Excavations at the Katz Site in Summer 2005

In the summer of 2005, the Simon Fraser University Archaeology Field School conducted an investigation of Sxwóxwiymelh (the Katz Site, DiRj 1) on Chawathil Reserve (Figure 1). Michael Lenert, a UCLA PhD student whose dissertation research focuses on Sxwóxwiymelh, and Dana Lepofsky (SFU) co-supervised the excavations. Our excavation team consisted of our teaching assistant, Cam Robertson, SFU (and sometimes UBC) students, Deanna Peters of Schkam First Nation, and Tim Peters Sr. of Chawathil First Nation.

The work at Sxwóxwiymelh was conducted under the auspices of the Fraser Valley Research Project – a multi-disciplinary research project exploring shifting interactions and changing social identities among the Stó:lo First Nation. In it, we bring together researchers from Stó:lo Nation and various academic communities to integrate archaeological evidence on ancient Stó:lo villages and houses with that from historical documents, oral accounts, ethnographic sources, and archival and current information on place names. Sxwóxwiymelh is of particular interest to our research because it is one of the oldest known multi-pithouse settlements in the Fraser Valley and because a large portion of the site has not been significantly disturbed.

The pithouses and area surrounding Sxwóxwiymelh were first investigated by Hanson (1973) and later by Von Krogh (1976, 1980). Archaeologists gave the site the name “Katz site” after the nearby historic stern-wheeler landing site (Katz Landing). This is the name that has been used in the literature to refer to the pithouse village (e.g., Coupland 1996). However, since the recent investigations have considerably expanded the extent of the settlement to cover more of the landform, we have changed the name to the culturally more appropriate Halkomelem place name for this location: Sxwóxwiymelh (“lots of people died all at once”; Duff 1952:33; McHalsie 2001:150). According to

Above: The Sxwóxwiymelh field school gathers in House 8 and discusses excavation strategy during morning grand rounds (Photo by Deb Castagner).
Evangeline Pete, the mother of Barb Pete—who currently owns the land on which the site is located, this name refers to the many deaths associated with the 1806 smallpox epidemic when all but one family died.

Previous investigations at Sxwóxwiyemelh (Hanson 1973; Von Krogh 1976) resulted in the recording of 26 pithouse depressions situated in two parallel rows adjacent to the Fraser River (Hanson 1973; Coupland 1996). Highway and railway projects have since destroyed 12 of these depressions, leaving only the western portion relatively intact. Our investigations in 2005 revealed an additional row of at least ten structures to the north of the highway and railroad rights-of-way, making the total number a minimum of 36. Based on the remains recovered from Hanson’s (1973) testing of the highway right-of-way it appears that at least one more row of houses was located in what is now the road and railroad. The total number of depressions and area covered by them suggests that Sxwóxwiyemelh may have been one of the largest ancient villages in the Fraser Valley.

Hanson’s (1973) excavations in Houses 1 and 2 (Figure 1) provide a basic understanding of site chronology and use. He noted two distinct occupations. The first is a series of linear and circular cobble arrangements with associated stake molds that lie stratigraphically below the housepit rims and date to 1125-403 cal B.C. (1-6190, I-6189). Based on the presence of fish bones, ground slate knives and cortex spall tools, Hanson concludes that this earlier occupation is the remains of several temporary camps where fish was harvested and processed. Chipped stone points show that hunting was also conducted during this earlier occupation.

The second more recent occupation at the site is the housepit settlement, which overlies and cuts into the fluvial layers containing the earlier component. Prior to our current research, radiometric dating of the housepit settlement was limited to a single radiocarbon date (764-414 cal B.C.; I-6191) from a hearth on the floor of House 1. Based on the ethnographic literature and Housepit 1 and 2 lithic assemblages, Hanson (1973) argues that the houses were inhabited annually from late summer to the end of winter and were the locus of tool manufacturing as well as fish and hide processing.

2005 Investigations

The primary goals of our work at Sxwóxwiyemelh were to collect information on household socioeconomy, house construction, village layout, and occupation chronology. Following the methods already developed in our larger research project (Supernant 2005), we excavated 50x50cm units in the centers of 10 housepits to collect charcoal from house floors for radiocarbon dating, excavated a 4 x 2m area in one house (House 9) and dug a 70cm x 2m trench across the southern edge of another (House 10) (Figure 1). The following is a summary of our new discoveries based on field observations and preliminary lab analyses.
Northern House Depressions

Figure 1 (both left and right). Map showing house depressions at S̱xwoxwiyeml̓h (numbered depressions mentioned in text) (Map by Sue Formosa).

Pithouse Construction and Architecture

Our detailed mapping of S̱xwoxwiyeml̓h, combined with our area excavation in Houses 9 and 10, revealed considerable range in size and form of the pithouses. Pithouses vary in shape from circular to almost square, and range in size from 6 to 10 meters in diameter. Our excavations in House 10 revealed a portion of a raised earthen bench along the southern perimeter of the house interior. Ethnographic data suggests such benches were used for sleeping and storage. Next to the bench, we found 3 or 4 floor surfaces, each of which was prepared with clean yellow silts and sands and then lived on. Each floor contained a hearth, placed in the same spot, suggesting people were using the house the same way over time.

Unlike House 10, we found only a single, thin floor in House 9. On the floor, we found a substantial, circular, clay-lined hearth north of center. Numerous stake- and postholes are located throughout the floor, in no apparent patterning; the postholes range in diameter from 7-15cm. Sonny McHalsie of Stó:lo Nation suggested the stake molds may be the remnants of woven mat partitions or weaving looms. We did not uncover posts large enough to have been used as main roof-supports.

Household Socioeconomy

Our preliminary analysis of the artifacts from S̱xwoxwiyeml̓h suggests that differences in house size and form are not reflected in differences in activities conducted in the houses. All households seem to be engaged in manufacturing and using nephrite tools (adzes and celts), hunting and butchering tools (bifaces and projectile points), and ground slate tools (probably mainly for processing fish). All households also appear to have been using high numbers of tools made from utilized flakes and cobble spalls. Our analysis of the raw materials suggests that all house groups had access to a wide variety of high-quality, cryptocrystalline stone materials, such as quartz crystal, chert, chalcedony, and obsidian. Future analyses will explore the possibility that some households may have specialized in particular economic tasks (e.g., fishing, woodworking, nephrite tool production) and if there was differential access to raw materials.

Season of Occupation

Although the recovery of plant remains from individual hearths and floors was meager, the collective paleoethnobotanical results provide some insights into season of occupation. The list of plants recovered is composed of both economic (food) and weedy species. The economic species (e.g., salal, elderberry, blueberries) are poor indicators of seasonality because it is difficult to determine whether they were collected in-season (summer) and then eaten fresh in the pithouse, or were brought into the pithouse already processed (e.g., dried) and then consumed.
out of season. None of these plants were found in great enough abundance to argue that they were processed in-season in the pithouse itself. That does not mean, of course, that the messy job of preserving the fruits didn’t happen elsewhere in the pithouse settlement.

The several weedy species recovered, though less exciting from an ethnobotanical point of view, are better indicators of seasonality. The presence of several non-economic seed plants in low abundances suggests that these seeds were accidentally introduced during occupation, most likely during mid- to late summer. A native species of chenopods was found in low numbers in all contexts and in high numbers on the floor of one housepit. The relative abundance of the seeds of this pervasive weed inside the house could be the result either of people deliberately bringing the plant into the house for some economic purpose, or introducing them accidentally with other gathered plants. Either way, these seeds are clear indicators that at least some people lived in the Sxw6xwiymelh houses during the late summer, when chenopods produce seeds.

Based on the ethnographic literature and housepit stone tool assemblages, Hanson (1973) argues that the houses were inhabited annually from late summer to the end of winter. The current data from the paleoethnobotanical analyses also indicate at least a summer occupation. Determining winter occupations from plant remains alone is much harder. Our on-going analyses of the lithics and microfaunal remains in combination with the plant remains will further clarify when the houses were occupied.

**Dating Sxw6xwiymelh**

Radiocarbon dates and settlement layout allow a partial reconstruction of the evolution of the settlement through time. At the start of the Sxw6xwiymelh project we knew that based on the excavations in the 1970’s, House 1 dated to ~2,400 years ago. Recently submitted radiocarbon dates from House 10, 9, 6, and 15 (Figure 1) suggest that many of the houses were occupied roughly at the same time. Slightly younger dates from the two houses on the west end (Houses 9 and 10) suggest the settlement may have expanded westward with time. One of two house floors dated on the north side (House 10) dates to the same time as House 1. Together, these five dates suggest the village was very large some two millennia ago. A much younger date of ~400 years ago from the uppermost floor of a small house (House 18) to the north of the highway represents a more recent occupation. Notably, this and the other smaller structures in the back row are somewhat out of alignment with the larger (earlier?) houses. Currently, we know about the protohistoric settlement of Sxw6xwiymelh only from oral traditions.

As we continue analyzing the enormous amount of data recovered from last summer, we will discover more details about life at Sxw6xwiymelh. We also hope to continue working with the Chehalis community in the future to reconstruct the history not of just Sxw6xwiymelh, but of settlements directly surrounding it on the same landscape. We are particularly interested in mapping and dating nearby settlements and exploring their social
and economic relationships to the people living at Sxwówxwiymelh.

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Mike Lenert is a PhD candidate at the University of California, Los Angeles.

Dana Lepofsky is an Associate Professor in the Department of Archaeology at Simon Fraser University.

A drawing by Hilary Stewart of a petroglyph salvaged during the early Katz Site investigations; the petroglyphs, including this one, were located a couple hundred metres to the north of the site. Originally from The Midden in 1972 [4(1)].