



Mapping and Testing Housepits in the Fraser Valley: 2005 UBC Field School Report

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On May 25, 2005, the UBC Fraser Valley Field School got underway. Our goal was to map and test a number of different village sites in the Upper Fraser River Valley and Lower Fraser River Canyon. This work is part of a larger joint collaborative project involving researchers from UBC, SFU, UCLA, University of Saskatchewan and the Stó:lo Nation / Stó:lo Tribal Council - the 'Fraser Valley Project'—incorporating archaeological, oral, historical, geological, and linguistic information to explore social identity among the Stó:lo. The nature of this collaborative project allowed the field school students to engage in different methods of archaeological data collection, including mapping and survey techniques, test excavation strategies and full-scale household excavations. While we were in the field, students from both the SFU field school and UCLA were working nearby, which gave the students an opportunity to experience different approaches to research.

The field school was directed by Dr. Michael Blake (Professor of Archaeology, UBC) and Dave Schaepe (PhD candidate, UBC; Senior Archaeologist, Stó:lo Nation), with technical support provided by Sue Formosa, a specialist in GPS survey and mapping techniques. Four UBC students, in addition to myself, participated in our field school. We joined with Dr. Dana Lepofsky's

SFU field school and started a rotating weekly schedule where two UBC students switched off working with SFU, while four SFU students worked with us. This was particularly useful for the students, as the SFU field school was excavating exclusively at the Katz site (DiRi-1)—with Dr. Lepofsky and Mike Lenert (PhD candidate, UCLA)—providing exposure to different sets of archaeological methods and strategies. Our students also had the opportunity to work with Anthony Graesch (PhD candidate, UCLA) who continued his excavations of a late-precontact / early post-contact village (*Welqamex*) on nearby Greenwood Island (part of the Chawathil First Nation's reserve lands). That site is located across from the Chawathil's Tel Teyet Campground in Hope, where we and the UCLA, and SFU fieldschools set up camp.

Goals and Methods

In testing and mapping different sites throughout this portion of the Fraser Valley, our goals were to collect information applicable to understanding relationships between house size, house shape, and community organization. By sampling a number of house depressions at village sites throughout the region, we explored variation in house size, shape, and arrangement

Photograph: Excavations at Ayxel (DiRi-48). From left: Nick Waber, Dr. Michael Blake, Chris Marchand, Kisha Supernant, and Dave Schaepe (Photo by Marnie Recker).

within settlements. One of the goals of this project involved establishing dates for the houses at these village sites. Focused on this objective, we used methods that did the least amount of disturbance while providing information about stratigraphy and allowing for our collecting of datable materials. Our two main tools were an Oakfield Soil Probe with a 2.5 cm diameter x 25 cm core and an auger with a 13 cm diameter bore. We typically used the soil probe to assess stratigraphy, recording in detail each core profile; collecting carbon samples when possible. If the soil probe proved ineffective or the results warranted further exploration and exposure, we continued with the auger, or, if necessary, a 25 cm by 25 cm shovel test. Soil type does limit the utility of both the soil probe and auger, as neither is particularly effective in very rocky or very sandy conditions. All of the material was screened through 1/8 inch mesh, and artifacts were collected from the auger and shovel tests by arbitrary 10-cm levels within stratigraphic layers.

The Sites

The first site we tested was *Ayxel* (DiRi-48), just outside of the township of Hope, which is currently a fishing location for a member of the local community. This site consists of four house-pits on a large terrace directly overlooking the Fraser River. The construction of the CN Railroad, which provides the only access to the site, has impacted DiRi-48. Using a total station in conjunction with a Lecia base station and rover (in order to place sites in real space using UTM coordinates – often with 1 to 3 cm accuracy for site location and sub-centimetre accuracy for site mapping), we mapped all four house depressions. We also tested the features with the soil probe and auger, targeting locations just north of centre of each depression. This location consistently yielded what appeared to be hearth contents, marking house floors. We collected many samples for AMS radiocarbon dating.

One aspect of this fieldwork was our ability to bring information back from the field and get immediate results. We set up a lab in Hope (at the lovely Swiss Chalet, complete with flowery curtains) where we could download mapping information from the total station to the computer, and generate maps of the sites on which we were working. This was particularly useful because it allowed us to see where the gaps in our information might be, as well as bring out new features of the site. At DiRi-48, for example, we discovered several features present on the site that would not have been readily visible without the mapping technology. The next site we mapped, DhRi-15 (Scowlitz Island), located in the Harrison River on the Scowlitz First Nation reserve near Harrison Mills, also proved interesting once viewed using the mapping software. Our first task at this site was what we fondly referred to as “vegetative excavation” – basically, clearing the site of all of the tangled underbrush in order to see and map the various features. Once this was complete, we set to mapping five depressions as completely as we could, although we were limited by the fact that most of the depressions were partially filled with water. We assumed that these house-pits represented the remains of circular pit houses, but on the generated maps, some of these pit house remains were clearly square. This pattern of square house depressions that appear round to the naked eye continued at other sites, and became an ongoing debate during our work.

Our next site in the sample was near Chilliwack, on the

Soowahlie Reserve. *Th'ewali* (DgRi-17) is a large village site on Sweltzer Creek which includes both house-pit depressions and the remains of longhouses along with other features, including burial mounds and cairns. The site is largely intact, although a road built in the 1980s caused some disturbance to a number of the house depressions. After more vegetative excavation, we continued mapping of the site—picking up from what was previously done in 2002 and 2004—by filling in gaps and ensuring that we had a complete picture of the entire site. Through our testing, we quickly found that the rocky nature of the soil precluded soil probing. Because of the size of the site and the fact that we could not rely on the expedient soil probe, we were not able to test each house-pit feature, but instead focused on a few of features of particular interest. In the lower portion of the site, three features formed a linear pattern and were rectangular, not circular. One of the proposed scenarios for this formation was that these so-called house-pits were in fact cellars of one larger building, possibly a plank house. Another feature of specific importance at Soowahlie was a burial mound that had been partially cut through by road construction. Due to the sensitive nature of burial remains, we did not excavate further into the mound, but took measures to record the exposed stratigraphy and ensure that the mound was protected from further erosion.

Once we had completed our objectives at Soowahlie, we moved our operation further up the Fraser River to the site of *Xelhálh* (DjRi-14) at the mouth of the Fraser Canyon, on the *Xelhálh* Reserve of the Shxw'ow'hamel First Nation. *Xelhálh* (translated as “hurt” or “injured people” in Hal'qemeylem) is a large village site, located on the south side of the river opposite Lady Franklin Rock, and contains a number of remarkable features. Half of this site had been extensively cleared and partially mapped in 2004—the lower portion of the site consists of a number of cultural depressions, including house-pits, longhouse depressions and other assorted remains. It was first thought that this was the full extent of the site, but in further explorations last year, the team came across a number of constructed rock features on the other side of a rock bluff (the upper portion of the site) where the site extends to the east. These formations include numerous rock walls, constructed rock terraces, rock retaining walls for structural platforms, and what appear to be stone-lined rectangular house depressions. Our goals, therefore, were to finish mapping the lower portion of the site, test a number of cultural depressions, and begin mapping and testing the upper portion. In all, over 10,000 data points were taken by the end of mapping work. The soil probe proved quite effective at this site and we were able to test a large number of cultural depressions in a short time—only a few days. Mapping the features on the rock bluff, however, proved to be quite challenging. More work remains to be done and we hope to return to *Xelhálh* in the future.

Over the final two weeks of the field school, we tested and mapped two more sites. The first was Shxw'ow'hamel (DiRj-30), located on the Shxw'ow'hamel First Nation reserve between Hope and Chilliwack. This site was mapped in 2004, so our main goal was to test a sample of the house depressions at the site, evaluate the stratigraphic patterns, and see if it matched up with an account in Stó:lo oral history of a village that had burned down in the past. One interesting feature of this site, besides



Dr. Michael Blake in front of rock wall at *Xelháih* (Photo by author).

the swarms of mosquitoes, was the linear arrangement of the houses. They appear to cluster in groups of three or more. One of the aspects of the site that we were trying to understand was the relationship within and between these groups. We tested seven house-pits - at least one house depression in each of the clusters - with considerable success in identifying floor zones and collecting datable material. Further analysis is needed before we understand the spatial and temporal arrangement of the site.

The final site that we mapped and tested was not part of our original plan, but was added at the start of the field season. The John Mack Slough site (DhRI-T1) is located on the Chehalis First Nation reserve; it was undergoing a large scale clearing operation initiated by the Chehalis Nation. We used this opportunity to map the site using the total station and rover, as it is a largely intact and significant village site with a number of house depressions, burial mounds and other features. We auger tested a number of house-pits, but found that the water table was so high that we were only able to go down about 10-15 cm before we hit water. We were nevertheless able to profile and collect a carbon sample from one of our tests.

Community Involvement

A significant part of our work this summer was the involvement of the Stó:lo communities in our work. Since most of the sites we visited were located on reserve lands, it was first necessary to gain approval and permits through each First Nation Chief and Council, as facilitated by the Stó:lo Nation under the Stó:lo Heritage Policy. Moreover, at least one, and often more, Stó:lo community members (including Sonny McHalsie, Darren Jones, Tim Peters, Larry Commodore, Cliff Hall, and Betty Charlie) worked with us at each site. Their sharing of information and community-based perspectives on our work and

on the sites we visited made a very important contribution both to the goals of the project and to the learning experience of the field school students. As part of our lab work, we participated in an open house hosted by the Chawathil First Nation, since we were staying as guests on their reserve lands. The active role of the communities in informing and shaping the archaeological work is one of the reasons working in this area is so enjoyable, as we can ensure the needs of the community are met while engaging in our research. At the end of the season, a burning ceremony was held at Chawathil to honour the ancestors and ensure the spiritual health of all of those involved in the project.

The UBC field school in the Fraser Valley was, by all accounts, a great success. Not only were we able to map and sample a large number of house-pits in five different village sites spread throughout the region from Chilliwack to Yale, we were also able to expose the field school students to a variety of perspectives and methods used in archaeological research, both in the lab and in the field. Our experiences with members of the Stó:lo community were incredibly rewarding, and we had the chance to interact with other students and researchers from SFU and UCLA. It certainly made for a fun summer, and I hope to continue to work in this area with similar success.

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