Tla’amin-SFU Field School in Archaeology & Heritage Stewardship
2008 Season Report & 2009 Prospectus

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Overview

Between 6 June and 25 July 2008, the Sliammon (Tla’amin) First Nation and Simon Fraser University
(SFU) conducted the first season of a jointly planned and managed field school to train Tla’amin (4
youth) and university students (8 undergrads, 2 post-grads, 1 MA, 1 PhD) in the respectful investigation,
documentation, protection, and sharing of Tla’amin archaeological and cultural heritage (Figure 1). The
program is authorized by Sliammon Band Council resolution (03 Dec 2007), BC Archaeology Branch
Permit (2008-0299) and SFU Research Ethics Board approval (38902, 11 April 2008).

The seven-week, for-credit field school, coupled with a three-week add-on for volunteers
working out of the Kahkaykay Reserve (IR 6, “Grace Harbour”), created unprecedented opportunities
for integrated regional study of Tla’amin oral traditions and archaeological and archival materials.
Building upon a baseline commitment to a mutually beneficial, open-agenda partnership, the 2008
season yielded diverse data pertaining to ancient and recent Tla’amin site and landscape use centered on
Kleh Kwa Num (Scuttle Bay) and Kahkaykay. We view 2008 as a pilot season and this report as a
foundation for expanding engagement with Tla’amin leadership and other community partners. As
laboratory analysis proceeds, we will continue to work with the Tla’amin Treaty Society, Tla’amin
Health, and others to maximize and harmonize overlap between program objectives, Tla’amin interests
and needs, and broader goals of making the world a better and healthier place for future generations.

This report is divided into six sections: (I) Overarching Program Goals, (II) Partnerships and
Outreach, (III) Kleh Kwa Num Excavations, (IV) Archaeological Reconnaissance and Mapping Near
Grace Harbour, (V) Conclusions, Special Projects, and Future Plans, and (VI) References Cited.

I. Overarching Program Goals

1. To sustain a meaningful partnership between Tla’amin First Nation, the SFU Department of
   Archaeology, and other partners;
2. To explore and enhance knowledge about Tla’amin lands and heritage through heritage site
   identification, documentation, and investigation;
3. To train Tla’amin youth and SFU students in archaeology and heritage stewardship;
4. To increase awareness and knowledge about Tla’amin history both within the Tla’amin community
   and in regional, academic, and resource management communities;
5. To facilitate exchanges of information and experience among Tla’amin Elders, youth, and SFU;
6. To advance to Tla’amin goals of self-governance, self-determination, and self-representation.
The six program goals took shape through Tla’amin-SFU exchanges of information, ideologies, and methodologies relating to cultural and environmental heritage stewardship. The program’s other primary driving force was to gather information for thesis projects for two SFU graduate students, Craig Rust and Sarah Johnson. In July 2008, SFU endorsed the terms of a research agreement and the Sliammon Band Council voted unanimously to authorize and support the field school through 2013. We are committed to collaborative program planning and implementation to develop personnel, data bases, and tools appropriate to the long-term stewardship of Tla’amin cultural and biophysical heritage.

Figure 1. The SFU team perched on the bedrock of the Kleh Kwa Num point. Front (right-left): Craig Rust, Michael Fox, Annette Simpson, Meaghan Hackinen, Stephanie Reczka, Dana Lepofsky, Panda, John Welch, Natasha Lyons; Back: Sarah Johnson, Katherine Young, Melissa Cutting, Mindy Hebron, Alisha Skelton (missing: Megan Brummitt, Crystal Sawyer)

II. Partnerships and Outreach
We refer to the open-ended, cooperative interactions we seek as partnerships. Partnerships are fundamental to outreach—the mobilization of program philosophies, goals, projects, personnel, and results beyond university and academic settings to serve community and social interests.

Partnership and outreach efforts in 2008 emphasized relationships with Tla’amin individuals and organizations, as well as connections with the Powell River Museum, Dr. Barbara Winter and the SFU Museum of Archaeology and Ethnology, and Vancouver Island University. The Tla’amin Cultural Committee, together with Michelle Washington and Laura Roddan of the Treaty Society and Rose Adams, John Louie, and the staff of Tla’amin Community Health, provided much of the project’s intellectual and logistical framework. Our SFU team has been joined by Tla’amin and non-Tla’amin elders and seniors (Les Adams, Emily August, Charlie Bob, Karen Galligos, Mary George, Eugene Louie, Fred Louie, Elsie Paul, Jim Timothy, Alvin Wilson, Don Carto, among others). Additionally, four
Tla’amin youth affiliated with Tla’amin Community Health-Sliammon HRDC and the Paha Kwagen-Yik Meh Thote (One Spirit–Helping Others) youth-elder participation grant program—Sosan Blaney, Gina Francis, Stephanie Williams, Lisa Wilson—provided reciprocal training in diverse skills applicable to multiple career paths and lifeways. We give special thanks to Margaret and Randy Timothy (our hosts at Kleh Kwa Num), who made it possible for nearly 500 visitors to experience our work. This included the more than 200 students, teachers, and parents who toured the Kleh Kwa Num excavation due to support and assistance from Betty Wilson of the Powell River School District.

In reflecting on her initial professional experience in heritage stewardship and community facilitation as a member and youth leader of the 2008 program team, Lisa Wilson wrote,

As a young woman interested in becoming an archaeologist I was delighted to come home, work in my own territory where there is so much fascinating history, and be a part of a unique community-bridging project…. I walked away with a wealth of knowledge about archaeology and reinforced my aspirations of being an archaeologist. I have applied theory from class in Scuttle Bay and Grace Harbour. It has allowed me to make contacts within the field as well as possible plans for grad school.... Working alongside the SFU team, I was given numerous opportunities for public speaking and organizing events….the latter half of the summer was spent gaining experience in planning, coordinating and budgeting. I have learned that I am capable of handling responsibility and managing expenses while having two people working under my supervision. I have learned to work with youth, hoping to have a positive influence in their lives by demonstrating the ability to attend university. I have gained confidence in my abilities to handle responsibility and learned to ask for help when needed. As this was my first job in a supervision role, I gained experience and knowledge and was delighted to have worked with two very bright young women…. People have said they really see that I have changed from this experience...one of my professors said my eyes light up when I’m talking about everything.

We facilitated community good will through meetings, interviews, site tours, artifact “road show” evenings, and public lectures involving Vancouver Island University, the Powell River Naturalists, the Archaeological Society of BC, and various media sources. Our engagement of journalists culminated in detailed coverage in The Peak, The Times Colonist, and The Vancouver Sun.

In early July, we made use of low tides and Lee George’s and Roy Francis’ new boat to lay foundations for an interdisciplinairy investigation of boulder and cobbie alignments and clusters built in intertidal zones throughout the Tla’amin Homeland. Described by non-Tla’amin as “clam gardens” and “fish traps,” the features observed during three days of explorations by our team of marine geologists, geo-chemists, biologists, and archaeologists appear to be more diverse in form and function. The features are also more widespread across both the Tla’amin Homeland and the intertidal zones than we realized. Our observations demonstrate that Tla’amin ancestors intensively modified and utilized intertidal zones and that there is a significant potential for combining archaeological documentation of these features with experimental studies to assess prospects for returning these marine resource cultivation and storage features to active use in accord with Tla’amin traditions and interests.

Barbara Winter, director of the SFU Museum, and other videographers captured partnership efforts, as well as individual perspectives, on videotape. We eagerly await the finalization of the Nation’s protocols for tapping and using community members’ stories and recollections.
III. Kleh Kwa Num Excavations

In consultation with our Tla’amin partners and Kleh Kwa Num residents, we selected the location for the excavations to maximize community access to the project and to facilitate connections to three research themes: (1) links among Tla’amin oral history and archaeological evidence, (2) long-term history of place, and (3) Tla’amin relations with neighboring groups. Our work focused on the prominent point of land that breaks the gentle arc of the Kleh Kwa Num shoreline. Work at Kleh Kwa Num (Scuttle Bay) began on 8 June and continued on most weekdays through 24 July 2008. The goals of our 2008 Kleh Kwa Num mapping and excavation project included:

1. To clear the point of land, reveal surface features, and provide a safe and inviting place for visitors;
2. To map the surface of the point and to document enduring aspects of site history;
3. To collect any “diagnostic” artifacts from the surface to help piece together the history of the site;
4. To “probe” (take core samples from) portions of the site to understand the depth and horizontal extent of the archaeological layers (that is, the stratigraphy);
5. To excavate a portion of the site by “peeling back” the top layers of the leveled surface (house platform?) to expose spatial patterns of features and artifacts on the surfaces of the structures;
6. To share information on the importance of heritage and heritage preservation generally, and Tla’amin heritage specifically with visitors to the excavation.

Land Clearing and Mapping

We began clearing vegetation and site mapping in our first week and finished on our last day. The surface map (Figure 2) and other observations indicate that the site has witnessed a complex sequence of activities, beginning prior to European contact and continuing today. Our clearing confirmed initial impressions that the northwestern part of the point was leveled in the past, presumably to create a platform for a house structure(s). On the surface, we find both ash from recent use and shell from more ancient uses.

Elsewhere on the point, evidence of 20th century use dominates. Oral history provided by senior community members accords with aerial photographs and surface observations indicating that the use of the adjacent shoreline as a booming ground and for other aspects of timber production resulted in the nearly comprehensive surface disturbance of all areas accessible to heavy equipment (bulldozers and log skidders), as well as deeper local impacts (Figure 3). Ruts and “push piles” created by equipment operations, as well as disturbed sediment profiles perched on bedrock and on fill at beach scarps reveal impacts exceeding one meter deep. Oral testimony from Jim Timothy and Don Carto confirms the use of heavy machinery in creating the extensive, relatively flat area between the Timothy residence and the elevated high landform where excavations took place, and in clearing and leveling adjacent areas.

Surface Collection of Artifacts

In order to safely clear the site vegetation and prepare the site for excavators and visitors, we picked up approximately 125 20th century objects from the site surface beyond the area slated for excavation. Most
of the objects removed were cans and bottles, and most were manufactured post-1970. One cluster of items was removed from the apron or “toss zone” surrounding the bedrock crown of the point. Another cluster, discovered and removed from the northern edge of the landform and including many items made before 1970, appears to be associated with an area habitually used for refuse disposal while the landform was occupied during the 1940s, 1950s, and 1960s. The post-1970 objects, especially the “stubby” beer bottles were consistent with episodic recreational use of the elevated landform, with on-site beer drinking by those employed in booming operations, or some combination.

Figure 2. Map of the Kleh Kwa Num point, showing excavation units and associated features

We cleaned and assessed the historical period objects. We discarded recent and redundant items lacking emblematic or analytic value. We then created a descriptive inventory of the objects of interest, conducted summary research on the manufacture date ranges, made photographs where appropriate, and offered the items to the Powell River Museum, which accepted approximately 15 of the objects. Historical objects having particularly high research interests, requiring additional analysis, or both are being held for study at SFU prior to being returned to Tla’amin.
Figure 3. Jim Timothy’s “memory sketch” of the Scuttle Bay booming ground, circa 1965, with three small structures on the point. The five shaded rectangles are the approximate locations of George Munson’s quarters, shops, and logging operation office (used with permission).

Figure 4. Aerial view of the Kleh Kwa Num point; Highway 101 in foreground
Subsurface Coring

We did not have sufficient time to implement our plans for an extensive, systematic coring program to determine depth and stratigraphy of the point and adjacent terrain. Instead, in select unexcavated areas, we used hand augurs and a percussion corer to assess underground stratigraphy. We removed, examined, and documented about 20 samples.

Our coring revealed that the point’s bedrock is unevenly covered by thin and weakly developed soils and organics. Sometime in pre-contact past people laid down shell over much of the point, except the highest ground, which is currently exposed bedrock. Elsewhere, the shell deposit contains whole and broken shell indicative of food processing and probably ancient house subfloor or leveling materials. We do not yet know with precision the age of the first use of the site. The apparently oldest artifact we found while clearing the site was a form of spear point that was used throughout the past and is thus not diagnostic to age (Figure 5). We surmise that the nephrite (fine-grained, high-quality stone) adze blade recovered in the first few days of our excavation (Figure 6) came from an extra-local source and was picked up from the shell midden and re-deposited by 20th century site users. Nephrite adze blades are also non-diagnostic age-markers, since they were used beginning about 3000 years ago.

Our coring of the platform along the northwest edge of the point revealed that much of the ancient shell layers had been disturbed by the construction of 19th and 20th century structures. Shell only remains along the western edge of the point, and along the base of the knoll to the east. The platform itself is composed of many fine layers of occupations, but none are shell-bearing.

![Figure 5. Spear point from surface](image)

![Figure 6. Adze blade from near-surface](image)

Excavation of the Structure Platform

After clearing the site, we laid out a north-south oriented grid so that our excavations will be tied into a universal mapping grid system (UTM system) and the position of all finds specified in horizontal and vertical (x, y, z) coordinates. We choose our excavation units based on both logistical considerations and our research goals. To accommodate the former, we wanted to be on the western edge of the flat so that we could more easily conduct large groups of visitors through the site. To address the latter, we choose a combination of units that we thought would be centered on any underlying structures as well as
reveal features on the periphery of the structures. This reflects our experience excavating other ancient structures, where the features (hearth, walls, etc.) tend to be either in the center of the structure, on the extreme edges, or both. In addition, stratigraphy (i.e., layers) is often best preserved along the sides of structures, where this is less trampling by the occupants.

We excavated six 2 x 2 meter units (Figure 7) down to approximately 20 cm below the pre-excavation surface. All deposits were screened through 1/8th inch screen and all bone and artifacts were collected from the screen. In addition, we collected about 5 (N = 32 total), 2 liter “flotation samples” from each unit. In the lab these are processed to retrieve even smaller remains such as seeds, charcoal, and the smallest animal bones (smelts, herring head parts). Field school student Alisha Skelton and Dana’s lab assistant, Naoko Endo, are sorting and processing these materials. The resulting data will provide insights into season of occupation, what was being eaten, and what trees and plants were used for construction, fuel, etc.

![Excavation units at the close of the excavation, immediately prior to backfilling](image)

Although our analysis will remain in progress through 2009, our excavation and preliminary analysis to date has revealed the following:

1. Beginning at some time in the late 19th century, and continuing until as late as the 1940s, multiple “smoke houses,” drying racks, or both were built on the northwestern part of the point. The last smoke house almost surely belonged to Chief Tom. Fred Louie recalls that Chief Tom had such a structure there in the 1940s. In addition to fish remains, this upper stratum produced various mammals bones, including portions of a dear carcass (Figure 8).

2. The other, earlier structures are represented archaeologically by complex stratigraphy and features. In profile, along the edges of the structures, we see fine layers that represent a series of collapsed and/or burned structures and then re-building events (Figure 9).
3. Based on the artifacts recovered, the most recent structures were likely built in the mid-20th century (1930s and 1940s). When we stopped at 20cm below surface, we had excavated through portions of several structures, the oldest probably dating to sometime around the 1890’s. Notable and datable finds include (in order of increasing age): 1920’s coins (Figure 10); square cut nails; and, a German-made crucifix, dating to the late 19th century (Figure 11).

4. In addition to these European-made artifacts, we recovered several Tla’amin-made bone artifacts (Figures 12 and 13). The Tla’amin items appear to be largely fishing implements. Not surprisingly, in comparison with European-made items, the number and frequency of artifacts made by Tla’amin increase in number with depth below the pre-excavation surface (i.e., age). In addition to the bone artifacts, we discovered a burned basket and mat preserved in thick layers of ash (Figures 14 and 15). Because these were so fragile, we could not recover these in their entirety, but we collected all parts (warp, weft, coiling) and will identify the plant species used in the baskets and more fully describe the weaving technique through laboratory study.

Figure 8. Deer bones (phalanges)  Figure 9. Ash lenses in stratigraphic profile

Figure 10. Canadian (1929) & Austrian (1924) pennies  Figure 11. Crucifix, made circa 1930
Based on the absence of substantial post holes, we surmise that many or all of the structures were lightly built. We found the occasional burned post or beam fragment, but in no instance were they more than 8 cm in diameter. Floor boards, which burned and thus were preserved as charcoal when the structures burned, were laid down on the floor of the structures. These boards were laid down parallel to the edge of the flattened terraces. Because we only found only a few such boards, and there was variable spacing between parallel boards, we surmised that the boards were only placed in high traffic or muddy areas. However, we did find the occasional wood fragment that was lying perpendicular to these floor boards. This may in turn suggest that at least some of the plank elements may have been floor joists, with boards (later removed) placed perpendicular to the joists. We collected samples of all posts and planks to identify the wood species in the laboratory.

We assume that the structures were used for processing food based on a large central hearth found associated with one structure. However, the dominant food remain is uncharred herring. It seems most likely that the abundance of herring bone has resulted from spoilage which fell off
drying racks. Several community members stated that herring was not dried in smoke houses, but rather was dried outside on racks. Mary George says that the herring was brought in every night so that it didn’t get wet. Perhaps at least some of the structural remains we have documented are racks for herring drying or smoking. In addition to thousands of herring bones, we recovered the bones of other foods: salmon, deer, perch, dogfish, etc. Again, these bones, as well as the plant remains, are being analyzed. When these analyses are complete, we will have a fuller understanding of the kinds of tasks conducted in and around the structures.

IV. Archaeological Reconnaissance and Mapping Around Grace Harbour

Under the supervision of Craig Rust and Sarah Johnson, Tla’amin-SFU crews conducted a diverse program of archaeological site reconnaissance, mapping, and subsurface inspection. The work took place in and adjacent to the Desolation Sound Marine Park (Figure 16) and pursued four goals:

1. to train students and Tla’amin youth in methods to identify and document archaeological sites;
2. to provide information to the Tla’amin people about their heritage resources;
3. to provide data for Ph D and Masters research projects; and
4. to advance our understanding of past human use and occupation of the area.

Our teams spent 10 weeks surveying Grace Harbour, Cochrane Bay, and surrounding areas. Acheson and Riley (1977) first surveyed the area in 1976 and 1977. Their survey covered an area several times larger than ours and focused primarily on shoreline. This project built on their work by focusing on a small part of the area, and investigating intertidal, shoreline, and upland areas. During June and July the crew consisted of SFU field school students, Tla’amin students and two SFU graduate students. In August the survey work continued with a crew of volunteers, all with archaeological training. We set up camp on the Kahkaykay Reserve (IR 6) and traveled by boat to the various survey areas. Table 1 summarizes the work week-by-week. This report is a preliminary discussion of our survey methods and our preliminary results. Over the coming year as we further analyze the data more results will become available.

Our survey covered many different parts of the landscape and identified diverse types of sites and features, ranging from intertidal features with unknown functions, to shell middens, to stone tool assemblages. We used different techniques for site identification and documentation, and the different methods used produced various types of information. The surveyed areas ranged from intertidal zones on days when the tide was close to zero, to the tops of bluffs overlooking the Malaspina Channel. Some areas were investigated by surface inspection and scrutinizing all soil exposures visible along our survey transects. We investigated the areas of Isabel Bay, Scott Point, and Cochrane Bay judged likely to contain archaeological materials by excavating small shovel pits at regular intervals. We employed a percussion corer at Grace Harbour and Cochrane Bay—the two locations we judged to have the greatest potential for yielding evidence for ancient and enduring Tla’amin occupation and use.

We have a lot of work ahead of use as we organize and try to understand the “mountain” of data we collected in 2008. We were able to devote at least 80 person days to the survey component of the program, but work to understand the full range of landscape features and values from both Tla’amin and
archaeological perspectives has really just begun. We were able to survey such a large area expeditiously due to the hard work of our crews. We thank each of the SFU field school students, our colleagues from the Paha Kwagen-Yik Meh Thote (One Spirit–Helping Others) program—Sosan Blaney, Gina Francis, Stephanie Williams, Lisa Wilson—and to our volunteers—James Herbert, Meaghan Hackinen, Lore Hackinen, Melissa Cutting, Mindy Hebron, Megan Caldwell, Chris Springer, Jerry Drake, and Rastko Cvekic.

Table 1. Weekly Activity Summary (weeks averaged 1 day of travel and 4 days of field work)

<table>
<thead>
<tr>
<th>Dates</th>
<th>Personnel</th>
<th>Activities and Milestones</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 8-14</td>
<td>4 students, 2 graduate students, 1 visitor for 1 day</td>
<td>Set up camp; cleared EaSe 11; relocated EaSe 10; sketched and relocated EaSe 55, EaSe 56, EaSe 57, EaSe 58, and EaSe 59</td>
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<tr>
<td>June 15-21</td>
<td>4 students, 2 graduate students, 2 visitors for 1 day</td>
<td>Survey of upland lakes; relocated and mapped EaSe 5, EaSe 19, EaSe 60, and EaSe 68; high resolution mapping at Grace Harbour</td>
</tr>
<tr>
<td>June 22-28</td>
<td>4 students, 2 graduate students, 1 visitor for 4 days, 2 visitors for 1 day</td>
<td>Survey and mapping of EaSe 65; high-resolution mapping at Cochrane Bay</td>
</tr>
<tr>
<td>June 29-5</td>
<td>4 students, 2 graduate students</td>
<td>Survey and mapping of intertidal features; survey of Scott Pt upland area; high resolution mapping and percussion coring at Grace Harbour</td>
</tr>
<tr>
<td>July 6-12</td>
<td>4 students, 2 graduate students</td>
<td>High-resolution mapping at Grace and Cochrane; percussion coring at EaSe 11,</td>
</tr>
<tr>
<td>July 13-19</td>
<td>4 students, 2 graduate students, 3 visitors for 1 day</td>
<td>Survey and mapping of intertidal area around Madge Island, Jean Island and Cochrane Islands; percussion coring of EaSe 11</td>
</tr>
<tr>
<td>July 20-26</td>
<td>4 students, 2 graduate students, 1 visitor for 1 day</td>
<td>Survey of uplands above Cochrane Bay; percussion coring of EaSe 65</td>
</tr>
<tr>
<td>July 27-Aug 9</td>
<td>None in field</td>
<td>No activity</td>
</tr>
<tr>
<td>Aug 10-16</td>
<td>2 graduate students, 2 volunteers</td>
<td>Shovel tests at Scott Pt; percussion coring at Cochrane Bay</td>
</tr>
<tr>
<td>Aug 17-23</td>
<td>2 graduate students, 3 volunteers</td>
<td>Shovel tests and survey between Grace Harbour and Isabel Bay</td>
</tr>
</tbody>
</table>
A number of Tla’amin community members talked with us about their personal and familial relationships to Grace Harbour and its surrounding landscapes. These consultations were invaluable means for contextualizing our research and adding a human dimension to the otherwise mechanical process of archaeological survey. We would particularly like to thank Les Adams, Emily August, and Charlie Bob for their help and guidance.

Figure 16. Map of Malaspina Inlet, Grace Harbour, and Cochrane Bay vicinity, depicting archaeological sites and areas inspected during the reconnaissance surveys

Reconnaissance and Mapping Methods
The methods we used to gather data included pedestrian survey, archaeological site mapping, and subsurface sampling. We conducted the pedestrian survey with three to six people roughly spaced 3 to 5 meters apart. The amount of ground covered depended on the size of the crew available on any one day, as well as the density of brush and other logistical considerations. We carried hand-held GPS units that recorded our approximate location and path, and we prepared narrative notes on our survey transects. We also periodically took pictures of the landscape and views as we surveyed. We looked for artifacts and other archaeological evidence in all tree throws and other soil exposures.
Site mapping is a useful tool in recording data about archaeological sites and the relationships between sites. This project used two kinds of mapping. We used the first type, sketch mapping, when we encountered an unrecorded site, an unrecorded component of a known site, or when existing site records inaccurate or hard to understand. We drew sketch maps by hand, and the rough sketch maps allowed us to take more accurate notes about the extent and character of the sites, as well as to produce better finished maps later for reports and site records. The second kind of mapping method is high resolution site mapping, which involves the use of precision survey instruments to record many elevation points and record the location of various archaeological site features (shell midden exposures, sea gardens, etc.). These data are then used to create accurate models of the surface of the archaeological site, which can be used to further assist initial interpretation of the site and provide an inclusive image of the entire site which could not be seen on the ground due to dense brush cover.

Our work also included the examination of subsurface areas through the use of augurs and small shovel pits. The inspection of subsurface areas is important because many archaeological sites in forested areas are not easily visible on the surface. Percussion coring involves driving a small tube into the ground, extracting the tube and looking at what is inside. A plastic sleeve fits inside of the metal driving tube which allows us to bring that samples back to the lab and study them further. Shovel testing is similar to coring, but a shovel is used to dig a small hole (about 30 cm in diameter) and the excavated sediment is put through a 1/8 inch screen so that we can see any signs of past occupation or use. The locations of both shovel pits and core holes are recorded for future reference.

**Findings**

The results of our survey have changed our ideas about how archaeology can be used to understand the ancient use of the Tla’amin Homeland. We found and documented a small number of new sites and redefined and expanded the available information on the size and extent of the 13 previously recorded sites. In most cases our work resulted in an increase in the size of previously recorded sites. This tendency resulted in the lumping of small but densely grouped sites into a single large site. Overall, this survey nearly doubled that average site area of the recorded sites in the surveyed area. As we complete the site inventory forms and finalize the site maps we will be able to make more specific statements about the effects of this seasons work on the size of the sites in our survey area. We have divided our preliminary results in to three geographic areas, Grace Harbour, Cochrane Bay, and Isabel Bay and each will be discussed in turn.

**Grace Harbour and Jean Island.** Much of our upland pedestrian survey took place on the north shore of Grace Harbour around Scott Point and KaKaekae point, as well as all of Jean Island as shown by the shaded areas in the map of the survey area (Figure 17). We surveyed the shore lines of the three small lakes in the uplands north of Grace Harbour (Figure 17, area A). We gave particular attention to areas around the lake and streams entering and draining these fresh water bodies because these kinds of places are typically rich in game animals. Plants for food, medicine, tools are abundant in these environments. All three lakes showed signs of water level change at some time in the last 50 years (Figures 18, 19). The water levels appear to have risen approximately one meter based on a ring of dead trees surrounding
the lake in the water. Unfortunately, this makes it much more difficult to locate sites that may have been on or near the lake shore before it rose and we were unable to locate any archaeological remains.

Figure 17. Map of Malaspina Inlet with areas of interest marked.

Figures 18 and 19. Two of the three small, unnamed lakes visited during survey
Two areas with intertidal features were located (Figure 20), one adjacent to EaSe 56 and one on the west side of Scott Point south of EaSe 67 (Figure 17, area B). Each of these features were sketched, photographed, and described. They will be included as associated features on the site forms for the nearby shell midden sites. We are including these features as components of the previously recorded sites because of their proximity and complementary functions. However, we do not know if the middens and intertidal features were used at the same time. Perhaps this can be determined in future studies. The function of these features is unclear, some appear to be the fish traps and canoe skids that we are familiar with but others are not as easy to identify and will need to be studied further.

![Intertidal boulder and cobble alignment in Grace Harbour](image)

**Figure 20. Intertidal boulder and cobble alignment in Grace Harbour**

We created many maps during visits to recorded archaeological sites around Grace Harbour. We drew sketch maps of intertidal features and recorded archaeological sites, thereby collecting the observations required to evaluate existing documentation for these sites. We also prepared a total station map of the Kahkaykay Reserve (IR 6) and nearby intertidal features (Figure 21).

We took a total of 32 percussion core samples at two locations on the Grace Harbour reserve (Figure 17, area C; Figure 21). The depth of the cultural deposits in these two areas varies from a few cm to over 4 meters. These samples are currently housed at SFU. We are analyzing the samples to assess the depths and ages of the stratigraphy and to search for traces of occupation surfaces. We have been unable thus far to detect clear surface indications of the locations and sizes of the long houses known from oral traditions to have been present at Grace Harbour. We are particularly interested in the use of the cores to look for subsurface indications of these structures. Once the charcoal samples needed for radiocarbon dating are collected, the core samples will be returned to Tla’amin.
We collected a small assemblage of artifacts from the Kahkaykay Reserve (IR 6). Five flakes and a single microblade core (stone used as source of small, thin cutting edges) were found on the beach, presumably eroded from the midden. Our inability to link these findings to any specific original location site makes it hard to date these artifacts. However, the microblade core does suggest that these sites may have been used as early as 6,000 years ago (Akerman, 1996; Figure 22). The collections are being documented and analysed prior to their return to Tla’amin custody at the Powell River Museum.
The area around Scott Point was both pedestrian surveyed and shovel tested (Figure 17, area D). We choose this area for intensive investigation because the small unnamed bay on the southeast side was the only such bay in the area without a recorded site, and because it connected to EaSe 67 by a low saddle making travel between the two bays likely. Artifacts were found in shovel pits on the surface in this area (Figures 23, 24). EaSe 67 is located on the west side of Scott Point in a small unnamed bay. We found shell deposits on the western side of Scott Point going up a steep slope to a rocky bald at the top of the point. These deposits could be recorded as a new site, but our inclination is to focus on the connections between areas and record adjacent archaeological deposits as parts of single sites. Including this area will significantly expand the site boundaries.

Northeast of Grace Harbour, two of the four sites we examined, EaSe 10 and EaSe 60, will require significant amendments to site records. The exterior boundaries of both will be expanded as a result of the 2008 work, with completion expected in early 2009. Our survey identified unrecorded shell
midden deposits in adjacent areas. We measured the extent of these deposits and produced sketch maps. We will submit revised site forms to the Archaeology Branch for EaSe 10 and EaSe 60, as well as for the other sites in the survey area.

**Cochrane Bay and Cochrane Islands.** Three sites are previously on record with the Archaeology Branch in the small bay south of the Cochrane islands, on the west side of Malaspina Inlet (Figure 17, area E). The records and maps on file are unclear or contradictory, so we collected diverse data. We completed a pedestrian survey of the vicinity, dug shovel pits, made total station and sketch maps, and extracted percussion cores from areas judged to have the potential for subsurface deposits.

The three recorded sites in the area (EaSe 5, EaSe 19, and EaSe 76) were originally recorded very close together. During survey we found that all three sites are much larger than previously known and that there is shell midden material, culturally modified trees (CMTs), and a canoe skid between and around the sites (Figures 24, 25). In addition, there is a thin layer of shell midden on the small islet near the entrance to the bay. We intend to recommend re-designation of the entire area as a single registered archaeological site.

![Figures 24. CMTs recorded by Crystal Sawyer](image1)

![Figure 25. Canoe skid north of EaSe 19](image2)

We documented a wide range of artifacts during the beach survey of EaSe 5, 19, and 76 (Figure 26, 27). These include projectile points, several large flakes, a medium sized core, three microblade cores, and several pieces of obsidian. The occurrence of microblade cores suggests a similar dating scheme as Grace Harbour (ancestral Tla’amin use as early as 6,000 years ago) (Ackerman 1996). The presence of obsidian artifacts, possibly from the Garibaldi field (B. Winter, personal communication to S. Johnson) suggests that there may be connections with obsidian sources at least as far as Squamish but could extend to other sources in the Pacific Northwest.
We made sketch maps and a high resolution site map for the site at Cochrane Bay. There are large depressions, about 15 meter wide and 2 meters deep, which appear to be the remains of ancient residential structures. These features were mapped in detail. We also collected for analysis a total of 6 percussion core samples from one of the features. We hope the cores and maps will help us to understand what these depressions represent and when they were built and occupied.

We conducted intensive pedestrian inspections of the Cochrane Islands as well as the intertidal rock outcrops between them. We found no sites were found on the islands, but a number of intertidal features connected the islands and were identified between the islands. These may have been constructed as one or more elaborate fish traps or as habitat for other desired plants or animals (Figures 28, 29).

Figures 26. Basalt microblade core  Figure 27. Basalt stemmed point

Figures 28 and 29. Boulder and cobble alignments found in Cochrane Islands intertidal zones
Isabel Bay and Madge Island. We investigated this area at a low tide to look for intertidal features (Figure 17, area F). We also conducted pedestrian surveys and dug shovel pits in areas judged to be likely to have been used or occupied (Figure 17, area G). The largest site in the area, EaSe 34, was found to be much bigger than recorded. Shell midden is visible in the cut bank approximately 50 meters beyond the site boundaries that have been identified previously. Our team drew a rough sketch map of the extent of the visible site.

The shoreline both east and west of EaSe 34 was surveyed as well as several transects through the upland toward Grace Harbour and to the bluff behind the site. Many of the shovel pits we excavated were located in the low saddle between EaSe 34 and EaSe 58. We choose this area for intensive investigation based on a story that we heard several times about these two bays being connected by a trail that was used to warn people in Isabel Bay about approaching raiders. However, we were unable to locate any archaeological deposits in this area, likely due to the heavy logging activity. Despite digging shovel pits spaced equally on a 20 metre grid to an average depth of 0.8 m, we did not find any archaeological deposits in this area.

We intensively inspected the surface of Madge Island as well as the intertidal bedrock outcrops that surround it. We found a series of intertidal features on the east side of the island. The ‘V’ shaped fish trap had been recorded previously, but the boulder alignments had not (Figure 30). These features need to be studied further. At this point we cannot confidently say what they were constructed to do.
Survey Summary
The survey portion of our program enhanced and expanded our understanding of the archaeology of the greater Grace Harbour area. We documented artifacts that may be 6,000 years old and significantly upgraded the region’s inventory coverage and archaeological documentation (Table 2). Broader and more precise knowledge of the region’s sites is boosting protection, research potential, and opportunities for appropriate site use in conjunction with cultural, educational, and land stewardship initiatives.

Table 1. Survey Summary

<table>
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<th>Totals (in meters)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work completed:</td>
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</tr>
<tr>
<td>Distance walked</td>
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<tr>
<td>Area (5m swath)</td>
<td>138570 sq m</td>
</tr>
<tr>
<td>Outcomes:</td>
<td></td>
</tr>
<tr>
<td>Previous site area</td>
<td>35900 sq m</td>
</tr>
<tr>
<td>Amended site area</td>
<td>66300 sq m</td>
</tr>
</tbody>
</table>

V. Conclusions, Special Projects, and Future Plans
The 2008 field work season achieved all or part of the six overarching program goals and laid foundations for ongoing and follow-up collaborations. We hope and expect the results of our work will help in meeting the demand for additional, more detailed information about Tla’amin archaeological heritage sites and other resources identified in the Tla’amin Land and Water Use Plan (2005).

The combination of archaeology with Tla’amin knowledge and wisdom is guiding us along new paths into ancient histories and landscapes. We are starting from places and memories familiar to the Tla’amin community and continuing to places and times that are beyond specific recollection and familiarity, yet still closely tied to Tla’amin heritage, identity, and future prosperity.

The Tla’amin and SFU representatives involved in the program have formed friendships and partnerships that entail commitments to travel this path together. We are finding that the path is not always clearly marked and that partnership processes are at least as important as outcomes. The side trips and detours discussed below provide opportunities for deepening and broadening the Tla’amin-SFU partnership itself, as well as the capacities associated with Tla’amin heritage stewardship. The following projects are being pursued beyond the scope of the field school, as means for maintaining the collaboration and advancing plans for field school seasons in 2009 and beyond.

Direct Community Outreach and Technical Assistance
- July 2008 public presentations at the Powell River Museum, Vancouver Island University, and Sliammon, including opportunities for professional identifications of artifact collections;
• July 2008 technical assistance to BC Parks in an effort to relocate a pit toilet within the North Copeland campground;
• November 2008 meeting and on-site assessment to guide the protection of human remains and archaeological site materials from the Willingdon Beach trail and associated impacts;
• February 2009 workshop on heritage site identification and protection protocols for Tla’amin, RCMP, BC Parks, Regional District, School District, and City of Powell River representatives;
• Ongoing collaborations with the Powell River Museum, including conservation assistance and plans for a basketry conservation workshop, led by Dr. Barbara Winter;
• Ongoing development by Dr. Winter and 2008 field school student, Mindy Hebron, of a suite of web-based podcasts created from the video tape captured throughout the summer of 2008 and placed on deposit with the Sliammon Treaty Society;
• Ongoing collaborations to facilitate the respectful repatriation of human remains and funerary objects collected in the 1980s and held at SFU;
• Ongoing collaborations with Sunshine Coast, Savary Island, and Texada Island landowners to obtain professional guidance in protecting and assessing archaeological sites;
• Ongoing SFU laboratory analyses of artifacts and samples collected from Tla’amin Territory;
• Ongoing participation in the integration of Tla’amin wisdom and archaeological standards to develop policy recommendations for cultural and ecological heritage stewardship, including—
  o Systematic establishment of sensitivity zones as one basis for land use planning and for determining the appropriate level of effort to be invested in archaeological site identification prior to land alteration;
  o Heritage site significance assessment and protection (including “buffering”);
  o Burial impact avoidance, and in cases of inadvertent discovery, mitigation.
Work on these initiatives assists in harmonizing diverse Tla’amin, regional, municipal, and academic interests, and in reducing uncertainty as Tla’amin moves closer to the completion of the treaty process.

**Information Sharing**

In accord with plans disclosed during Research Agreement negotiations, work is continuing on the following presentations and publications of the results of our research, training, and outreach efforts:

• Sarah Johnson’s MA thesis on Tla’amin cultural landscapes centered on the Kahkaykay Reserve;
• Craig Rust’s PhD thesis on computer-assisted site identification and significance assessment;
• September 2008 presentation to the Archaeological Society of BC, Vancouver;
• October 2008 presentation to the BC Archaeology Forum, Chilliwack;
• November 2008 presentation to Vancouver Island University, Powell River;
• December 2008 publication of a brief summary of this report in *The Midden*;
• March 2009 release of video podcasts of diverse aspects of the program;
• March 2009 presentation to the Society for Applied Anthropology, Santa Fe, New Mexico.

As these and related documents and other materials are completed, they will be provided to Tla’amin representatives for use in planning, management, and community advancement purposes.
Proposed 2009-2010 Research Themes and Initiatives

1. **Excavating and exploring Kleh Kwa Num** – In addition to continuing our excavations layer by layer, we hope to survey the bay to find other undocumented or incompletely recorded sites. Several community members have told us about “underground houses” across the bay. We would like to record these and possibly core them to learn about the depths and ages of the earliest archaeological deposits. Similar work may be called for to document the location of longhouse structures at the Kahkaykay Reserve, and to assign ages to their earliest occupations.

2. **Documenting the use of herring at Kleh Kwa Num** – Several community members have told us that Kleh Kwa Num was an important herring spot for generations, but was wiped out by pollution and a dramatic 1984 episode of industrial overfishing. Further, we were told (and have talked to fisheries experts at SFU as well) that the Department of Fisheries and Oceans makes no effort to monitor local herring populations and does not recognize changes in the Kleh Kwa Num herring stock. We hope to use archaeological evidence in combination with local knowledge to document the long-term importance of herring in this bay.

3. **Clam Garden and fish trap research** – We have an ongoing interest in “traditional resource management” and the potential for using Tla’amin ecological and engineering knowledge as a basis for enhanced stewardship. To do this, we are proposing to deploy a team of archaeologists, Tla’amin elders, geologists, and biologists to document and date clam gardens, fish traps, and intertidal plant gardens in Tla’amin Territory. We are seeking funding to map garden and traps in relation to ancient settlements, to document in detail how and when they were used, and to examine the long-term use of fish, clams, and food plants in associated settlements (size, species, etc.).

4. **Cultural heritage stewardship, self-governance, and intellectual property rights** – We recognize and deeply respect the many changes being contemplated at the treaty tables. The SFU team will continue to build upon the collaborative negotiations employed to reach consensus regarding the SFU researcher agreement. We will continue to work together to develop policies and practices grounded in Tla’amin cultural principles and teachings, and well as appropriate professional standards.

**VI. References Cited**


Sliammon Natural Resources Committee 2005 She ‘goymetsht Ams Hehaw (We raise our hands in praise to our Ancestors): Land and Water Use Plan for Tla’amin Traditional Territory, Draft.