CHAPTER 12

Excavations at *Lhó:leqwet* Rock Shelter on the Harrison River

Morgan Ritchie
Sts'ailes

Chris Springer
Simon Fraser University

Introduction

This chapter presents the results of 2010 excavations conducted at *Lhó:leqwet* (aka Chocolate Bar) rock shelter (DhRl 2), a multi-use site located on the Harrison River in Chehalis *(Sts'ailes)* territory (Figures 1 and 2). *Lhó:leqwet* is culturally important to the *Sts'ailes* because of its traditional association with spirit questing, other ceremonial activities, and high concentration of pictographs. Cliff overhangs and boulder shelters offer unique "windows" into aspects of human behaviour that are often difficult to incorporate and address in settlement or household studies, such as spirit questing and creation of rock art.

A number of other rock shelter sites have been excavated (e.g., Arnett 2012; 2016; Angelbeck 2015; Croes 2005; Hall et al. 2007; Hammond 2009; Reimer 2004, 2006; Ritchie and Sellers 2016) and surveyed (Acheson and Riley 1976, 1977) in the Salish Sea region but only *Lhó:leqwet* and several small boulder shelters at the South Yale site (DjRi 7) (Chapter 5) have been investigated in the lower Fraser Canyon. Dry conditions at *Lhó:leqwet* resulted in excellent preservation of non-calcified faunal and botanical remains, and wood and bone fishing and processing implements. While it is clearly an important pictograph site, material remains indicate that *Lhó:leqwet* was the locus of a variety of ritual and practical activities (Ritchie and Springer 2011).

Lhó:leqwet is a massive granitic outcropping that dominates the landscape at the confluence of the Harrison River and Morris Creek (Figure 1). The upper part of *Lhó:leqwet* slopes at a striking 45% angle from a height of ~55m to where it intersects the Harrison River. Under this solid granitic crust is a more fragile and crumbling geology that has resulted in a prominent overhang. While much of the terrain covered by this overhang is sloping, there are three level areas, including the 5m x 2m platform that we excavated a portion of for this study. This platform, the lowest of the three, is nestled between the cliff and a large flat topped rock spall which offers a visual buffer and additional protection from wind and rain (Figure 2). It is situated between 1 and 2 meters above the Harrison, depending on the river level.

Lhó:leqwet is a highly visible and culturally powerful landmark in the Harrison River Valley that would have helped to establish and perpetuate a sense of a collective identity and shared traditions (Carlson 2003; Mohs 1987). Landmarks such as *Lhó:leqwet* represent the location of some significant occurrence that took place deep in the past and imbued the landscape feature with meaning to the descendent community ever since. The dense concentration of pictographs at *Lhó:leqwet* visually communicates and reinforces this ancient significance (Arnett 2016).

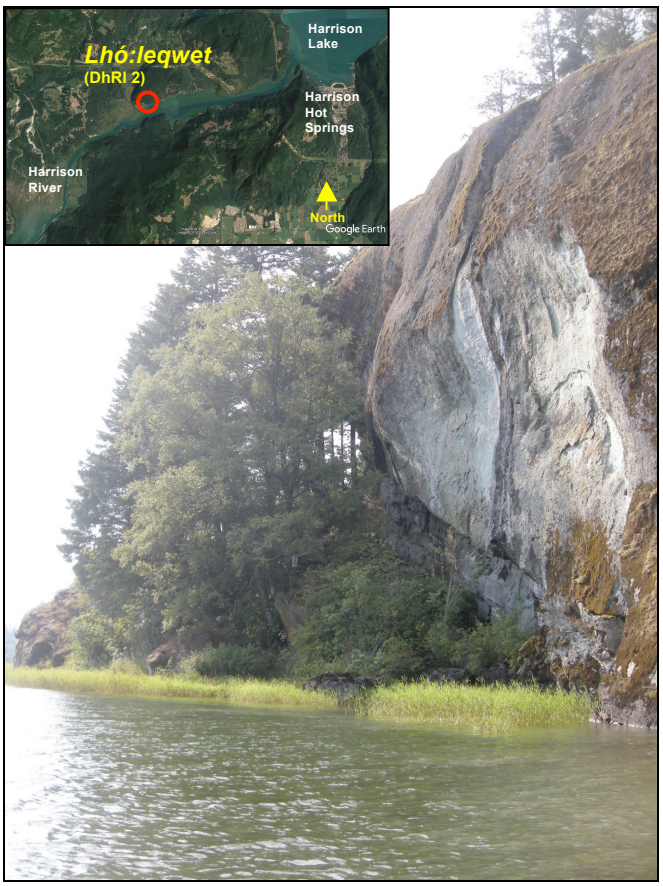

Figure 1. *Lhó:leqwet* rock shelter on Harrison River during seasonally high water levels.

Archaeology of the Lower Fraser River Region
Edited by Mike K. Rousseau, pp. 105-112
Archaeology Press, Simon Fraser University, 2017

Understanding The Use History of *Lhó:leqwet*

Relevant local ethnographic and ethno-historic sources, *Sts'ailes* traditional knowledge, and the archaeological record at the site reveal how and why people used *Lhó:leqwet* rock shelter in the past. We have identified a few key factors considered to be important for understanding the environmental and cultural context of the site. Specifically, they include: (1) the dietary and socioeconomic importance of salmon runs on the Harrison River; (2) the influence that the ancestral Sts'ailes had on activities at *Lhó:leqwet* and its use as a temporary camp or residence; (3) the significance of regional trade and exchange networks; and (4) the spiritual importance and potency of the Harrison watershed in *Sts'ailes* history. The archaeological data also allow us to explore change in site use through time.

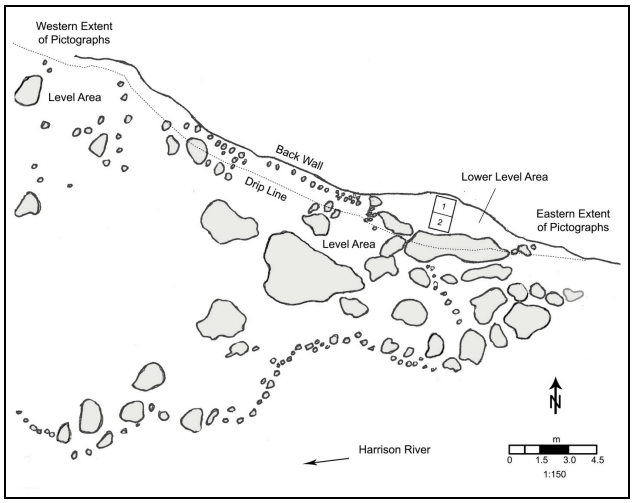

Figure 2. Plan view map of *Lhó:leqwet* rock shelter showing location of EUs.

Salmon Availability

During the late pre-contact period, the Harrison River system was more abundant with salmon than any other tributary of the lower Fraser River, enticing many people to make the Harrison River their home, and many others to visit on a seasonal basis (Kew 1992:210-212; Hill-Tout 1904; Duff 1952; Maclachlan 1998; Ritchie 2010; Sanders and Ritchie 2008). The Harrison River was particularly busy between September and December when several species of salmon, including the sought-after white Spring (Chinook) salmon known by the *Sts'ailes* as *pawk* were spawning (Duff 1952: 62; Hill-Tout 1904: 316). Groups that visited the Harrison River during this time included the nearby Stó:lō, and more distant Salishan groups from the coast and interior. *Lhó:leqwet* is ideally situated at the confluence of two productive waterways which facilitated easy travel and ready access to salmon and sturgeon.

Local Settlement Patterns

Lhó:leqwet lies at the periphery of a very dense permanent settlement area comprised of at least 75 pithouses and 30 plank houses in 17 discrete settlements scattered on both sides of the Harrison River and its mid-river islands (Sanders and Ritchie 2005; Springer 2009; Ritchie 2010). Strategic placement of these villages allowed the *Sts'ailes* to monitor activities on the river and collect a tribute from visitors who fished in their waters (Burns 1942; Hill-Tout 1904; Ritchie 2010). Given the proximity of *Lhó:leqwet* to so many resident people it is reasonable to assume they were involved in, or greatly influenced the many activities that transpired there. The wetlands adjacent *Lhó:leqwet* were known as *Lhemqwó:tel*, or the place "you can get anything off of" (Galloway 1979).

Occupation of *Lhó:leqwet*

Sts'ailes traditional knowledge recognizes *Lhó:leqwet* as a place where ancestors lived during times of serious resource depletion (Kelsey Charlie Pers. Comm. 2009). People inhabiting the rock shelter eked out an existence by living on small mammals and plants. Oral tradition maintains that a seal's generous act of self-sacrifice ultimately allowed the people to survive. This story indicates that *Lhó:leqwet* was used as a residence at some point in its history. Immediately upriver, an important rock known as *Ashxwetel*, or "layers of seal fat", marks the place where the seal sacrificed itself. *Ashxwetel* is also marked with pictographs. The landscape setting of *Lhó:leqwet* is such that it would be a highly desirable place for people to live temporarily; it offers shelter, an unrivalled view of the Harrison-Chehalis confluence, and ease of access to key riverine and terrestrial resources.

Exchange

The Harrison waterways were one of the easiest and most direct routes for long-distance travel, communication, and trade between groups in the Interior and lower Fraser River, and large volumes of goods were transported easily by canoe rather than via overland (Sanders and Ritchie 2008). Ethnographic accounts indicate that a good deal of trade involving non-local resources occurred between the *Sts'ailes* and surrounding groups (Teit 1906a:231-232). They had particularly close trade relationships with the Lower Lillooet, from whom they would exchange dried service-berries and soap-berries, goat-skins and goat's-wool, hemp-bark, marmot robes, and other commodities (Teit 1906:231-232). The *Sts'ailes* also traded with lower *Stó:lō* and coastal groups living near the mouth of the Fraser River. From them they obtained wild potato, clams, abalone shells, *dentalium*, cranberries, and seal skins (Duff 1952:95; Hoffman et al. 1997). Archaeological evidence also indicates that *Sts'ailes* obtained exotic materials such as obsidian from Garibaldi locality and from Glass Buttes, Oregon (Reimer 2012; Reimer n.d.; Skinner and Thatcher 2010), and camas bulbs from the Southern Vancouver Island area (Lyons and Ritchie n.d.). The physical prominence of *Lhó:leqwet,* its ease of access, and location on the periphery of the main Harrison River settlement areas may have made it a desirable place for travellers to rest and/or exchange goods.

Ritual and Ceremonial Use

Lhó:leqwet was an important destination for ritual specialists and people in spiritual training, an assertion that is supported by numerous pictographs (Figure 7). According to *Sts'ailes* cultural tradition, everyone is born with a particular gift, but these gifts had to be brought out at places such as *Lhó:leqwet* through a process of prayer, fasting, and meditation (William Charlie Pers. Comm. 2007). It is a sacred place. The Harrison watershed is considered to be a powerful training area for shaman *(shxwlá:m)*, who would come from various parts of the Salish world to apprentice, and *Lhó:leqwet* was a focus for some of these activities. These individuals spent long periods mastering their gifts in isolation from the rest of the community and *Lhó:leqwet* offers this seclusion. For these reasons, it is reasonable to expect some artifacts deposited at *Lhó:leqwet* to be indicative of ritual and ceremonial activities.

Fishing Practices

The *Sts'ailes,* like other Stó:lō groups, relied on anadromous and freshwater fish for the majority of their protein needs. The most important and abundant were the five species of salmon, but sturgeon were also frequently targeted at *Lhó:leqwet*. Salmon were available for a significant part of the year in the Harrison River and their cycles structured many *Sts'ailes* social, economic, and political relationships. Use of weirs was one method of procuring salmon at the confluence of the Harrison River and Morris Creek (Ritchie and Springer 2010). This location was also ideal for spearfishing. Overlooking clear shallow water, large boulders adjacent to the shelter facilitated harvesting of the best fish. Sturgeon fishing typically involved two boats and a spotter situated at the top of Chocolate Bar who would direct activities far below.

Excavation Results and Interpretations

We excavated two contiguous 1m^2 units on the lower platform at *Lhó:leqwet* over a period of two days during the summer of 2010 on behalf of *Sts'ailes*. These units were placed perpendicular to the back wall of the rock shelter, and extended across the entire width of the platform to the large granite spall bounding it on the riverside. The drip-line of the rock shelter falls at the mid-part of this granite spall, keeping the platform dry year-round except during most extreme conditions. This unit equals ~20% of the total surface area of this level platform.

In 2015 a crew of *Sts'ailes* archaeologists returned to the site to investigate the upper two platforms at *Lhó:leqwet* and more fully map the rock shelter (Ritchie n.d.). We secured and produced valuable data from these investigations, including two radiocarbon dates, a detailed site map generated by integrating four lines of data including drone and ground based photogrammetry, LiDAR point data, and Total Station mapping. Results of the faunal, botanical and stratigraphic analyses have not yet been published.

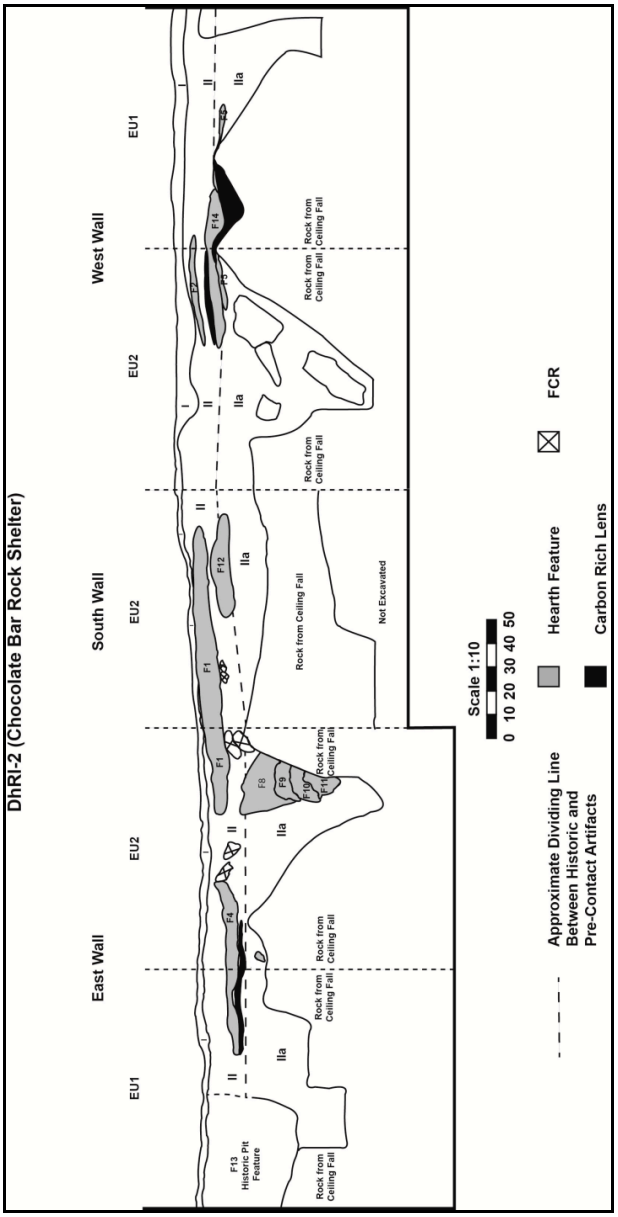

Figure 3. Wall profiles of excavation units (EU) 1 and 2 at *Lhó:leqwet* rock shelter.

Stratigraphy and Features

Due to an overall homogeneity of sediments within the lower platform of the rock shelter, only two layers (I and II) were readily identifiable during excavations. Following laboratory analysis, we determined the upper portion of Layer II was associated with post-contact use of the rock shelter and the lower portion with pre-contact activities so we subsequently divided this Layer into IIa and IIb (Figure 3). Post-Contact (historic) period artifacts of metal and glass were absent below 15-20 cm below datum (dbd).

Twelve hearth features were encountered in two contiguous 1 m^2 excavation units (EU 1 and 2). No specific location was consistently used to construct hearths, but some were clearly built over top of previous ones. Hearths were typically thin, and ranged between 30cm and over 1m in length. A set of four stacked hearths that tapered to the bottom were unique in their small size (Figure 3). The large number of hearths in such a small area suggests persistent, intensive, and variable use of the rock shelter. Sediment samples (N=28) from hearths and associated strata around the hearths, yielded a diversity of calcined and non-calcined zooarchaeological materials and carbonized and non-carbonized paleoethnobotanical remains (Figures 5 and 6; Tables 2 and 3).

Excavation to sterile deposits was not possible due to ceiling collapse. Cultural deposit densities were sparser with increased depth and no hearths were identified in the lower levels. Altogether, our samples best reflect the uppermost 45 cm of the units rather than the entire 80 cm that we excavated. We had greater success reaching sterile deposits in 2015 on the middle and upper benches, however large rocks from ceiling collapse were a constant issue.

Radiocarbon Assay Results

One radiocarbon sample from each of the level benches was collected during the two excavations at *Lhó:leqwet* and were submitted for ^{14}C age determinations (Table 1). Samples from the lower two benches were collected from hearth features, and from an ochre lens associated with a small pit feature on the upper bench. The two samples from the lower benches indicate similar periods of use, most likely between 310 and 140 years ago, or AD 1640 to 1810. As noted earlier, historic artifacts were not found below 20 cm dbd. This is also true for excavations conducted in 2015. The sample collected from the upper bench reflects earlier use of the site, likely around AD 1278 to 1389 (672 to 561 Cal BP). It is likely that this date is a better reflection of early use of the lower benches as well, though evidence for this has been largely destroyed through subsequent re-use.

Table 1. Radiocarbon Age Determinations for DhRl-2.

Lab Sample Number	DBD (cm)	Location	Notes/ Matrix	C14 Age in yrs BP	Calibration Ranges (Cal BP)
Beta-265895	55	Lower Bench	Hearth Charc.	**210 +/- 40**	310 - 260; 220 – 140; 30 – 0
D-AMS 011734	25	Middle Bench	Hearth Charc.	**214 +/- 23**	303 - 269; 212 - 198; 188 - 147
D-AMS 011733	13	Upper Bench	Ochre Lens Charc.	**666 +/- 25**	672 - 634; 596 - 561

Artifact Assemblage

A total of 112 artifacts were recovered from EU1 and EU2 at *Lhó:leqwet* (Ritchie and Springer 2011). Eighteen (16%) are formed tools, that are indicative of specific activities. The most notable items in the *Lhó:leqwet* assemblage are wood and bone fishing implements that have survived because of dry conditions in the rock shelter. These tool types are rare in non-midden contexts in the Lower Fraser region. There are eight formed tools made of wood and bone, representing 57 % of the 14 subsistence related tools. Also recovered were chipped stone projectile points, ground slate knife fragments, quartz crystal, an incised beaver tooth, and a single bead.

The recovered material remains provide direct evidence for a variety of activities associated with *Lhó:leqwet*, including fishing, hunting, plant resource harvesting and use, and as a focus for ceremonies. Engaging in these activities resulted in consistent regular use and habitation of the rock shelter. While the assemblage is small, it allows us to discern the diverse use-history of the rock shelter, and identify and evaluate any obvious changes in the rock shelter use during the transition from the pre-contact to post-contact periods. The recovered material remains also indicate the seasonality of the occupations. These considerations are discussed in greater depth below.

Evidence for Fishing

Of the 112 artifacts recovered from excavations at *Lhó:leqwet*, 19 (17%) are components of a traditional fishing tool kit, and include 11 ground slate knife fragments, six pieces of modified deer bone, and two pieces of modified wood for spears (Ritchie and Springer 2011). Ground slate knives with rectangular or semi-lunar blades were usually hafted onto a wooden handle and typically used for butchering and preparing fish for drying or smoking (Barnett 1955:62; Duff 1952:66; Stewart 1977:155-156). All these blades are fragmented and seem to indicate intensive fish processing. Two deer bone *ulna* knives shaped and sharpened to a point probably related to fish processing were also recovered (Ritchie and Springer 2011). Ethnographically, *ulna* knives are identified as herring knives (Stewart 1977:155), but they could be readily employed to process of other fish.

Six artifacts are associated with fish harvesting (Figure 4). Three items, one of wood and two of bone, were ground into points or barbs. Abrasion striations relating to production are visible under magnification on all three. They were likely components in hooks, spears, or harpoons. The remaining three artifacts, also one of wood and two of bone, were likely valves for salmon harpoons and spears (Stewart 1977:72). Harpoons and spears used for fishing were made from bone or wood points with one end of a line lashed between two valves. Lashed valves were covered with a pitch mastic for additional strength. When complete, the valves acted as a socket for attaching the point to the harpoon shaft. The system allows the point to dislodge from the shaft after penetrating a fish, but remain attached to the line. Once the fish tires of running, pulling it back to shore or a canoe is much easier. These artifacts suggest this fishing strategy was pursued at *Lhó:leqwet*, and the *Sts'ailes* know it as an excellent location for spearing salmon.

Figure 4. Wood (B) and bone (A and C) points, and valves (D and F: bone; E: wood) recovered at *Lhó:leqwet* rock shelter.

Many fish remains recovered from hearth features at *Lhó:leqwet* (Table 2) were heavily fragmented and calcined, making identification beyond class (*Osteichthyes*) impossible. However, some less degraded fragments allowed identification of salmon, trout, sturgeon, herring, and northern pike minnow. It is probable that the majority of fragments defined as Medium Fish are Pacific Salmon.

Table 2: Fish remains collected from *Lhó:leqwet* rock shelter.

Taxonomic Category*	Unit 1 (NISP)**	Unit 2 (NISP)	Totals
Onchorhynchus sp. (Pacific Salmon)	165	73	238
Salmonidae (Trout)	11	4	15
Acipenser sp. (Sturgeon)	2	1	3
Clupeidae (Herring)	1	1	2
Ptychocheilus oregonensis (Northern Pike Minnow)	8	1	9
Medium Fish	105	102	207
Fish Totals	**292**	**182**	**474**

*Only remains identifiable at least to class are included.
**NISP – Number of Identified Specimens

The species of fish identified fit well with our understanding of fishing-related tools described in ethnographies (Duff 1952; Stewart 1977). Salmon remains and ground slate knives are typically associated with one another in archaeological contexts, in the Lower Fraser River Region. Salmon are by far the most common type of fish represented in the recovered assemblage (58%) and slate knives comprise 10% of artifacts. The presence of cranial elements in this assemblage reinforces the impression of *in situ* salmon processing. Spear and harpoon components were most likely used to target salmon, trout, and sturgeon. The tentative identification of herring remains suggests the possibility that herring were transported to *Lhó:leqwet* either fresh or preserved from the Salish Sea. The presence of *ulna* knives commonly used for processing herring further suggests they were imported fresh and processed on-site.

Evidence for Hunting

Only two of 112 artifacts (2.24 %) recovered from *Lhó:leqwet* are components of a traditional hunting kit: a triangular rhyolite side-notched point and a triangular basalt single side-notched point, both of which have straight basal margins and are characteristic of the Kamloops Horizon (1200 to 200 BP) of the Canadian Plateau (Rousseau 2008: 243). Also recovered were two bifaces, eight primary reduction flakes, and 17 secondary flakes. We do not find evidence for retouch or use of these primary or secondary flakes indicating that people who used the rock shelter sites occasionally made small flake tools, but otherwise used tools made elsewhere.

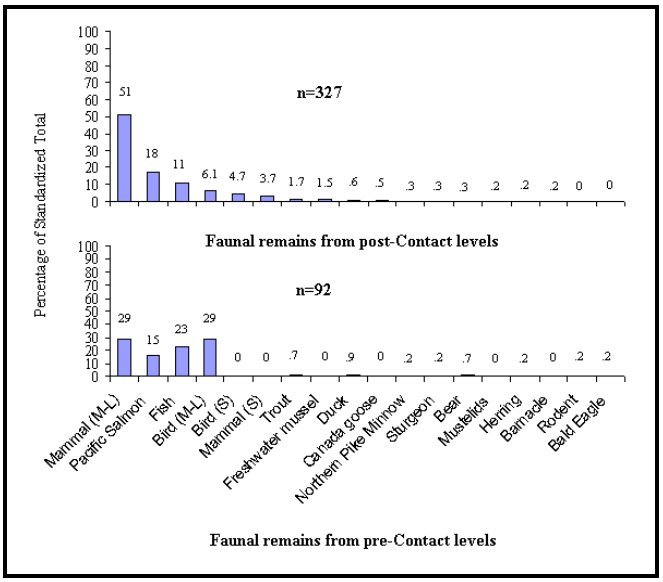

Figure 5. Comparison of pre-contact and post-contact period faunal remains recovered at *Lhó:leqwet.*

Most faunal remains recovered from hearth features at *Lhó:leqwet* were heavily fragmented and calcined. The poorly preserved nature of the recovered assemblage is such that many fragments could only be identified to two main classes: *Aves* and *Mammalia* (Figure 5; Table 3). However, some fragments allowed a more refined species identification, including bald eagle, Canada goose, black bear, elk, and black-tailed deer. The assemblage is indicative of broad-spectrum exploitation of local fauna. The unidentifiable remains are also considered representative of local bird and mammal populations that could include grizzly bear, mountain goat, groundhog, beaver, raccoon, wildcat, squirrel, eagles, grouse, robins, blue jays, and crows (Duff 1952:62-71; Duffield and McHalsie 2001:62-63).

Faunal remains samples recovered from hearth features were considered for evaluating whether traditional subsistence practices at *Lhó:leqwet* changed from pre-contact to post-contact periods. To present and compare the

content of different samples collected from pre-contact period features and sediments (20 samples = 40L) and post-contact period features and sediments (8 samples = 16L), the samples were standardized to compare relative frequency and ubiquity (Figure 5).

Table 3. Bird and Mammal remains recovered from *Lhó:leqwet* rock shelter.

Taxonomic Category*	Unit 1 (NISP)**	Unit 2 (NISP)	Totals
Haliaeetus leucocephalus (Bald Eagle)	2		2
Branta canadensis (Canada Goose)	3		3
Anas sp. (Duck)	9		9
Small Bird	29		29
Medium Bird	46	137	183
Large Bird	1	2	3
Bird Totals	**90**	**139**	**229**
Ursus americanus (Black Bear)		1	1
Ursus sp. (Bear)	3	1	4
Cervus elaphus (Elk/Wapiti)			1
Odocoileus hemionus (Black-Tailed Deer)	2		2
Mustelidae sp. (weasel)	1		1
Rodentia sp. (Small Rodent)		1	1
Small Mammal	23	1	24
Medium Mammal	203	287	490
Large Mammal	8	25	33
Mammal Totals	**240**	**316**	**556**

*Only remains identifiable at least to class are included.
**NISP – Number of Identified Specimens

The number of different taxonomic categories of faunal remains increases from 12 in pre-contact period samples to 16 in post-contact period samples. Samples from both periods are dominated by medium-size and large mammals, medium-large sized birds, unidentified species of fish, and salmon. Small mammals and small birds are represented in the post-contact period samples but are lacking in the pre-contact period samples. At the opposite end of the foraging spectrum, there is also a larger quantity of medium-large mammals found in the post-contact period samples (Ritchie and Springer 2011). These changes may indicate a slightly broader subsistence base possibly connected to new hunting technologies or a greater degree of faunal preservation because they are more recent.

Plant Remains

Various plant types are represented by burned seeds, needles, and charcoal recovered by flotation of samples collected from hearth features (Figure 6). While the likelihood of incidental introduction of some plant remains (ie., *Chenopodium sp*.) into these hearths is considered inevitable, the majority were brought by humans. The botanical remains suggest a broad-spectrum of use of nearby plants with some indication of berry processing. In total, sixteen types of seeds were recovered from *Lhó:leqwet* (Ritchie and Springer 2011:29). Fifteen of these were associated with pre-contact deposits. Salal dominates the pre-contact period assemblage (n=452), followed by goosefoot (n=33) and wild rose (n=30). The ubiquity of seed remains recovered from post-contact period deposits was marginally less, with 14 seed types represented. Salal dominates the assemblage (n=880), followed by goosefoot (n=258) and nightshade (n=78). Most of the other seed types are represented in very low numbers. High numbers of salal seeds recovered from investigated hearth deposits are likely a reflection of processing salal for later consumption. Salal berries were cooked over hearths on masse, and stored as dried cakes.

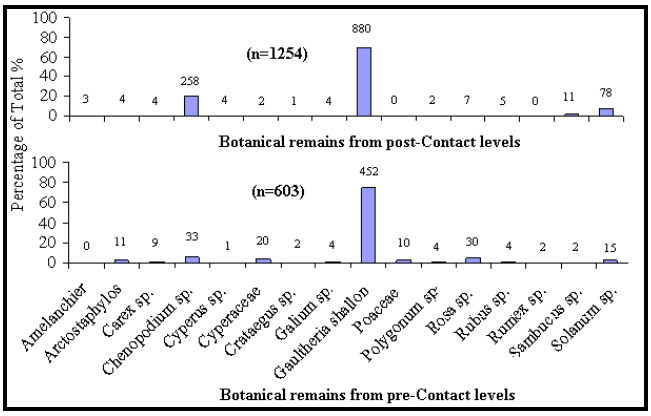

Figure 6. Comparison of pre-contact and post-contact period botanical remains recovered at *Lhó:leqwet.*

All considered, the floral assemblage suggests very few changes in types and frequency of seeds over the last several hundred years. This indicates that the traditional manner of plant harvesting and processing continued at *Lhó:leqwet* following contact with Europeans (Ritchie and Springer 2011).

Ritual, Social, and Leisure Use

We regard the presence of pictographs throughout the rock shelter (Figure 7) and recovery of red ochre to indicate ritual use of *Lhó:leqwet*. Prevailing themes expressed in the imagery deal with the liminal space between the tangible and intangible worlds, a place commonly sought by ritual specialists as part of their practice. For example, Sasquatch, a cryptozoological being familiar to all *Sts'ailes* and Coast Salish peoples, exemplifies this notion of travelling between the physical and supernatural realms. All images are of red

ochre, a spiritually powerful material used to convey connections between the land, life, and death. We found ochre at all depths during excavation, indicating it was not exclusively associated with pre-contact or post-contact use of the rock shelter (Ritchie and Springer 2011). Coast Salish peoples utilized wild rose for spiritual protection as they did ochre. The paucity of other material evidence for ceremonial behaviour is likely a reflection of preservation, and our limited understanding of material remains associated with these events.

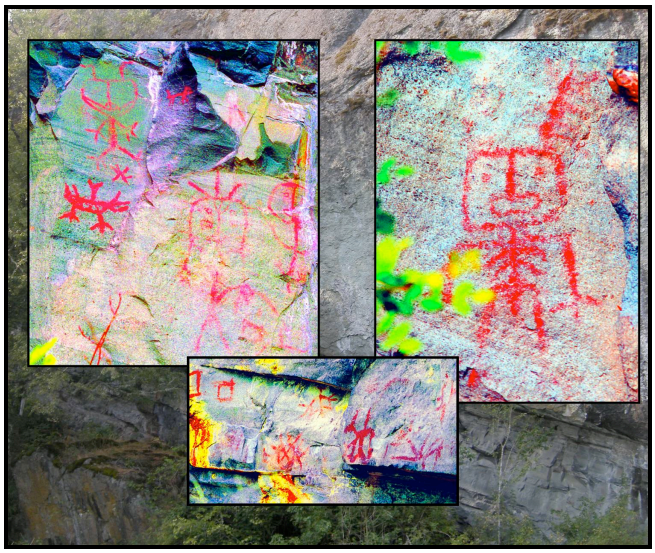

Figure 7. Pictographs at *Lhó:leqwet* enhanced using D-Stretch (Harmon 2010).

Figure 8. Modified beaver tooth (left) from Lhó:leqwet resembling gaming pieces (right) portrayed by Teit (1906: 248).

Remains of an incised beaver tooth (Figure 8) suggests that some users of *Lhó:leqwet* had leisure time. The modified beaver tooth is most probably a gaming piece based on its formal similarity to those documented ethnographically among St'at'imc (Lillooet), Nlaka'pamux (Thompson; Teit 1900, 1906) and Nuu-chah-nulth women on the West Coast of Vancouver Island (Harlan Smith 1928). In the game, two or three paired beaver teeth (mates) were marked on one side with matching or similar carved lines or spots (Teit 1906: 248). These four or six engraved teeth were thrown down onto a blanket or skin with points being awarded to the thrower depending on the configuration of right-side-up teeth. The presence of this gaming piece suggests women, and likely entire family groups, and other parties, used the rock shelter and engaged in leisure activities there. This game was likely widely known, and played, by most Salish people.

Occupation Seasonality

Archaeobotanical samples for pre- and post-contact periods provide three lines of evidence that the rock shelter was occupied during summer months; likely from late spring to early Fall. First, small numbers of seeds from edible fruits indicate in-season consumption. Second, the relatively large number of salal seeds suggests late summer processing for winter consumption in both periods. Lastly, seeds from weedy plants that became charred when introduced into hearths during the summer months were recovered in the excavation sample. None of plant remains infer winter occupation, but it is rarely possible to determine winter use from floral assemblages as plants are out of season (Lepofsky and Lyons 2003).

Faunal remains are also reliable indicators of seasonality, particularly animals that follow a seasonal migration such as salmonids, ducks, and geese. With respect to the latter two, it is suggested that duck hunting was practiced primarily in November when the migration south began (Duff 1952:72, Duffield and McHalsie 2001:63). The majority of terrestrial based hunting was undertaken in the Fall when animals were fattening-up in preparation for winter. Faunal remains recovered during excavation (Figure 5; Tables 2 and 3) lend support to Spring through Fall use of the rock shelter, which is also suggested by the botanical remains (Figure 6).

Conclusions and Recommendations for Future Research

Our 2010 excavations revealed that *Lhó:leqwet* was used for a variety of subsistence and social purposes during the late pre-contact and early post-contact periods. The data indicate *Lhó:leqwet's* use as a residential base while engaging in local fishing, hunting, and plant gathering. We suspect that most fish, mammals, and plants were procured in close proximity to the rock shelter and carried to the site to be processed and consumed. We also suggest that *Lhó:leqwet* was an important place for ceremonies and ritual behaviour. The extant data indicate that the range of activities and intensity of use may have increased around 300 years ago.

Lhó:leqwet was also an important and prominent landmark in a long-distance trade route, which may have facilitated interactions between a diverse array of people and socially distinct groups, but there is little doubt that the *Sts'ailes* people were the primary users of the rock shelter. The scant evidence for non-local lithic materials, plants, animals, and fish (Ritchie and Springer 2011) indicates this. This impression is further reinforced by its proximity to a major salmon fishery relied on by the *Sts'ailes*, its visibility from many year-round villages, and its cultural importance in *Sts'ailes* history and culture.

From *Lhó:leqwet*, people targeted fish, mammals, and plants prior to, and after early Euro-Canadian presence on the Harrison River. This ongoing and consistent use of the rock shelter during such a tumultuous period demonstrates the depth and strength of *Sts'ailes* cultural traditions and

practices. Ritual activities similarly continued into the post-contact period, as indicated by recovered ochre and other artifacts. Many aspects of ceremonial activities continue to be carried on today at *Lhó:leqwet*.

The excellent preservation at this rock shelter is remarkable compared to most other sites in the lower Fraser River region. Artifacts made from wood or bone rarely survive in the archaeological record unless found in 'wet' sites or dense shell midden contexts. Our 2010 excavations clearly attest that *Lhó:leqwet* has significant archaeological and cultural importance. Since the majority of the cultural deposits remain at the rock shelter, much can still be learned from the well-preserved record about the lifeways of ancestral *Sts'ailes* people and surrounding Coast Salish groups.

The study of rock shelters and boulder shelters are an emerging and productive focus of archaeological enquiry in the lower Fraser area and the greater Salishan region. These discrete and protected landscape features offer unique insights into past land and resource use, and ceremonialism. Recording these sites in detail promises to yield insights into poorly understood aspects of Coast Salish pre-contact culture, and land use. Rock shelters with pictographs are of particular importance for understanding how ritual practices and cultural interactions with ancient places may have changed during the proto-Contact period, as a reaction to observed or feared changes in socio-cultural systems (Arnett 2016).

To maximize data recovery, document the entire use-history, and facilitate comparisons between shelters, archaeologists will want to conduct relatively large area excavations to mitigate the effects of ceiling collapse, emphasize organic recovery strategies, collect large quantities of bulk samples for laboratory analysis, and select a representative number of ^{14}C samples. Similarly, landscape level analyses such as recording the size of the boulder, area of overhang, proximity to water, elevation, and orientation should be recorded as precisely as possible. Finally, much can be added to our understanding of sites such as *Lhó:leqwet* by integrating traditional knowledge.