. It occurs at the summit of the wall in the north part of the house at a place where the wall dips down more than elsewhere. Stratum X seems to extend out beyond the house onto a paleosurface. It was dark brown, but not as dark as the floor deposits, and it contained moderate numbers of organic, bone, and lithic artifacts. The pebble and large gravel content was relatively high (40%) and the cobble content was also elevated (20%). We initially thought that this might represent a storage alcove extending out the side of the house, since Stratum X seems to be draped over the top of the north wall. However, a more probable explanation is that Stratum X represents soil and refuse gathered from the surrounding area and deposited in the base of the ravine in order to prevent water from flowing against the base of the roof, or to divert flowing water away from the base of the housepit roof. The dip in the wall might then represent the bottom of a very shallow erosion channel at the base of the shallow ravine.

### **Till Stratum**

This stratum is a brown (10 YR 5/3) pebbly/silty loam till which appears sterile in most locations, although some flakes were recovered from more silty, loess-like capping deposits. A Shuswap period point from the till-colored sections of the roof deposits (Stratum V–**Fig. 1**), also indicates that the area around the housepit was used in Shuswap or earlier times.

### **Cultural Remains**

There are four distinct deposits of cultural remains represented in the excavations. Two occur in the surface colluvium, one constitutes the pithouse remains, and one appears to be from a pre-housepit occupation.

The most recent occupation is associated with hearth Feature 1, represented by ash and fire-reddened deposits within the surface colluvium (Stratum III) 7–15 cm below surface. Both basalt flakes and pieces of weathered, thick, flaked bottle glass are present, indicating an early historic occupation. Several pieces of thick buckskin and mammal bone were also associated with this occupation. The localized distribution of these materials (each about 2 m<sup>2</sup>), their stratigraphic position, their sparse quantity, and their nature indicate that they are the remains of a temporary encampment by a few people, possibly, for example, a nineteenth century hunting party.

Another similar type of occupation is represented by Hearth Feature 2 (15–20 cm BS) which is probably associated with an unusually rich cluster of fine chert end scrapers, scrapers, and flakes 20–23 cm below surface in Subsquare 2 of Square A. The exotic nature of this unusual assemblage and the calcined bone associated with Hearth Feature 2 seem to indicate that this occupation was a hunting campsite. This occupation appears to be prehistoric since no European artifacts were present and also appears to have taken place considerably after the abandonment of the housepit, given the 10–20 cm of colluvium that accumulated between the collapse of the pithouse and this occupation. Although no time-diagnostic artifacts were associated with this occupation, a Kamloops period occupation seems highly probable.

The housepit occupation itself involved few diagnostic artifacts, or few artifacts or flakes of any kind for that matter. Bone was particularly scarce. Initially, what looked like a Kamloops point preform recovered from the roof bottom led us to suspect a Kamloops occupation. The recovery of an asymmetrical drill stem from Pit Feature 3 reinforced this impression. However, subsequently, a large corner notched Plateau horizon point was recovered from the floor in Square D, and another similar point was recovered from the roof surface of the same square. These occurrences, together with the indurated nature of some of the deposits, now make it seem more likely that the last occupation of the housepit floor took place during the late Plateau period.

The earliest occupation represented in these excavations appears to have been an activity area or an encampment on the original till and loessic land surface. Some flakes and scrapers in the yellow aeolian and till deposits in Squares A and D testify to this occupation, while a Shuswap period point found in till-like lenses of roof deposits in Square B (**Fig. 1**) and a Shuswap preform seem to indicate that at least part of the pre-housepit occupation took place in the Shuswap period. No microblades were recovered or any other artifacts that might indicate an earlier occupation.

### **Features**

The two post-housepit hearth features have already been discussed in the preceding section. No clear hearth feature could be discerned on the housepit floor, although one may have existed in the rock-filled area of Pit Feature 1, or in the southwest corner of Square D where there is a slight concentration of fire cracked rock on the floor. The lack of more definite

evidence for an internal hearth such as fire-reddening of the underlying till, or a charcoal accumulation, is enigmatic and will be discussed further in the section on social and economic interpretations.

### **Pit Feature 1**

Pit Feature 1 is a shallow (10 cm) elongated and irregular rock filled basin that extends beneath the floor in the center portion of the house (**Fig. 2**). It is over 2 m long and 0.6–1.0 m wide. Few of the rocks are fire cracked and they range in size from small pebbles to cobbles, which makes it seem unlikely that this feature was a roasting pit. The matrix around the rocks is generally indistinguishable from floor deposits. The size, shape, and nature of fill make the function of this feature problematical. It may simply have been a pre-existing depression (perhaps at the bottom of the erosion channel) that was filled in to level out the floor, or it may have been created for greater heat retention in the hearth area. It may also have been created as a cobbled surface over damp or wet portions of the floor (especially if seepage along the old drainage channel was a problem) or for drying skins or foods, which gradually filled with floor sediments. I suspect that water seepage was the major problem leading to this feature.

### **Pit Feature 2**

Pit Feature 2 is a small basin shaped pit, 20 cm in diameter and 12 cm deep (**Fig. 2**). The lower boundaries are very diffuse, grading into brownish

stains. This may indicate use as a small indoor latrine, or perhaps it was used as a small boiling pit.

### **Pit Feature 3**

Pit Feature 3 is a possible deep, conical shaped pit, about 60 cm in diameter and 60 cm deep (**Fig. 2**). An asymmetrical drill base was recovered at 82 cm below surface (about 40 cm below floor level), which was initially felt to be most likely from the Kamloops period. The boundaries of this feature were very diffuse, grading into brownish stained areas in the till. It is not clear whether this might be from use as an indoor latrine, or whether some natural staining from water percolation associated with water flows in the bottom of the shallow ravine or other disturbance was responsible. Similar staining was found to underlie apparently sterile till deposits in the northern parts of Squares A and D. Although occasional flakes were present in this material, the stained areas spread out in sheet-like and amorphous forms, indicating some sort of natural formation which has not previously been encountered at the site. I suspect root activity may be one factor involved. The occasional flakes may be redeposited from the pre-housepit occupation.

### **Pit Feature 4**

Pit Feature 4 is a small, slightly bell-shaped pit, 30 cm in diameter and 20 cm deep near the center of the house. It is of a size and nature to have possibly been used for caching personal tools, stone raw materials, or small quantities of food.

### **Pit Feature 5**

Pit feature 5 was a shallow pit in Square C, later determined to be a rodent burrow.

### **Pit Feature 6**

Pit Feature 6 may be related in a similar fashion to the drainage problems of HP 90, although it is not clear at this point to what extent this unique occurrence really constitutes a feature. As described in the discussion of Stratum X, the north wall of HP 90 exhibits a significant dip as though the top part of the till had been cut away to make a shelf or an alcove. However, the surface of this area is irregular, sometimes fire-reddened, exhibits no clear boundaries, and is filled with a dark artifact bearing soil (Stratum X) and notable clusters of cobbles and pebbles. Time did not permit the full exploration of this surface, and the lack of clear boundaries made it seem likely that such exploration would not resolve the issue. At this point, given the location of this surface at the bottom of the shallow ravine along the line of flow of surface water, it seems most likely that this "cut away" area was the original pre-occupation erosion channel. In fact, builders of HP 90 may have chosen this site because runoff water had already partially cut into the till thus, builders would have only had to expand nature's original excavation to the sides in order to create the excavation for their house. If this was the case, they appear to have deposited Stratum X, perhaps in the course of a re-roofing event, in order to fill in the original runoff channel and divert any water away from the structure. Other structures built in similar environments were far less lucky and quickly filled up with fluvial sediments (e.g., HP 119).

## **Entrances**

There was a noticeable dip in the west rim of HP 90. At the time excavations began, it appeared that this might simply be fortuitous or caused by foot traffic through the area after the collapse and abandonment of the structure. However, as we began to expose the western interior wall of the house, it seemed that the wall began to curve toward the depression in the rim. At that point, we suspected the presence of a side entrance. Subsequent excavation confirmed the presence of a side entrance, and architectural modeling (Vol. II, Chap. 15) made it clear why side entrances should be expected in most small housepits. Similar dips in the rims of other small housepits (e.g., HP's 6, 9, and 12) also occur but have never been systematically explored to determine if they too represent side entrances, which now seems likely. Similar dips in the rims of large housepits (e.g., HP's 5, and 7) may also represent more elaborate entrance arrangements. At this point, however, the side entrance of HP 90 is the only confirmed side entrance in any of the housepits at Keatley Creek.

The side entrance of HP 90 is surprisingly narrow (**Fig. 2**), although this might be expected in order to conserve heat. At the bottom of the entrance passage, a rock fill had been deposited, probably either because the passage had become worn down through use (indicating a relatively long use of the structure), or perhaps as a preventive measure to avoid the wearing down of the passage or the tracking in of mud, or possibly because the passage had been excavated too deeply to begin with. Future excavation of side entrances should indicate whether such rock fills were regular features of side entrance construction in small housepits. The passage appears to have been quickly filled in by a single or continuous depositional event shortly

after the abandonment of the structure. This may simply be roofing soil that was pulled down around the rim or which slid down to the rims as the roof burned.

### **Beams, Post-holes, and Abandonment**

As in some other housepits such as HP 7, there appear to be a number of small post-holes, ranging from 3–8 cm deep that were used to put up internal divisions, racks, or benches in HP 90. These tend to occur within 2 m of the house wall and sometimes appear to be paired. However, no further patterning is apparent, particularly since many post-holes are only tentatively identified as such (dotted double circles). A number of relatively large, flat cobbles also occur near the southern and northern walls (**Fig. 2**). Some thicker rocks were placed upright; these stones lie directly on the till and appear to have been purposefully put in place. This, and their more or less regular spacing of just over a meter apart, may indicate use as pole supports. Surprisingly, there is only one post-hole that seems as though it may have held a central supporting post, although even this is far from certain. Thus, as indicated by the architectural analysis in Volume II, Chapter 15, post-holes may not have been used for central roof supports in smaller housepits, or perhaps fewer were used than the four ethnographically reported central posts.

As with most other housepits at the site, HP 90 was burned after abandonment. The sparse remains on the floor, the charcoal accumulations against the walls, the lack of charred *in situ* posts or human remains, all indicate that the abandonment and burning were intentional and not due to accident or raiding. Usable posts were undoubtedly salvaged as well as

other useful wood. Unfortunately, burning was relatively complete and left too few charred beams from the roof or internal structures to provide information about the construction details. As also occurs in other housepits, localized fire-reddening of the housepit walls was frequently found, indicating a particularly intense burning in these areas. In fact, burning of the structures most probably began along the walls, where the roof would have been closest to the floor and easiest to ignite. Brush, and old household furnishings may have been piled against the walls for the purpose of igniting the roof.

### **Internal Use of Space**

Aside from the large rock-filled basins (Pit Feature 1), and possible indoor latrines (Pit Features 2 and 3), the only indications of the internal use of space involves postulated sleeping platforms along the house walls with their storage and provisional discard spaces under them. These may have been supported by upright poles lashed to roof supports at the top and placed in small post-holes on the floor. Alternatively, they may have been supported by flat or upright rock slabs, or they may have simply been poles placed horizontally on log segments as illustrated by Teit (1906:214). Whatever the case, the floor deposits within 1 m of the walls tend to be distinctively thicker, softer, and darker often with "dump" morphologies, compared to the lighter, more compact, and more gravelly deposits in the center of the house. This indicates different depositional environments, consistent with the notion of protected areas underneath a wood platform or bench along the walls. As previously discussed, the areas underneath such sleeping platforms are typical locations where infrequently used,

provisionally discarded items, or items of little worth are stored and left upon intentional abandonment of households. Thus, the occurrence of a number of broken or inadvertently covered stone and bone tools in this area is also consistent with the notion of wooden platforms existing along the walls.

### **Length of Occupation**

In order to assess the relative social and economic standing of the residents of HP 90 in the Keatley Creek community it is necessary to form some idea of the length of time that this housepit was occupied, since artifact accumulation is both a function of length of occupation and socioeconomic position (e.g., Hayden and Cannon 1984). There are several indicators of length of occupation, including: artifact densities; the density of pits and post-holes, and overlapping occurrences of these; staining and homogeneity of roof material; occurrence of artifacts throughout roof deposits indicating recycling of roof deposits and thus re-roofing; depth or development of floor deposits, and finally; the nature and size of the structure itself.

From the outset, one would not expect a family to undertake the considerable labor required to excavate into hard till surfaces, to fell and transport the trees and brush necessary to build a roof, and to pile dirt on roofing, all for a single or several winters' use. Housepits were major constructions meant to last for a substantial number of years. Poorer or transient families probably erected simpler, smaller mat lodges for a single or several seasons' residence, just as the pre-housepit residents of Keatley

Creek must have done. Thus, the nature of the structure alone, leads one to expect an occupation on the order of at least a number of years.

Other indicators in HP 90 are consistent with this notion. Lenses and major divisions within the roof deposits have maintained considerable coherency and definition (**Fig. 1**), indicating that the roof collapse did not result in extensive mixing or homogenization of materials in the roof deposits. Thus, while the thick lenses of till that were thrown onto the base of the roof indicate little recycling (therefore re-roofing) history for some of the roof deposits, the homogenized and organically stained nature of the vast majority of the roof deposits indicate that HP 90 underwent a number of re-roofing episodes. Subjectively, given the nature of this mixing, I would suspect that one to three re-roofing episodes might be involved. The occurrence of sporadic artifacts throughout the roof deposits, conforms to the notion of recycled, homogenized roof deposits especially where flakes from distinctive lithic sources appear in several different levels of roof (see Stratum V). The sparse number of internal pits, post-holes, and the lack of intersecting features also tend to support the idea of a comparatively short occupation span for this housepit. Given all these indicators, and assuming roofs lasted about 10–20 years, I feel that it is not unreasonable to think in terms of an occupation spanning the lifetime of one family or even an extended family, i.e., about 10–30 or more years. Unfortunately, the mixing of some pre-existing Shuswap remains in the roof deposits may have led to inflated impressions of the number of re-roofing events involved, the degree of mixing in the roof deposits, and the total length of occupation of the structure.

### **Socioeconomic Standing**

One of the most striking results from the Coxoh Ethnoarchaeology Project that I undertook in traditional Maya villages, was the extreme paucity of material items in the poorest households (Hayden and Cannon 1984). I initially suspected that small housepits at Keatley Creek would be the poorest economically and artifactually. While the occupation of HP 90 appears to occur at an earlier period than the Kamloops floor deposits that have so far been extensively excavated in other housepits, the sparse lithic and even sparser faunal remains from the excavation are consistent with the idea that the occupants were relatively poor, given an occupation on the order of 10–30 years. The very few fish bones recovered from the housepit, as well as the lack of salmon storage pits, seem to indicate limited access to salmon, while the equally limited amount of mammal bone suggests an equally limited access to the more highly prized hunted foods. Despite the occurrence of a badly flawed and damaged nephrite adze and a sculpted maul fragment (which may have been scavenged or obtained at low cost), and a single obsidian flake, the overall impression from this household is one of poverty, even taking into consideration the limited occupation span. A small piece of mica recovered from the roof may be associated with the house occupation or the previous Shuswap occupation. In my Mayan ethnoarchaeological investigations, it was relatively common to find broken or badly damaged prestige items in relatively poor households because these items had been scavenged by household children or obtained as items of little worth from wealthier households.

### **Faunal Remains**

Housepit 90 is particularly notable on account of its extreme paucity of faunal remains, except for those associated with its post-housepit occupations. In the surface strata (I and III), large mammal bones, probably all deer, are associated with both hearths occurring in these strata. Hearth Feature 1 (containing historic artifacts) contained 79 burned mammal bones. Hearth Feature 2 (a very late prehistoric, post-housepit occupation) contained 36 burned mammal bones. Other bones recovered from Stratum III near these hearths included five deer, two artiodactyl, four large mammal, and three unidentifiable mammal bones.

The roof deposits of HP 90 (Stratum V) in their entirety, only contained two pieces of antler (one elk and one artiodactyl), 14 unidentifiable mammal bones, and three salmon vertebrae.

Even fewer bones were recovered from the floor deposits (Stratum II). These consisted of seven mammal bones, two salmon vertebrae, and three bone artifacts consisting of two bone awls and a "knife."

A surprising number of bones were recovered from the fill matrix of Pit Feature 1, which otherwise only contained rocks filling a shallow depression. A deer ulna and six unidentified mammal bones were recovered from this feature.

### **Figures**

Figure 1: Stratigraphic cross sections of HP 90.

Figure 2: Floor plan of HP 90.

### **References**

Hayden, Brian, and Aubrey Cannon

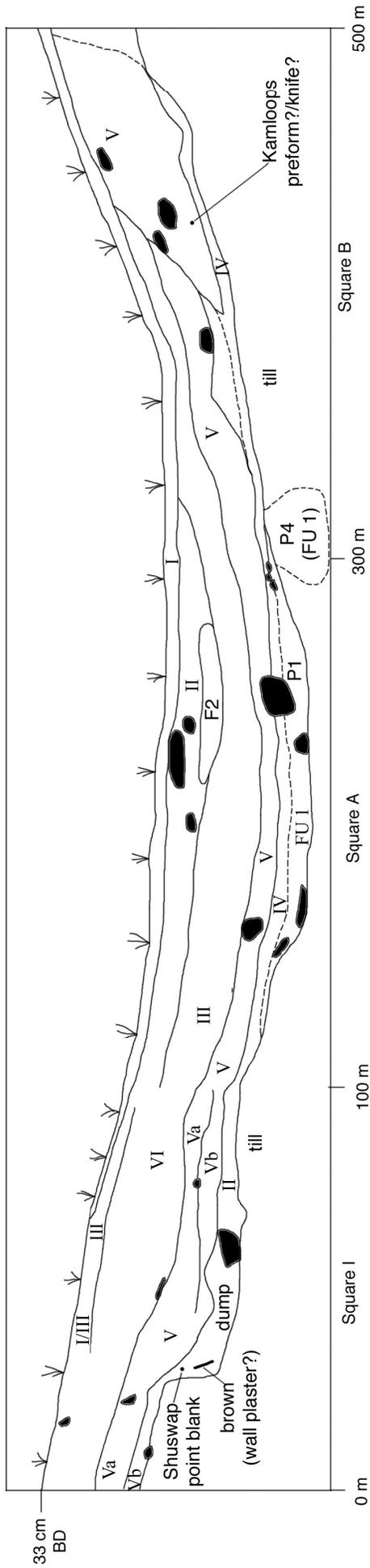
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Figure 1. Stratigraphic cross sections of HP 90.

Housepit 90 - East Wall Profile



Housepit 90 - North Wall Profile

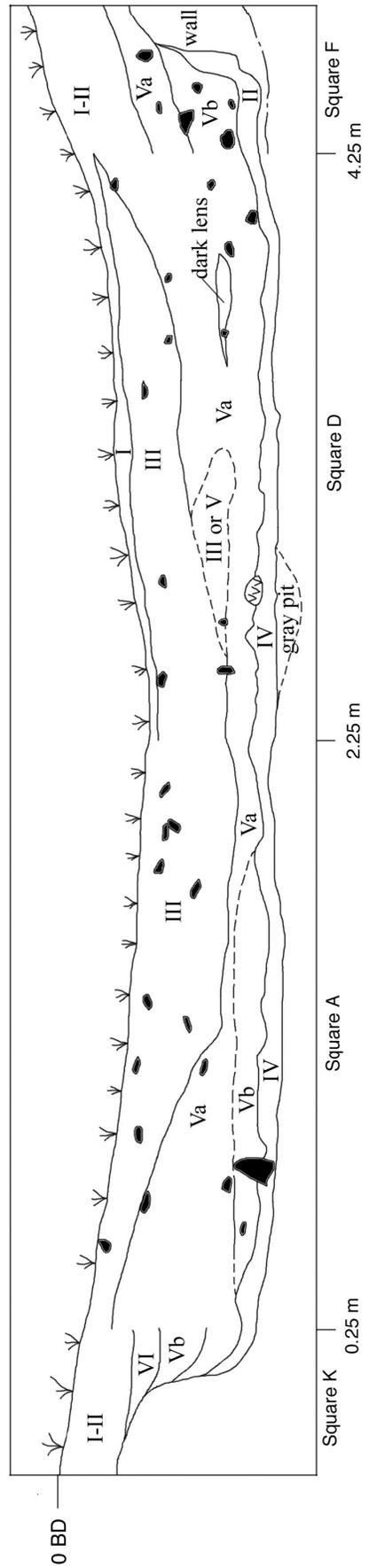


Figure 2. Floor plan of HP 9

