# Excavation Summary for Extra-Housepit Excavation 36 Sara Mossop Cousins

Extra-Housepit Excavation 36 (EHPE 36) was partially excavated in as part of a roasting pit testing program at Keatley Creek. It is medium-sized in terms of diameter and depth in comparison to other roasting pits identified at the site to date. It measures approximately 4.5 m in diameter across the high points of the rim, while other roasting pits at the site have measured between 2-8 m in diameter. It is located on a terrace approximately 60 m north of HP's 9 and 107 (Vol. III, Preface, Fig. 1). Several other roasting pits of various sizes have been identified on this terrace, although they have not been tested at this point. The surface depression of EHPE 36 is approximately 15 cm deep in the center, which is shallower than most other pits measured to date. Other pit surface depressions have ranged from 15-40 cm in depth. The shape of EHPE 36 is roughly oval and it is bisected by a horse trail running north-south along its eastern edge (Fig. 1). The "debris flow" is pronounced along the southwestern edge of the pit and the soil on its surface is darkened and ashy. The eastern rim is poorly defined, due in part to the horse trail noted above. EHPE 36 has all of the surface characteristics of a Keatley Creek roasting pit. Charcoal samples from EHPE 36 have been dated to 870 and 770 BP

The sub-surface characteristics of EHPE 36 also identify it as a plant roasting pit. The pit is approximately knee-deep and contains a central group of large cobbles near the bottom, which is typical of a roasting pit. The quantity of fire-cracked rock, charred plant material and fire-blackening also suggest that it was a plant roasting pit that was used on more than one occasion. It may be superimposed over an earlier pit, as well, a characteristic

that has not been observed in other roasting pits at the site. This was suggested by the presence of several different strata below the first cobble layer, including a possible second cobble layer, and by the fact that sterility was not reached in the center of the pit. Due to time constraints during the excavation, this has not been determined.

## **Excavation and Ground Survey Summary**

A non-intensive survey of the ground surface was completed in a 5 meter radius of the pit. No artifacts were recovered. This was unusual. Most pits have had a number of waste flakes and even tools on the surrounding ground surface. Other areas of the terrace surface were littered with lithic artifacts.

A 1.5 m by 50 cm trench was excavated in a north to south direction from near the center of the pit to its southern rim (Ssq.'s A5, A9 and A13; see Fig. 1). This trench uncovered a portion of a fire-cracked cobble feature located in the center of the pit located approximately 30-35 cm below the ground surface. The bottom of the pit was unclear and a second pit may be underneath. In Subsquare A9 sterile till was encountered at 40 cm below the surface but in Subsquare A13 several more layers were uncovered to a depth of 65 cm below the surface. A second cobble feature may have been found, and perhaps also evidence of a third pit, but the excavation was not completed to sterile in all areas. Extra-Housepit Excavation 36 appears to have been basin-shaped, based on the slope of the sterile till near its southern edge (Fig. 3). A fair amount of charred wood was recovered and several samples were retained for dating purposes. Samples of charcoal from what may be non-woody plants were also retained for identification purposes. Four root skin fragments may be from *Lomatium* roots. Several

flotation samples were taken from various strata, including from within the cobble feature. Very few lithics and no bone artifacts were recovered.

#### Use

The cobble feature found in the centre of EHPE 36 is thought to have been the main heating element of the roasting pit. The cobbles that made up the feature were not particularly large, however, which may suggest that a lengthy cooking time was not required. It is possible that larger cobbles were removed when the food was removed, but very large cobbles have been left in other pits at the site.

"Root" plants that may have been cooked in this pit include Wild Onion (Allium cernuum), Mariposa Lily (Calochortus macrcarpus) and Desert Parsley (Lomatium spp.), all of which grow on the site today. Other plants that may have been available and which do not require a lot of cooking to make them palatable, according to Turner (1997) and Pokotylo and Froese (1983), include Yellowbells (Fritillaria pudica), Wild Carrot (Lomatium macrocarpum), Chocolate Tips (Lomatium dissectum), Bitter-root (Lewisia rediviva), and Wild Thistle (Cirsium edule). Prickly Pear (Opuntia fragilis), lichens and various berry species were also occasionally pit-cooked (Pokotylo and Froese 1983:131). Root skin fragments, tentatively identified as Lomatium sp., have been recovered from flotation samples.

Meat and fish were also pit-cooked. No bones have been recovered from any of the roasting pits excavated at the Keatley site to date, but the flesh may have been removed from the bones prior to roasting (Peters 1999). Meat and fish were usually cooked with plant materials as well (Pokotylo and Froese 1983, Peters 1999).

It seems clear that plant materials were roasted based on the amount of charred vegetable material, perhaps along with meat or fish. The cooking time was probably not long, based on the size of the fire-cracked cobbles, so a species like Balsamroot (*Balsamorrhiza sagittata*) which required days of cooking is not likely to have been cooked in this pit.

## **Stratigraphic Details**

The west wall of the excavation trench is profiled in **Figure 2**. The trench began at the centre of the pit and continued to its southern edge.

Stratum I included the soil just below the ground surface to approximately 10-15 cm below surface. It was made up of fire-darkened, dark brown silty loam with fire-cracked pebbles and small flecks of charred wood. The percentage of fire-cracked pebbles increased from 15-20%, with approximately 5% falling in the 4-6cm size. A patch of fire-reddening was identified in Subsquare A9 at about 10 cm BS. The percentage of charred wood and fire-cracked rock increased over the last three centimetres of the stratum. One small trachydacite flake was recovered. It is probably an accidental inclusion.

Stratum II included soil that was much darker in color due to its charcoal content. Stratum II included soil from between 16 and 25 cm below the ground surface. Stratum II was not found in Subsquare A5. Larger pieces of charred material were recovered, a number of which were retained for carbon dating and for identification. Approximately 2% of the matrix consisted of charred material. The percentage of fire-cracked rock increased to 25%, with approximately 10% falling in the 4-6 cm size. A flotation sample was taken from approximately 17 cm below the surface. One small flake of pisolite was recovered.

Stratum III included the large cobble feature and surrounding soil to approximately 35 cm below the surface. Stratum III was not found in Subsquare A5. The color of the soil remained black due to the continued high percentage of charcoal. The percentage of fire-cracked rock increased to approximately 50%, with approximately 35% being the cobbles which formed Feature 1. Dating, identification and flotation samples were retained from this stratum. No artifacts were found within it.

Stratum IV was located beneath the cobble feature and may also be found in Subsquare A5 (**Fig. 2**). It may represent the soil that the upper pit was dug into. The soil was loamier than the soil above it and the matrix was made up of approximately 20% fire-cracked rock, none of which were cobble-sized. In Subsquare A5 it was brown rather than dark brown-black in color. No artifacts were found in this stratum other than fire-cracked rock and small amounts of charred wood. This stratum was followed by sterile till in Subsquares A5 and A9, which sloped down toward the centre of the pit. (Note: in Ssq. A5 the till contained a shallow post-hole like depression)

Stratum V was located in Subsquare A13 only. There was an increase in the percentage of cobbles from 0 to 10% in this stratum. This may represent a second cobble layer, which would imply an earlier roasting event. A dating sample was retained from this stratum. No artifacts were recovered.

Stratum VI was also only located in Subsquare A13. It consisted of fire-blackened soil mixed with approximately 25% fire-cracked rock. Till was reached in the eastern half of the subsquare but not in the western half. The soil in the western half of the unit was still very black and soft for several centimetres at the time the excavation was halted. A third pit may be indicated. No artifacts were recovered from Stratum VI.

#### **Discussion and Conclusion**

Extra-Housepit Excavation 36 is of medium size in comparison to other roasting pits located at Keatley Creek. It exhibited the typical characteristics of a plant roasting pit at the site. There may be several roasting pits lying on top of each other in this case. While such superposition has not been observed in any of the other pits excavated, this may be the result of the position of the trenches, and such overlapping use may have occurred.

#### References

Peters, Desmond

1999 Personal Communication. Desmond Peters is an elder and past chief of the Ts'kw'aylaxw (Pavilion Band).

Pokotylo, David and Patricia Froese

1983 Archaeological Evidence for Prehistoric Root Gathering on the Southern Interior Plateau of British Columbia. *Canadian Journal of Archaeology* 7(2): 127-158.

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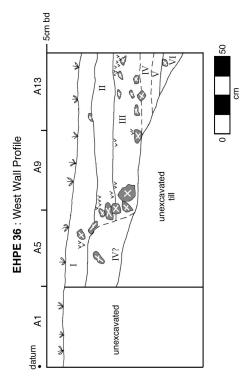
1997 Food Plants of the Interior First Peoples. Royal British Columbia Museum Handbook, Victoria.

### **Figures**

Figure 1: Surface plan and excavation units of EHPE 36. Surface cross-section is illustrated below.

Figure 2: Stratigraphic profile and floor plan of EHPE 36.

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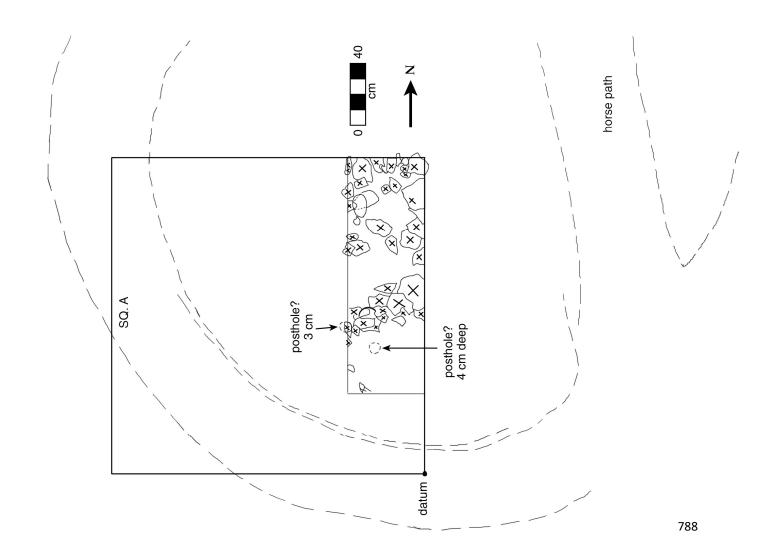


Figure 2: Stratigraphic profile and floor plan of EHPE 36.

