

CHAPTER 4

What the Features Revealed

Archaeological features consist of everything that cannot be picked up and carried away. They are usually modifications to the earth, but can also be objects in special relationships, such as teepee rings or alignments of objects. A great deal can be learned about past cultures simply from studying the features at a site. At Keatley Creek, there are five basic types of features: house or structure depressions, storage pits, hearths, postholes, and roasting pits. Some other types of features that we will not discuss in detail include benches inside houses, small pits, and small structures. There also appear to be two ritual areas with small specialized structures and roasting pits. These are situated far away from the residential core of the site on the eastern terraces overlooking the site (comprising Structures 104, 105, and 106), and on the southern terrace south of the creekbed (including Structure 9 and probably others—see Hayden and Adams 2004). However, these inferences of ritual use are still somewhat tentative. Let us begin by examining the most obvious type of feature at the site, the housepits, to see what they can reveal about the prehistoric community.

HOUSEPITS

Housepits can open up a surprising number of insights into past cultures all on their own. They provide estimates for population sizes of individual structures as well as entire sites. They can tell us about the degree of equality or hierarchy in sites and about how groups were organized. Also, together with information from postholes, they constitute the basis for understanding the architecture of the structures.

Until recently, there were a number of formulas archaeologists used to estimate the number of square meters of living space used per person in traditional societies. These estimates were based on worldwide ethnographic observations and indicated that on average each person had 10 square meters of floorspace. The few estimates that James Teit provided for the number of inhabitants in the pithouses he described did not correspond very well with the formulas used by most archaeologists. I began to suspect that pithouses might constitute a special category of dwellings in this respect. Together with several students, and Dr. Gregory Reinhardt who had studied Arctic housing, we began to collect all the observations we could, from Alaska to California, on pithouse sizes and the number of inhabitants that lived in them. When we assembled all of these observations, it was clear that people who lived in housepits had much less floor space than people living in other types of dwellings throughout the world. People in pithouses averaged only 2–3 square meters of floor space per person (Figure 4.1). This estimate

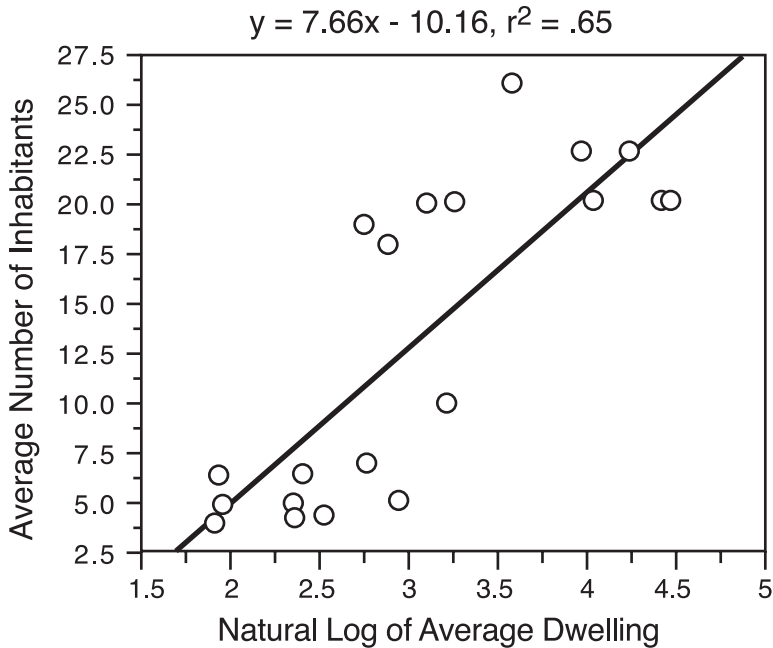


FIGURE 4.1. This graph shows the number of inhabitants ethnographically recorded as living in winter semisubterranean houses plotted against the recorded floor area of these houses. The average is about 2 to 3 square meters of floor area per person.

corresponded much better with Teit's observations. Such a dense press of people is unthinkable for today's industrial citizen. For personal interest, try to estimate the amount of floorspace per person you have in your home. Then measure the room you are in to determine how many people would live in it if it were a pithouse.

Under traditional conditions, the high density of people in pithouses made a great deal of sense. The prime goal of pithouse living was to survive the winter, and pithouses, as a labor intensive type of shelter, make most sense in environments with severe winters. If stored food with lots of calories was necessary to survive the winter, so was staying warm. Pithouses were relatively well-insulated from the cold by the earthen floors and walls, and the earth-covered roofs; but pithouses also required a source of heat to remain comfortable. It appears that for daily heating, most groups relied to a large extent on the body heat given off by the pithouse's closely packed residents, similar to the effects of partygoers heating up crowded rooms.

Bolstered by the knowledge that Teit was not in error or unique in his observations on the density of people living in pithouses, but was consistent with all the other observations made of housepit residents, we were able to confidently estimate the number of people in each housepit by calculating its floor area (Table 4.1), and we were also able to estimate the population for the entire site (Table 4.2). As will be explained in chapter 8, we had good reasons to assume the great majority of the large- and medium-sized housepits were occupied throughout the history of the site, and the more ephemeral smaller houses probably were most numerous during the Plateau Horizon. In any event, a good proportion

TABLE 4.1
POPULATION ESTIMATES OF INDIVIDUAL HOUSEPITS

House Radius (m)	Floor Area (M ²)	Pithouse Population									
		19	13	9	7	6	5	4	4	3	
2.50	19.6	19	13	9	7	6	5	4	4	3	
3.00	28.3	28	18	14	11	9	8	7	6	5	
3.50	38.5	38	<u>25</u>	19	<u>15</u>	12	10	9	8	7	HP 12
4.00	50.3	50	33	25	20	16	14	12	11	10	
4.50	63.6	63	42	31	25	21	18	15	14	12	
5.00	78.5	78	52	<u>39</u>	31	<u>26</u>	22	19	17	15	HP 3
5.50	95.0	95	63	47	38	31	27	23	21	19	
6.00	113.1	113	75	<u>56</u>	45	<u>37</u>	32	28	25	22	HP 7
6.50	132.7	132	88	66	53	44	37	33	29	26	
7.00	153.9	153	102	76	61	51	43	38	34	30	
m ² /person		1	1.5	2	2.5	3	3.5	4	4.5	5	

Note. Pithouse populations for the relevant range of floor areas and population densities. The underlined values show the range of the best estimates for the populations of the housepits indicated in the right margin, with the most probable value printed in bold type. From Spafford, 1991.

TABLE 4.2
POPULATION ESTIMATES FOR KEATLEY CREEK

1. Assuming there is a linear relationship between rim and floor diameter, and based on the data from HPs 12, 3, and 7, the following regression formula was generated:

$$\text{floor diameter} = 2.7 + 0.47 (\text{rim diameter})$$

2. Population density is assumed to be higher in smaller housepits. Figures used for density estimates were:

$$\text{large HPs} = 2.5 \text{ m}^2/\text{person}$$

$$\text{small HPs} = 2 \text{ m}^2/\text{person}$$

3. Excavated housepits with diameters > 14 m (n = 6) consistently have evidence of occupations extending across at least two Plateau Pithouse horizons. Evidence of occupation during three or even four horizons is present in four out of the six. So, large housepits were probably occupied throughout much of the site's history.

Smaller housepits tend to have shorter occupations. Probably only a portion of small housepits were occupied at any given time. Thus the estimated population of large and medium HPs = 1,100; with 1/4 of small HPs = 1,500 total site population, or with 1/2 of small HPs = 1,900 total site population.

(we assumed 25%) of the smaller houses were probably occupied simultaneously at the peak of the site's growth. The fact that there is little overlap of housepits at Keatley Creek is one indication that a large percentage of these structures were occupied simultaneously. Even using the more conservative estimates of floor space per person and the number of housepits occupied at any one time, the peak population of the community at Keatley Creek must have been at least 1,200 to 1,500 people. This number of people, as well as the

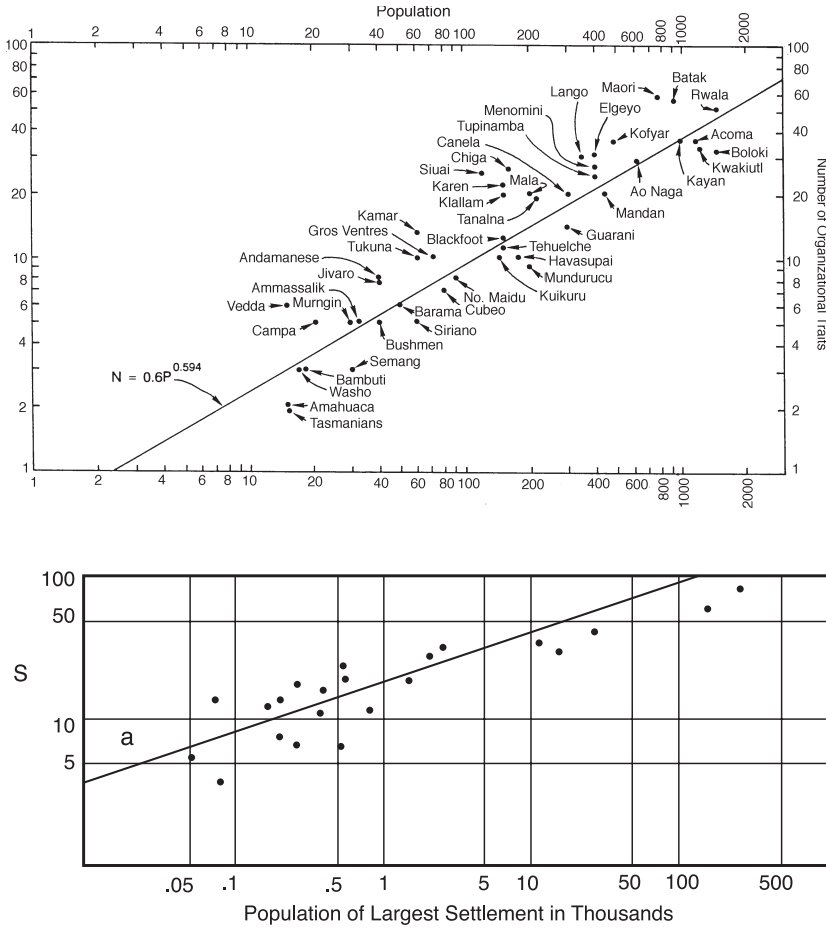


FIGURE 4.2. Two studies show the relationship between the population sizes of communities and their relative complexity. The graph at the top was compiled by Robert Carneiro (1967) and demonstrates how overall social complexity increases with community size. Earlier, Raoul Naroll (1956, p. 689) documented a similar relationship for types of social organizations and the size of the largest settlement, and in addition he showed that the number of occupational specialists was also related to the size of the largest settlement in a similar fashion (bottom graph). Clark and Parry (1990) subsequently confirmed this result. On the basis of these studies, Keatley Creek, with a population of 1,200, should have had about 20 occupational specialties (including corporate administrators, shamans, warriors, hunters, carvers, and others), and it should have had about 10 different types of social organizations (including nuclear families, lineages, clans, corporate groups, dance societies, elite secret societies, work groups, and others).

area covered by the entire site (the densely settled core of the site covers 4 hectares [ha], while the overall site spreads out to about 12 ha), would be grounds for calling Keatley Creek a “town” rather than a village in many archaeological approaches. For instance, Adams and Nissen (1972, p. 18) define towns as sites larger than 6 ha.

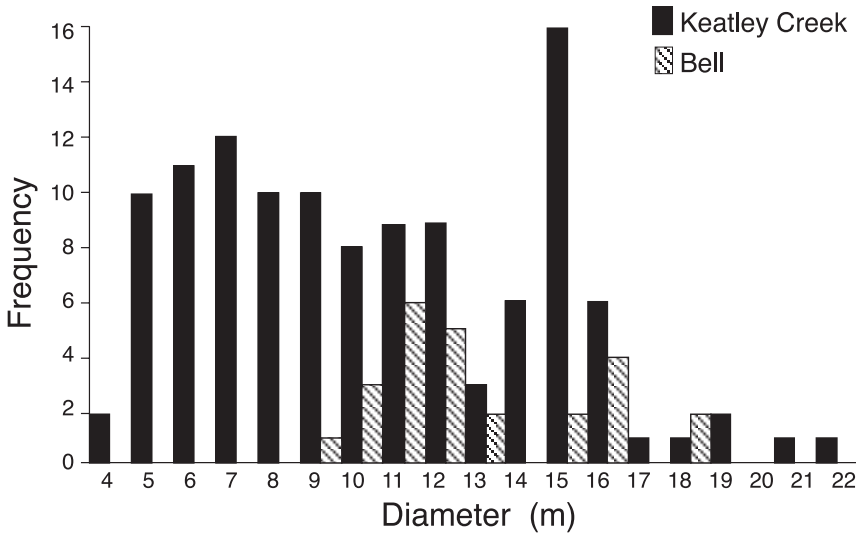


FIGURE 4.3. A histogram showing the size distribution of housepits at the Keatley Creek site and at the Bell site. Note the two pronounced peaks that occur in both distributions. There may even be a third peak at 19 m for the largest houses at Keatley Creek. Housepit size was measured from rim crest to rim crest.

Estimating the number of people living at Keatley Creek is very important for understanding the social and economic complexity of the site because a number of anthropological studies have shown that as communities increase in size, so do their number of specialized political, economic, social, and other roles and institutions (Figure 4.2). Although not foolproof, this is an important initial indicator that the community at Keatley Creek was relatively complex. Indicative of this complexity is the fact that *all* the people of a typical generalized hunter-gatherer community (i.e., about 25 to 50 people) would equal the number of residents in a *single* medium-sized housepit at Keatley Creek. The full community of Keatley Creek at its height could have been 60 times larger than the average community of generalized hunter-gatherers.

Still another indicator of complexity is furnished by examining the distribution of housepit sizes. At Keatley Creek, as at the neighboring Bell site, there are few large housepits, but they form a distinct peak at one end of the size spectrum resulting in a *bimodal* distribution, that is, a distribution with two peaks (Figure 4.3). This indicates that there are two distinct groups of housepits and residents at Keatley Creek: the more ordinary ones living in housepits up to 13 m in diameter, and the unusual ones living in housepits up to 22 m in diameter.

However, the mere occurrence of large-sized housepits by themselves does not indicate there were inequalities. They could simply represent one end of an egalitarian-size continuum. It is the distinctiveness of the large housepits as a group, separate from the others, that indicates the presence of inequalities. This is why the bimodal shape of the pithouse size distribution is important. Another means of measuring inequality

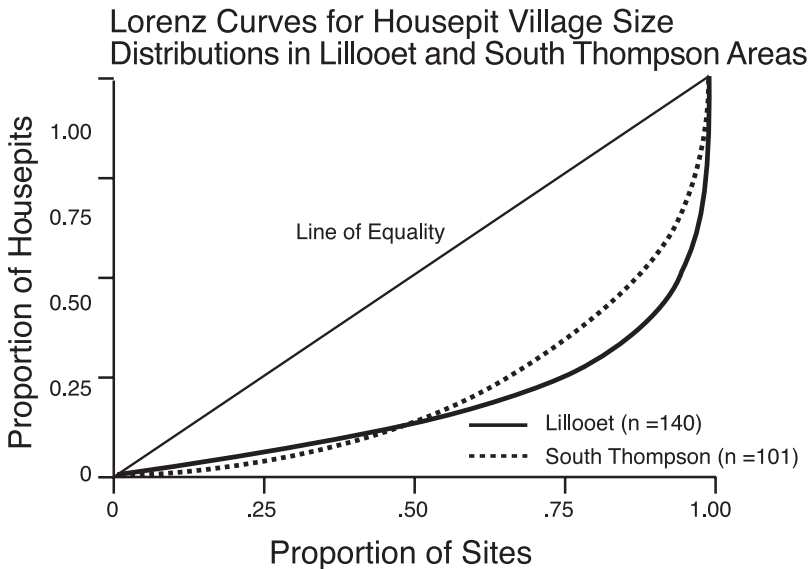
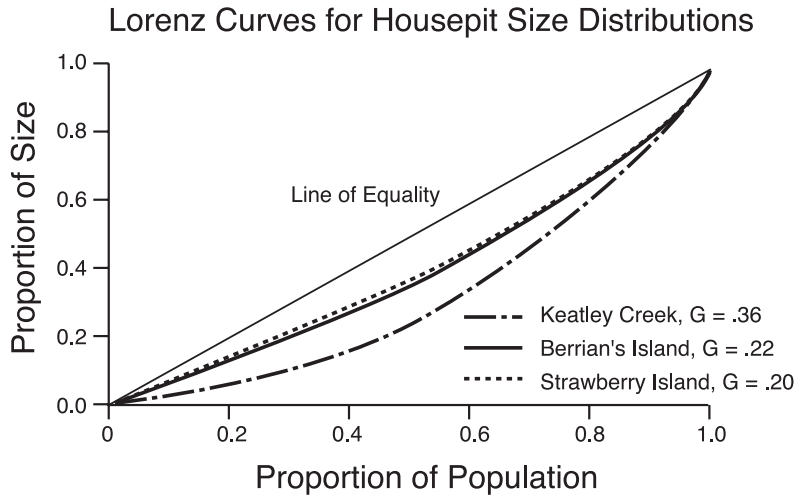


FIGURE 4.4. The graph at top displays Lorenz curves showing the degree of departure from an ideal egalitarian distribution of the housepit sizes at Keatley Creek and two other sites from the Columbia Plateau (Berrian's Island and Strawberry Island added for comparative purposes). Thus, not all Plateau housepit sites seem to have exhibited the same degree of hierarchical organization and inequality. On a regional level, the bottom graph shows that hierarchical organization between sites in the Mid-Fraser and South Thompson River areas may have been even more pronounced (Gini indices for these areas are 0.64 and 0.57 respectively), although these results may partially reflect temporal mixing of sites from different time periods.

in size distributions or other data is provided by Lorenz curves and Gini indices. Using these techniques, the size of each housepit is plotted on a graph from smallest to largest, and the resulting shape of the curve indicates how much inequality is present in the distribution (Figure 4.4).

If the large housepits had simply been one end of a regular continuum, the graph curve would have been a straight line, and they would have scored a 0 on the Gini index. If there had been complete inequality, or hierarchy in the distribution, the figure would have been very concave, and the Gini index would register close to 1.0. By using Lorenz curves and the Gini index to gauge the degree of inequality in housepit sizes at Keatley Creek, Rick Schulting was able to show that there is a considerable degree of inequality present, registering 0.36 on the Gini index. This, too, is an important indication that there were relatively complex social and economic relationships present in the prehistoric Keatley Creek community. It is interesting to note that the largest housepits at the site are spread out evenly in the site's core, almost as if each large house dominated a neighborhood, or was allied with its own group of neighboring houses (refer to Figure 3.3).

If we look at a broader regional picture of site sizes (see Figure 4.4), these, too, display a significant degree of hierarchy. The values derived from the Fraser Valley near Lillooet and the South Thompson River Valley sites are 0.64 and 0.57 respectively. These surprisingly high figures may be due in part to the inclusion of some undated sites from different time periods. But clearly, there is very substantial inequality between communities at the regional level as well. Such hierarchies characterize increasingly complex social organizations with different levels of wealth and power. Thus, site population estimates, the distribution of housepit sizes, and the regional distribution of site sizes all point to an important conclusion: The residents of Keatley Creek formed part of a complex society with fairly important inequalities, hierarchies, and specialization within communities. Analysis by Rick Schulting (1995) of burials recovered from the Plateau area also show similar degrees of inequality in burial items to the Lorenz curves of the Lillooet housepits.

HEARTHES

Let us take a detailed look at some of the features inside a few of these houses. In the smallest houses, such as Housepits 12 and 90, there is almost no trace of a detectable hearth (Figure 4.5). Only a small, thin patch of fire-reddened till and a sparse scatter of fire-cracked rocks betrays the presence of a hearth in Housepit 12. It does not appear to have been used very often, nor for very long times, or built up into a very large fire. There was not even a detectable ash accumulation over the fire-reddened area, which indicates the hearth area had not been used for some time prior to abandonment of the pithouse, but instead had been used as a normal part of the floor for walking on. Housepit 90 had no detectable hearth area. Thus, it seems that in the small houses we excavated, residents relied primarily on body warmth to heat the interior of their houses and used fires only for special occasions or during intensely cold nights in winter. Such

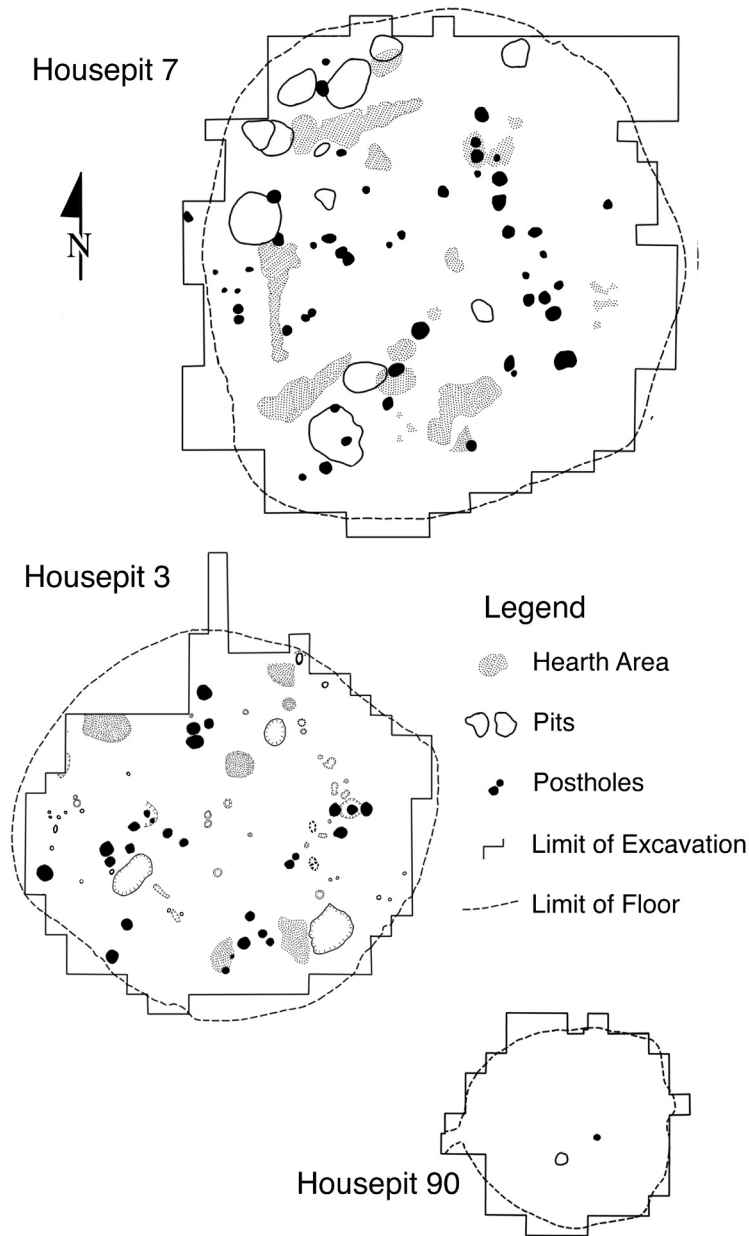


FIGURE 4.5. Floor plans of a large housepit (HP 7), a medium-sized housepit (HP 3), and a small housepit (HP 90). Note in particular the lack of main postholes, storage pits, and fire-reddening in the small housepit compared to the regular and pronounced development of these features in the large housepit. This implies that fires were used infrequently in smaller houses and were much smaller than in large houses. Note also the small side entrance on the left side of HP 90.

strategies may have been due to poor ventilation within pithouses and the dangers of smoke poisoning, or they may have been related to the exhaustion of the firewood supply within walking radius of the community. At this point, we do not know.

In contrast to the small houses, the larger houses such as Housepit 7 have a number of large, deeply reddened (up to 8 cm into the till) hearth areas that form an inner ring about 2 m inside the house wall (Figure 4.5). This suggests considerably more use of hearths with larger and more lasting fires in the larger houses than in the smaller houses. Concentrations of fire-cracked rocks near the hearths also suggest more cooking activity than in the smaller houses. However, even in the larger houses, most of the hearths lacked accumulations of ash above the fire-reddened areas indicating that they, too, had been used primarily for special events or only on the coldest nights. Otherwise the hearth areas were simply used as normal floor space for walking and other activities. The lack of ash is so consistent a pattern in the housepits we excavated and tested that this intermittent use of hearths seems to be a general feature of pithouse life at Keatley Creek. The lack of evidence for any activities in the housepits just prior to abandonment, other than the routine daily activities, reinforces the notion that the condition of the hearths as we found them was a normal one.

However, there is something else interesting that you may have already noticed about the hearth areas in Figure 4.5. Even without information on the depth of fire-reddening, it is apparent that the hearth areas on the left half of Housepit 7 are much larger and more numerous than those on the right side of the house. It is on the left side, too, that fire reddening is deep, whereas the fire reddening of hearths on the right side of the house was more superficial, at most 2 cm deep. The patterning is clear, but the reason for the patterning is not so clear. The two most probable reasons for the hearths being different on the two sides of the house include (1) different activities being conducted on the two sides of the houses, for instance, eating on one side of the house versus sleeping on the other; or (2) the hearths could differ because of the characteristics of the families residing on the two sides of the house, such as poor families on one side versus wealthy families on the other side. This is a fundamental question about the social and economic organization of these large houses that will require many different types of evidence to adequately address: It requires evidence from other features, from food remains, from remains of stone tools, and from plant remains. Let us look at the remaining features first.

PIT FEATURES

Relatively large storage pits have been found inside some of the tested and excavated housepits at Keatley Creek. Similar storage pits are also found between houses and in special areas on the peripheries of the site. The storage pits inside houses vary in depth from about 30 cm to over a meter below the floors. Ethnographically, they are described as used for storing dried salmon, meat, berries, and roots. James Teit called them “cellars,” but he makes it clear that he is talking about pits covered with poles or boards. We know the archaeological examples were used in a similar fashion because

in the bottom sediments of some of these large pits we have found layers of articulated salmon backbones laid one next to another, or in other cases, layers of disarticulated salmon bones at the bottoms of pits.

The occurrence of large storage pits in some houses but not others provides an important clue as to the nature of past social and economic organization at the site. With few exceptions, the smaller houses had only small or no food storage pits (see Figure 4.5). By contrast, the large housepit we excavated had numerous, large storage pits (Figure 4.6) and the other large housepits we tested also contained large storage pits (see Figure 3.4). If we calculate the storage volume per square meter of floor area for each house, this is almost the same as calculating the amount of storage per person for each house. Can you see why this is so? When this is done, it can be seen that

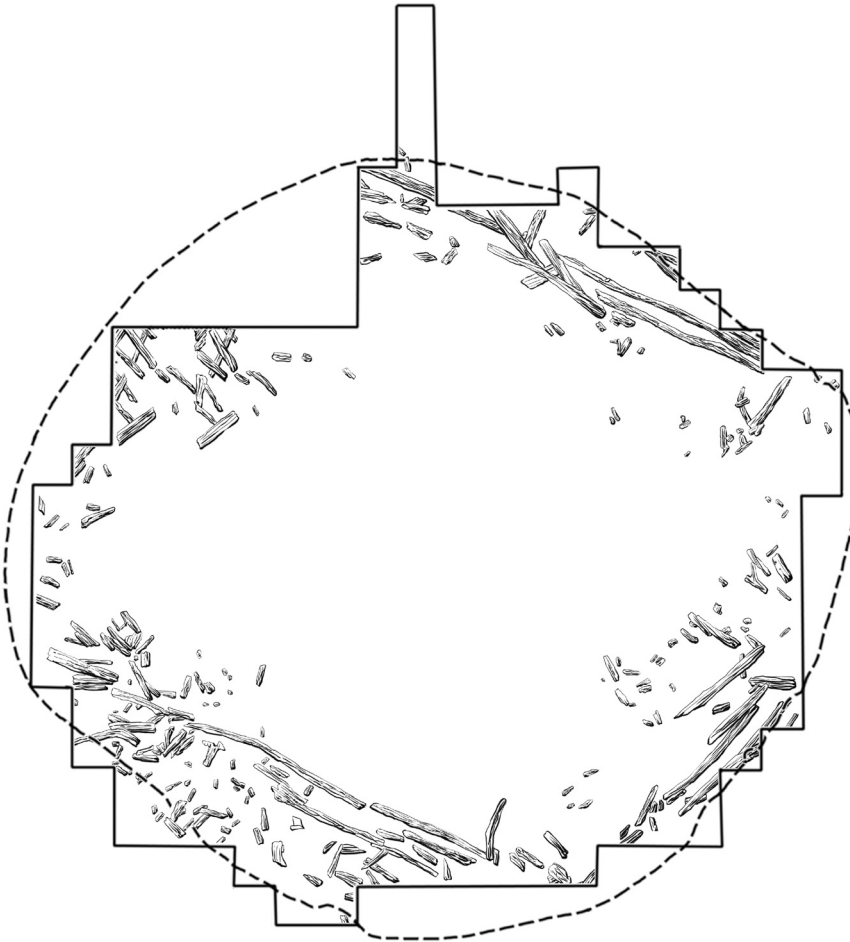


FIGURE 4.6. Charred roof beams found lying on the floor of Housepit 3. Note that only the thinner secondary cross-beams are represented and that none of the heavier and thicker major joists or support posts are present. Since these heavier beams should have burned much slower and been better preserved than the lighter cross-beams, it seems that all the heavier timbers were removed from the structure prior to its burning.

Housepit 7, the large house, has far more storage capacity per unit floor area and per person than any of the smaller houses (Table 4.3). If we examine the total volume of storage pits in each house, the contrast between large and small houses is even more striking. This seems to indicate that residents of larger houses had a great deal more surplus food than residents of smaller houses.

But there is more evidence to be gleaned from these prehistoric cellars located inside the houses. Can you detect any patterning to the occurrence of storage pits inside Housepit 7? A careful scrutiny of Figure 4.5 reveals that virtually all of the large

TABLE 4.3
STORAGE CAPACITY OF LARGE STORAGE PITS BY HOUSEPIT

<i>HP 12</i>	<i>Feature Number</i>	<i>Depth</i>	<i>Diameter</i>	<i>Estimated Volume</i>
	P-2	70	94	485.78
	P-3	35	65	116.14
	P-5	35	40	43.98
			Total storage volume	771.91
			Estimated floor area	38.50
			Liters storage/m ² floor	20.05
<i>HP 3</i>	<i>Feature Number</i>	<i>Depth</i>	<i>Diameter</i>	<i>Estimated Volume</i>
	HP 3-89:2	76	114	775.73
	P-1	44	58	116.25
	P-2	145	114	495.90
	P-3	44	102	359.54
			Total storage volume	1747.42
			Estimated floor area	78.50
			Liters storage / m ² floor	22.26
<i>HP 7</i>	<i>Feature Number</i>	<i>Depth</i>	<i>Diameter</i>	<i>Estimated Volume</i>
	P-4	65	156	1242.37
	P-2	120	113	1203.45
	P-25	100	130	1327.32
	P-31	115	135	1646.10
	89-5	130	101	1041.54
	P-36A	75	81	386.47
	P-34	55	80	276.46
	P-4	60	87	356.68
	P-36	60	72	244.29
	P-35B	32	90	203.58
			Storage volume: large pits	6460.78
			Estimated floor area	113.10
			Liters storage/m ² floor	57.12
			Storage volume: large and medium pits	7928.26
			Estimated floor area	113.10
			Liters storage/m ² floor	70.10
<i>HP 3</i>	<i>Feature Number</i>	<i>Depth</i>	<i>Diameter</i>	<i>Estimated Volume</i>
	P-1	82	126	1022.46
			Estimated floor area	20.5
			Liters storage/m ² floor	49.88

storage pits in the house are located in the left half of the floor, with none occurring on the right side. Moreover, the storage pits seem to be closely associated with the large hearths in the house which also occur on the left side of the floor. Once again, we are faced with a fundamental question in trying to understand the past social and economic organization within these structures. There is obviously a strong pattern to the location of storage pits inside the large house. But is the patterning of storage pits and hearths on the left side of the house due to activity differences between the left and right sides of the house (for instance, food storage and cooking occurring on the left), or does it indicate differences in storage activities between families living on the left side of the house (presumably the wealthier families) versus families on the right side (presumably the poorer families)? Although we have not yet finished accumulating observations to decide whether activities or socioeconomic differences are responsible for this patterning, you may have already begun to form an opinion. Which do you think is more likely? Are there any arguments you can think of at this point to support your opinion? What further kinds of observations do you think would help resolve this issue? One clue might be found in the distribution of the fire-cracked rocks mentioned during the discussion of formation processes.

POSTHOLES

In most traditional societies around the world, people dig narrow holes in which to place support posts for their structures, and sometimes holes are used to construct internal post partitions or for furniture, such as benches or beds. Virtually all of the postholes that we found at Keatley Creek were vertical to the floor, not angled as James Teit indicated in his ethnographic illustrations of housepits. Placing posts in holes stabilizes them and prevents them from being knocked over or slipping out of place with potentially disastrous results. Thus, holes are commonly dug for structural posts, although some special types of architecture and furniture use only posts placed on the surface of the floor. We will first examine the main support posts used to hold up the large roof beams in houses.

The holes for the main support posts were dug deep into the clean, yellow till—as far as people could reach with their arms. When the posts decayed or were removed, the postholes filled up with dark soil from the house floor or roof, thus making it very easy to recognize the postholes in the yellow till. Moreover, because of the depth of these holes, the traces of the earliest, first, postholes dug in the house floor are still visible, even after the progressive cleaning up of scuffed floor deposits when houses were reroofed.

As with any house that lasts more than a generation or two, it was possible to enlarge, reduce, or remodel the house to suit the needs of current generations, especially when the roof was replaced. However, the depth and distinctive color of the main deep postholes enable archaeologists to keep track of any changes in size or major structural remodeling that took place over the entire lifetime of a particular house.

While the same large postholes might be used for successive roof structures, it

was probable that the shape of the trunks of the large trees used to make main support posts and main roof beams varied from one roofing event to the next, thereby making it necessary to slightly alter the positions of some postholes from time to time. But if the house did not change its basic size or structure throughout its lifetime, then all of these new, main support postholes should cluster around the locations of the original posts. This is clearly the case in Housepit 3 and in Housepit 7 (see Figure 4.5). If either of these structures had changed in size from their first construction in Shuswap or Plateau times until their abandonment, well over 1,000 years later, this would have shown up in the pattern of remnant postholes visible in the till, although traces of very small previous houses might be obliterated. It seems clear that once firmly established, these larger houses remained the same basic size and adhered to the same basic design until they were abandoned, a conclusion indicated in our discussion of the formation of rim deposits in chapter 3. This seems to imply a continuity of use over a long period of time. The social and economic implications of such an observation may not be immediately apparent, but they are quite profound, as we shall see in chapter 8.

Astute readers might think hearths and storage pits could be used in similar ways to make inferences about the modifications to a structure over time. While the evidence from the hearths and storage pits in Housepits 3 and 7 do support the notion that these structures did not change in size or organization over time (the hearths and pits occur in a band with a constant distance of one to four meters from the wall of the house), skeptics could weaken such arguments. It could be argued, for instance, that all the evidence of previous hearths had been removed when scuffed up till and floor soils were removed with successive reroofing events, thus, gradually lowering the floor level. It could also be argued that the storage pits were all dug and used during a very short period of time, or at least only when the house was at its present size, during the final occupation. Although these lines of evidence are relevant to deciphering the life histories of houses and are consistent with other types of evidence, they are not as good indicators of house histories as deep postholes.

In addition to providing important information on the life history of structures, the study of postholes can provide a great deal of information about the nature of the superstructure of a housepit roof and about the arrangement of household activities. Contrary to what we expected from the ethnographies, not all housepits at Keatley Creek had the same kind of superstructure. For example, it came as a great surprise to find that most small housepits had no support posts at all. When I consulted Richard MacDonald, an architect, as to the likely nature of these houses, he began a series of possible architectural reconstructions based on evidence from postholes, as well as the pattern of the smaller burned roof beams that we had found lying on the floors (refer to Figure 4.6). Using this evidence, he was able to infer that small houses probably had roof slopes too steep to enter them from the smoke hole as described ethnographically (see Figures 3.7, 4.7). In fact, once we began looking for side entrances in small houses, we began fording them (see Figure 4.5). The medium-sized houses with four main support posts corresponded closely to the descriptions and illustrations of housepits published by James Teit. On the other hand, the large houses, such as Housepit 7, presented still different architectural features, including probably six main support posts and secondary support posts near the

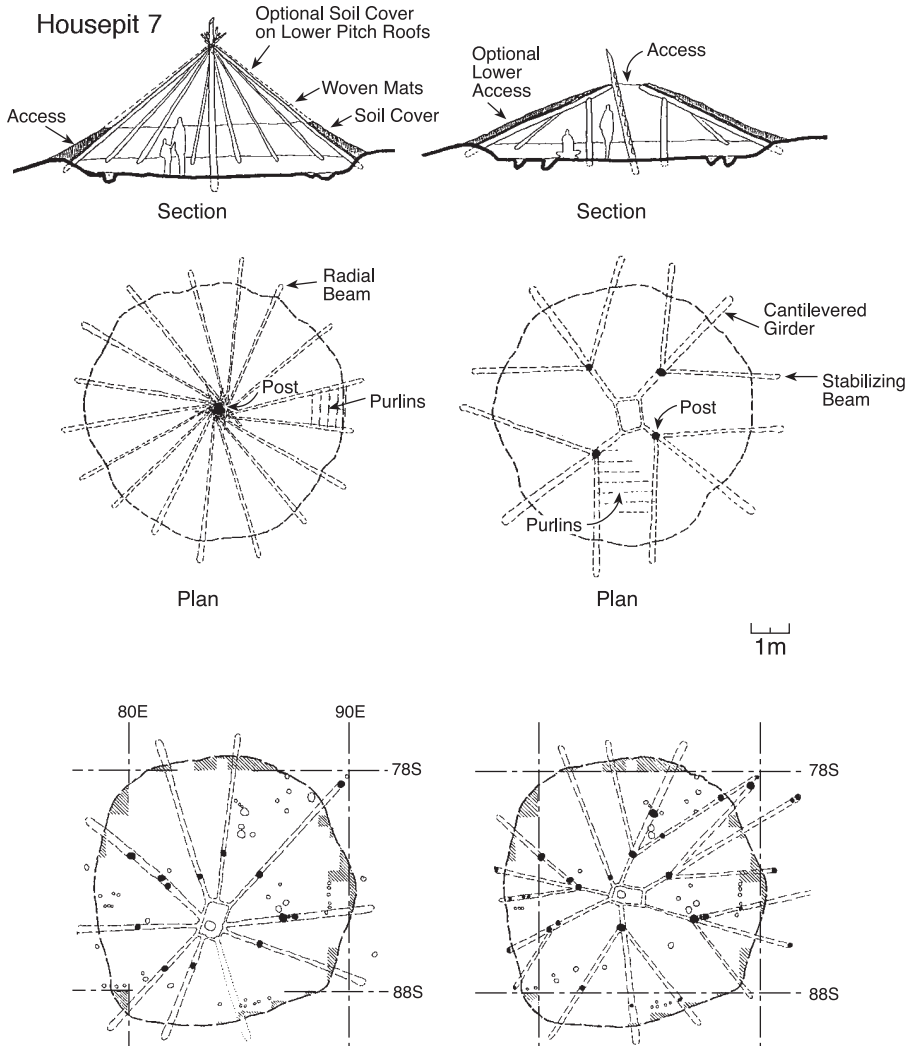


FIGURE 4.7. Several of the possible architectural reconstructions formulated by Richard MacDonald for housepits based on the postholes and features associated with housepit floors and the application of architectural principles. In contrast to ethnographic descriptions, small houses probably had very steep roof pitches that made entry through the smoke hole impractical.

walls. In addition, the smoke holes of the large houses would have been so high above the floor that it is difficult to imagine how small children, elderly, or sick individuals could have used the smoke holes to enter and leave the housepits without frequent accidents. We have not yet been able to identify a side entrance for Housepit 7 or any other large housepits, and it seems worth considering the possibility that a landing platform may have existed under the smoke hole, about halfway to the floor. A row of large post-holes in this area may have supported such a platform (refer to Figure 4.5).

Aside from the main support posts, there was also an assortment of other post impressions in Housepits 3 and 7. The purpose of these is still enigmatic, but the occurrence of paired, small, shallow posts near the walls (not illustrated) may indicate the placements for poles that supported sleeping platforms, as described in the ethnographies.

Finally, although the actual posts had been removed from most main postholes, occasionally one or two had been left to burn in place. From the charred remains, it was possible for Dana Lepofsky, a botanical specialist, to determine the type of wood used for posts. I had fully expected Douglas fir to have been used because it is a stronger, denser, more rot-resistant wood. I was very surprised to learn that all the post remains that we recovered were actually pine (*Pinus ponderosa*). Since pine and Douglas fir both grow in the vicinity today and are both represented in charcoal samples taken from the floors of the housepits, it is clear that the prehistoric residents of Keatley Creek purposefully chose pine over fir for the largest posts. On the basis of experiments conducted with ground stone adzes, I suspected the reason they chose pine was that large pine trees were much easier to cut down using stone tools and resulted in less damage to the tools. Later, I read an unpublished manuscript of James Teit that confirmed this was indeed the case. The length of time the pine supports lasted was apparently of less importance than the risk of damaging tools or the relative ease of cutting the posts, perhaps because smaller elements of the roof would rot far before the main supports.

Thus, simple postholes have provided an important array of information about past life at Keatley Creek. They have revealed what kinds of structures were present, the life histories of those structures, something about the organization of activities within structures (the entrances and sleeping areas), and also something about the technology and concerns of the house builders.

ROASTING PITS

The last type of feature I will discuss is the roasting pit. These are shallow depressions usually filled with charcoal or ashy material, as well as fire-cracked rock, animal bones, or plant remains. Roasting pits are important because in a winter village site such as Keatley Creek, they may represent large-scale food preparation for unusually large gatherings of people at feasts. Roasting pits also occur in the mountains where large quantities of plant foods need to be cooked as part of the drying and preserving process. However, no large sources of plant foods requiring such processing are known for the immediate site area of Keatley Creek. Therefore, it seems likely that most, if not all, of the roasting pits at Keatley Creek are associated with feasting activities. A large roasting area is associated with Housepit 7. We have not detected any roasting pits associated with small housepits at Keatley Creek. However, we have excavated a number of roasting pits associated with the ritual structures on the eastern and southern terraces. These may have been used for ritual feasting (Hayden and Mossop 2004). Feasts will feature importantly in the concluding discussions about Keatley Creek. “

SUMMARY

The seemingly simple study of site features has brought a wide array of issues before us, as well as some compelling reasons for viewing the Keatley Creek community as a 'relatively complex group of hunter-gatherers. On the basis of structural evidence and rim midden accumulations, Keatley Creek was certainly a large, seasonally reoccupied, semi-sedentary community. Population estimates, distributions of house sizes by rank and size, the differential occurrence of food storage and hearths, all suggest that inequalities in wealth and social roles were significant, and hierarchical and specialized roles were probably present in the prehistoric community at Keatley Creek throughout most of its occupation. We were also able to reconstruct the nature of the buildings people lived in and track the basic history of those buildings. Tangential observations point to the presence of feasting and a stone technology that probably had difficulty felling large, dense trees. Tantalizing patterns of hearth and pit features within the largest house studied reveal a strongly structured organization within this house, but we have still not been able to identify the source of that patterning. Let us turn to the artifactual evidence to determine whether artifact patterning can provide a more definitive answer.