

Crazy Dog Dancers and Chalcedony Core Knappers The SFU 2006 Keatley Creek Field School

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The 2006 SFU archaeology field school at Keatley Creek established our base camp in the gully at Keatley Creek in the Fraser Canyon north of Lillooet on June 12. Our extended family of approximately 18 settled into our shade-less gully for a summer of excavation and surveying in the hottest region in the country. With the primary goal of training students in archaeological field techniques, we had four primary projects 1) mapping the McKay Creek site, 2) digitally mapping the Keatley Creek site 3) exploring some of the cultural depressions on Terrace 1, and 4) excavating structure 109 (hereafter ST 109). Each of these projects is discussed below.

1. Mapping McKay Creek

In consultation with the Lillooet (Stl'atl'imx) Tribal Council we agreed to produce a more detailed map of the McKay Creek site (EfRl 3 and EfRl 13). This site is a large housepit village (46 housepits, 4 of which are not on the map presented), on the west bank of the Fraser River approximately 40 km north of Lillooet, or 20 km north of Keatley Creek (see Figure 1). Similar to other large housepit villages such as Keatley Creek,

Above: (Figure 5) Excavations at ST 109 (Photo by Jon Sheppard).



Figure 1. Location of Keatley Creek and McKay Creek sites (after Hayden and Ryder 1991, and Hayden 2000).

Bridge River, and Bell sites, there are a variety of different sized housepits at McKay Creek, the largest of which measures 19 meters in diameter (see HP 39 in Figure 2). While we lack radiocarbon dates and reported typologically significant finds, all other large sites with large houses in the region were primarily occupied during the Classic Lillooet phase (2600 - 1100 BP, spanning late Shuswap, Plateau, and early Kamloops horizons, all dates uncalibrated radiocarbon years) (Hayden 2000, 2005; Prentiss et al 2005; Kuijt and Prentiss 2004; Stryd 1973). While many of the housepits at this site have been pot-hunted, these illicit excavations are each very small, and overall, the site has tremendous potential for future research.

2. Digitally Mapping Keatley Creek

A major goal of our field school that season was to create a detailed digital map of the Keatley Creek site. As we discovered at McKay Creek, and became painfully obvious at Keatley Creek, high-precision digital mapping of these large Classic Lillooet housepit villages using a total station is very time consuming. Although Keatley Creek is entirely free of underbrush, it has so many cultural features, many very large, that precise mapping of

the entire site would require hundreds of thousands of data points. We settled for approximately 17,000 data points and focussed on mapping the approximately 90 housepits and 50 small cultural depressions in the core of the site.

3. Exploring the Cultural Depressions on Terrace 1

Terraces 1 and 2 to the east of the core of the Keatley Creek site have high densities of cultural depressions, including root-roasting pits, storage pits, and meat-roasting pits of various sizes, and small non-housepit occupations (Figure 3) (Hayden and Cousins 2004). We tested two surface depressions, one 30 m to the north of ST 109, and another 30 m to the south.

The first, designated "EHPE109-1", was centred on a shallow depression associated with rusted cans and lids that were scattered on its surface. The depression was thought to be a result of historic activities such as charcoal production. This depression was markedly oval in outline and quite shallow, while at Keatley Creek most housepits are usually more circular and deeper. Excavation of two small units in the centre of this depression indicated that it was clearly prehistoric. The lithic component included trachydacite, chert, and, similar to ST 109, an unusually high concentration of chalcedony flakes. This depression may have been a small housepit, or more likely a mat lodge, menstrual lodge, or some other relatively ephemeral small structure.

The second test pit to the south of ST 109, "EHPE109-2", was placed amongst a cluster of what were presumed to be storage or cache pits. Excavation yielded one very large quartzite flake, a few trachydacite flakes, salmon vertebrae, and some carbonized fir needles. The limited depth of this feature and pervasive fire reddening of sediments suggest that it was not a cache pit, but rather a large atypical hearth. Clearly, much caution must be used in assuming the function of small cultural depressions without testing them at Keatley Creek and elsewhere.

4. Excavations at ST 109.

The primary goal of our research at Keatley Creek this season was to further explore ST 109 on Terrace 1 to the east of the core of the site (Figures 4 and 5). This housepit depression was originally tested in 1988, and was subjected to further excavations in 1998. We wanted to further investigate this structure because it has been identified as one of several potential ritual structures possibly associated with the activities of secret societies at this portion of the site (Hayden and Adams 2004; Johansen and Morin n.d.; Morin 2006a, 2006b).

Analysis of the assemblage recovered from ST 109 is currently being undertaken by Jon Sheppard for his Honors thesis at SFU. Does ST 109 represent a domestic structure or a non-domestic – possibly ritual use – structure? Moreover, can task specific activities be identified by analyzing the distribution of cultural remains on the floor? Results will be attained through spatial analysis of the distribution of artifacts on the Kamloops Horizon floor of ST109. In looking at the patterns of the distribution of fauna and artifacts, it is possible to make suggestions on the social and economic organization of the housepit's residents (Spafford 2000:167). In addition, to assess the function of ST 109, data from this structure must be compared to other structures (Morin 2006a). If it was used



Figure 2. Map of the McKay Creek site (EfRI 3) (prepared by Jamie Hoshkins).

for domestic purposes then the results should be comparable to other housepits identified as domestic households. However, if it was used for other means, such as ritual use, then the results should differ significantly from domestic houses, and be more comparable to structures used for ritual or ceremonial purposes.

Briefly, we suggest that the structures and features on the Terrace 1 and 2 complex are not typical of domestic residences or domestic activity. Instead, we suggest that they are more likely indicative of public feasting or potlatching activities, private feasting activities, and ceremonialism (Hayden and Adams 2004; Johansen and Morin n.d.; Morin 2006a, 2006b). This portion of the site is physically separated from the core of the site by steep slopes, is not visible from anywhere else at the site, and provides an ideal landform for activities intended to be kept



Figure 3. Map of the Keatley Creek site (after Hayden 2000).



Figure 4. Structure 109 Kamloops horizon floor plan (prepared by Jon Sheppard).

secret from the core of the community. Evidence for occupation of this portion of the site spans the Plateau and early Kamloops horizon (2400 - 1100 BP) components of the Classic Lilllooet occupation of the site, with significant late Kamloops horizon or Protohistoric activities as well (450 - 100 BP). Structure 109 contains substantial evidence for both of these two major components, and preliminary analysis suggests that its assemblage differs markedly from domestic housepit assemblages. The following discussion briefly describes the occupation sequence at ST 109, and describes the more notable characteristics of this structure compared to other excavated housepit deposits at Keatley Creek.

The earliest occupation of ST 109 probably dates to the Plateau horizon (based on recovery of a single Plateau point), but has not been dated radiometrically. This initial structure was only about 5 m in diameter and nearly one meter deep. Combined with the 1998 excavations, we have exposed over 80% of the floor of this structure. We did not encounter any layers typical roof fall overlaying the early floor strata, and it may not have been covered with a wood and earth roof. Despite the probable antiquity of these deposits (> 1200 BP), preservation in the floor strata of this occupation was excellent, with mammal, bird, and fish elements all recovered in quantities. Even the most delicate salmon rib and spine elements were recovered. Bird wing elements appear to be very well represented. Elsewhere, we have argued that these bird elements were more likely used as regalia and ritual paraphernalia than for subsistence (Hayden and Adams 2004; Morin 2006a). All of the lithics recovered from this component are trachydacite or vitreous basalt.

Following the abandonment of this early structure, the pit was backfilled with approximately 20 cubic meters of heterogeneous rocky materials. Combined with the 1998 excavations of such 'construction fill' deposits, we recovered several thousand unretouched chalcedony and chert flakes and very few trachydacite ones. These compose upwards of 95% of the assemblage in many of these deposits. Nearly all of these flakes are non-retouched bifacial thinning flakes, and all have remarkably sharp or 'fresh' edges compared to most lithic material recovered from the site. Many of these flakes are large enough (>2 cm)



that they would have made serviceable expedient cutting tools identical to those that dominate most house floor assemblages at Keatley Creek. However, these flakes were produced by the thousands and buried in the construction material fill of ST 109.

Besides a chert and a chalcedony core, very few retouched artifacts were recovered from these construction-fill strata. This appears to be the result of a somewhat massive episode of flint knapping, probably involving the production of bifaces, or the systematic reduction of bifacial cores. Hayden (2004) suggests that this atypical assemblage might have been produced by a single knapper, who was producing bifaces as gifts to reward the labourers involved in in-filling the pit and rebuilding ST 109. While we do not disagree with Hayden (2004), we suggest it might equally have been a BYOCC (bring your own chalcedony/chert core) event. In any case, this scale of exotic lithic reduction has rarely been encountered in the extensive excavations at Keatley Creek except for a smaller fill deposit in HP 101.

Above the in-filled Plateau horizon occupation of ST 109, a new structure was built. This structure was shallowly excavated, 10 meters in diameter, and almost perfectly circular. A single radiocarbon date of 220+/-50 in this upper occupation of ST 109 makes it contemporaneous to ST 104, ST 105 (upper occupation), and ST 106 (Hayden and Adams 2004). Most of our attention was focussed on horizontal excavation of this late Kamloops or Protohistoric occupation, and this component is the focus of Jon Sheppard's Honors thesis at SFU.

No historic or Euroamerican artifacts were recovered from excavations, probably indicating that the structure was not utilized after the early 19th Century when Euroamerican trade goods became much more common in the region. The only temporally diagnostic artifacts include two Kamloops side-notched points. The combined excavations from 1988, 1998 and 2006 season uncovered approximately 70% of the floor of this structure (Figure 4). The results were both disappointing and spectacular.

First, these excavations were disappointing to many of our excavators because these potential ritual structures at Keatley Creek contain hardly any artifacts (Hayden and Adams 2004; Morin 2006a). Thus, student excavators in some areas of ST 109 devoted most of their time to recording negative data. In ST 106 and ST 109, the central areas of these structures are almost devoid of all cultural material. These central areas seem to have been kept remarkably clean compared to domestic residences, except perhaps for a comparable ceremonial or elite precinct on the southern end of HP 7 (Middleton 2000).

The lithic assemblage from late Kamloops occupation of ST 109 is remarkable. In the later occupation of ST 109, the debitage is dominated by non-retouched chert and chalcedony flakes, similar to the assemblage recovered from the underlying construction fill. However, almost every single retouched lithic artifact recovered from this late occupation phase is made of trachydacite (or fine-grained vitreous basalt). Whoever utilized ST 109 had access to very fine-grained exotic material like chert and chalcedony as they produced many usable flakes from bifaces or cores from those materials, but they did not utilize those raw materials for utilitarian purposes at this location. Clearly, the exceptional qualities of the lithic assemblage recovered from this structure deserve special analytical consideration.

In several locations around the internal edge of the structure we recovered what we believe to be the remains of a wooden bench beneath the roof-fall, and on top of the floor. The carbonized remains of the bench were much smaller in diameter compared to roof beams, and in many instances, the wood used construct the bench seems to have been split into planks. This bench feature was always as-



Figure 6 (left). Worked bone at ST 109.

Figure 7 (right). Worked dog leg elements (breast plate or flute) recovered from a small pit in ST 109. Photo by Jamie Hoshkins.

sociated with considerable amounts of mammal bone, and in many places was associated with rich concentrations of fir needles. Aside from a possible bench feature identified in HP 3, ST 109 probably provides the best example of an internal wooden bench from any excavated housepit at Keatley Creek.

Following in the trend described for other potential ritual structures at Keatley Creek (Hayden and Adams 2004; Morin 2006a), two completely unique artifacts were recovered from the edge of house floor of ST 109. First, we recovered a fragmentary piece of worked bone that may have been a comb or a 'scratcher' similar to those described by Teit (1900: 312, 1906: 261, 1909: 588). This piece is vaguely shaped like a quadruped, with each protuberance or 'tooth' corresponding to a leg, was carefully incised with a dot in circle motif, and appears to have a crest or ridge composed of several short parallel lines running along the 'back' of the piece (Figure 6). We know of no other artifact similar in form to this one described for the region, and certainly nothing like it has been recovered from elsewhere at Keatley Creek (Brian Hayden, personal communication 2006).

On the southern edge of ST 109, probably underneath a wooden bench feature, we encountered a small bark lined storage pit. From this small pit, we recovered a bundle of five dog leg bones (two femorae and three hummeri) with their epiphyses cut off (Figure 7). Some of these elements are quite polished, and one is ochre stained. Each of these elements is graded in size, both by diameter and length. We suggest that the two most likely uses for this set of artifacts are 1) a breast plate worn around the neck with the five elements stacked horizontally (similar to dentalia breastplates worn on the Plains and in contemporary Plateau pow-wow dance regalia) (Ignace 1998), or 2) a pan flute composed of the 5 elements bound together with each producing a distinct tone. Breastplate or a pan-flute, in either case it is exceptional, and has obvious connotations of the ritual importance of canines.

The internal bench areas at the edges of these structures are, however, very different. In structures 104 and 106 numerous articulated artiodactyl limbs were recovered lying on the floor around the internal edges of the structures (Hayden 2004; Morin 2006a). This patterning does not occur in domestic residences at Keatley Creek and should not be expected to occur, as people do not leave large pieces of decomposing animal parts lying around in their domiciles. This type of deposition is far more likely to have occurred in structures that are used intermittently as opposed to the habitual use of domestic residences.

Similar to ST 104 and ST 106 on Terrace 2, the internal periphery and bench features of ST 109 also display the pattern of rich, occasionally articulated faunal remains. In this case however, both deer and dog seem to have been consumed. Regular consumption of dogs as special foods is described ethnographically for the Lillooet (Teit 1906: 223), but has never been observed archaeologically. Disarticulated and broken canine elements were recovered from nearly everywhere where we encountered the internal margin and bench of this structure. Some elements appear to have received special treatment, including a dog sacrum wrapped in birch bark, and a completely articulated canid forepaw left on the floor (Figure 8). Comparison with other canid elements in the region suggest this paw was part of a large wolf rather than a dog or coyote, the only such example we know of from the site or region. It is likely that this paw was attached to a skin or costume, as opposed to food waste. While there is abundant evidence for ritualism involving dogs at HP 7 (Crellin and Heffner 2000), the late Kamloops occupation of ST 109 provides the strongest evidence yet recovered from the site for specialized feasting activities focussed on canines and probable garments or costumes utilizing wolf and dog remains.

Given the abundance of evidence for atypical use of canids

as food, ornamentation and perhaps ritual paraphernalia in ST 109, and our previously hypothesized association of this portion of the site with a secret society compound (Hayden and Adams 2004; Johansen and Morin n.d.; Morin 2006a, Morin 2006b) it is pertinent to relate a relevant passage concerning the activities of a secret society called the Tseka'ma as described for the Shuswap immediately north of Keatley Creek.

Among all the Shuswap bands of the Fraser River, as far south as Alkali Lake or Dog Creek, were men who danced the Dog dance. They formed a group by themselves, called the Tseka'ma, which name was also applied to their dances. The song of their dances was called the Tseka'ma Song. These people were called Dogs, Crazy Dogs, Dog-Dancers and Wolves. Their dance was sometimes called the Dog dance, or the Crazy dance, and their dance-song the Dog Song or Wolf Song. Their dance was generally opened by one man clad in wolf-skins, who sang the song and danced in a circle in the midst of the people; a chorus of the Dog Society, who were seated on a platform, joining in the song, and accompanying it with drums, beating of sticks, and shaking of rattles. The dancer soon became very excited, shook his head from side to side, and cried and acted like a dog or wolf. At last he became like a madman, and acted violently, hitting and scratching the spectators, throwing water on them and breaking everything within reach. When he was at the height of his fury, another man dressed in wolf-skins appeared, leading a dog, and he also danced. Then the first dancer attacked the dog, tore it in pieces, and devoured it. Then the second dancer became excited, and joined the first one in devouring the dog. The chorus took up the excitement, and, leaving their places, the members danced behind the actors, each with a wolf-scalp on his head, the rest of the skin and tail hanging down behind. They flourished their batons, shook their rattles, and beat their drums fiercely, singing at the top of their voices (Teit 1909: 579-580, emphasis ours).

On the Canadian Plateau, the Dog society seems to be closely associated with the much better known Cannibal societies of the coast (Teit 1909: 580-1). These societies wielded significant ritual and political power, especially during the winter season of nucleation and ceremony. The passage above bears an almost uncanny resemblance to the assemblage recovered from ST 109 and may be specifically related to Tseka'ma society performances or training activities at Keatley Creek.

Overall, our initial impressions of the ST 109 assemblage conform to atypical trends noted by Hayden and Adams (2004) and Morin (2006a) for potential ritual structures at Keatley Creek, and we eagerly await the outcome of future analyses. The archaeological field school was successful both in training students in fundamental excavation and surveying techniques, and in significantly contributing to our understanding of the prehistory of the site. Further, the material recovered currently being analysed by students at SFU, has tremendous potential for future research. The 2006 spring and summer excavations at Keatley Creek mark the remarkable 20th anniversary of investigation of the site, and we thank all of those who have contributed to

understanding its prehistory.

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Figure 8. Articulated wolf paw recovered from the floor of ST 109. Photo by Jon Sheppard.

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