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ARCHAEOLOGY AT THE RIVER'S EDGE



“LET THEM REMEMBER”: ARCH FORUM IN REVIEW

ARCHAEOLOGY AT THE RIVER'S EDGE: 2015 KWANTLEN POLYTECHNIC UNIVERSITY INVESTIGATIONS WITHIN THE FRASER CANYON

by Brian Pegg, Justin Hanna, Elpiniki McKave, Jonathan Munro, and Tanis Place

Introduction

Kwantlen Polytechnic University (KPU) has now completed four field school seasons within the Fraser Canyon between Boston Bar and Spuzzum. Boston Bar and Spuzzum First Nations are both research partners for this project, and each directed KPU to our particular investigative locations. The research goals of the project are to provide detailed historic information to KPU's research partners related to these locations, to empirically investigate the colonial history of the Fraser Canyon, and to provide students an opportunity to use applied archaeology methods in collaboration with First Nations. Many sites in the Fraser Canyon, including sites of extremely high historic significance, have only minimal data available to archaeology as previous investigations have been cursory. Our project aims to provide detailed baseline data related to these sites to assist in future decisions related to research or management.

The Fraser Canyon area and its Nlaka'pamux inhabitants were pivotal to the formation of the mainland colony of British Columbia, which occurred in August of 1858. This year saw a massive gold rush in the Canyon, followed quickly by a war between the incoming miners and the Nlaka'pamux. This short but vicious war ended with a series of treaties concluded at Kumsheen (Lytton) between the Nlaka'pamux and one of the miner's militias. Significantly, both sides respected the terms of the treaties, which were favourable to Nlaka'pamux interests (NNTC 2009). This is a strong indication that the two sides in the conflict were militarily equal, including after the cessation of hostilities.

Following the negotiated peace, British colonial authorities, including the Royal Engineers, were able to establish themselves within the Fraser Canyon, beginning the early stages of survey for the Cari-

boo Wagon Road. It is unlikely that the mainland colony of BC would have included the Fraser Canyon had the American miners decisively defeated the Nlaka'pamux in the canyon or if regular US Military forces had entered the conflict. Therefore, the Nlaka'pamux can be said to be pivotal in the establishment of modern British Columbia. Later, Nlaka'pamux people negotiated the introduction of a cash-based economy, the reserve system, and the construction of the Canadian Pacific Railway (CPR) (Harris 1997; Laforet and York 1998).

Past projects conducted by KPU have identified the first archaeological evidence of the Canyon War of 1858, have accumulated detailed archaeological data related to the indigenous communities of Kopychitchin, Tuckkwiowhum, and Scaucy, and have investigated a roadhouse used by miners in 1858 on the Tikwalus Trail between Tuckkwiowhum and Tikwalus. Prior to the commencement of our project in 2009, these sites had not yet been recorded in the provincial heritage register, though they were known to Nlaka'pamux people and to some locals of Boston Bar and Spuzzum (Pegg et al. 2009; Pegg et al. 2011; Pegg et al. 2013).

In KPU's 2015 field season, we investigated several sites (Figure 1): the west side of the Alexandra Bridge, where historic and pre-contact materials are mixed together (DkRi 10); the east side of the Alexandra Bridge, which is a possible location for the Nlaka'pamux community of Tikwalus (DkRi 39); the west side of the Fraser River across from Anderson Creek, where a CPR engineer's camp was investigated (DkRi 139); a culturally modified tree (CMT) site in the Anderson River drainage (DIRi 56); and the ancient Nlaka'pamux village of Tuckkwiowhum (DIRi 3), where our project excavated two circular house depressions. Work took place under HCA Permit #2015-0128.

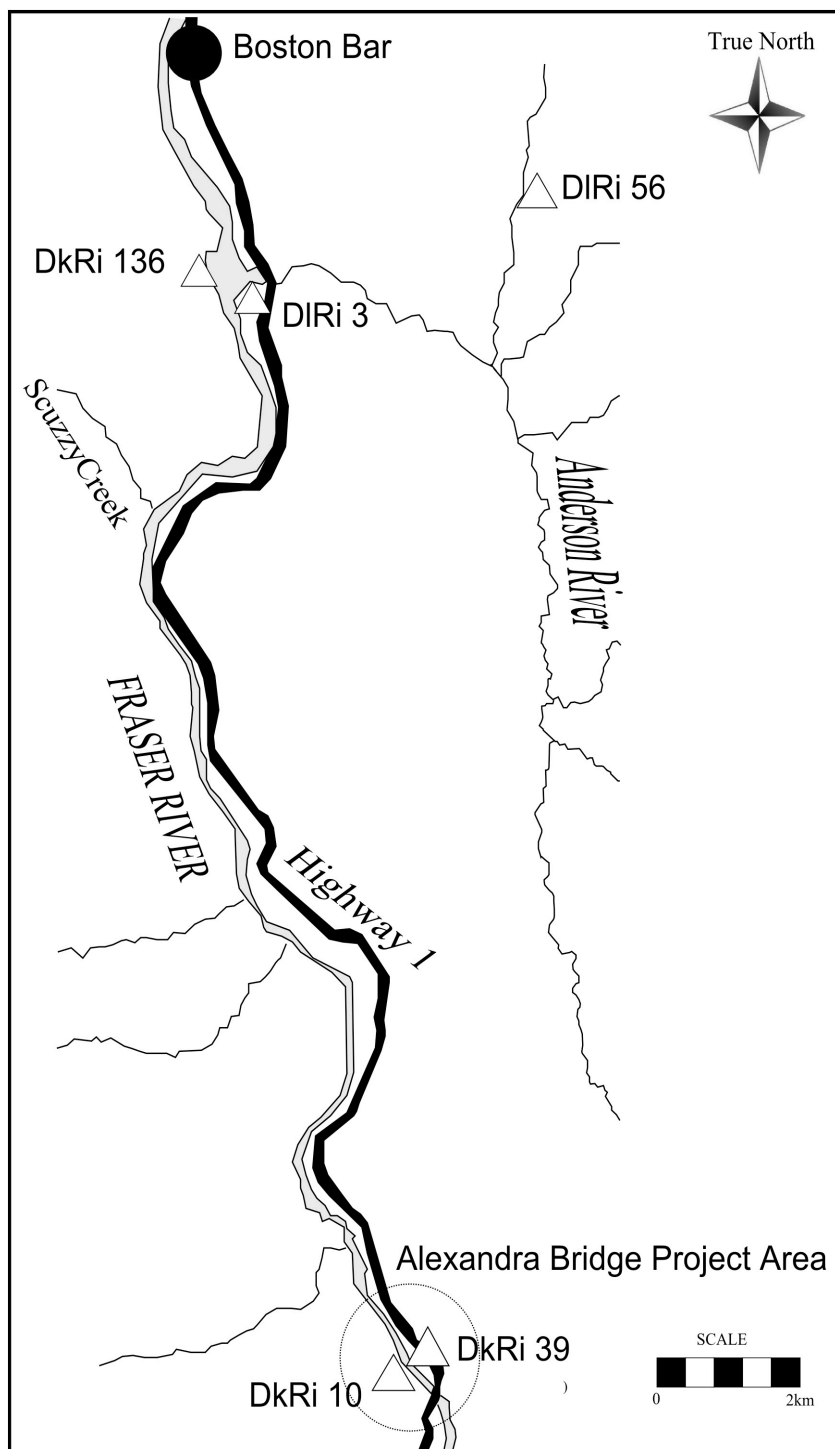


Figure 1. General location of sites investigated by KPU in 2015.

Alexandra Bridge Project Area: DkRi 10 and DkRi 39

Two archaeological sites were investigated at this location. DkRi 10 is on the west side of the existing Alexandra Suspension Bridge, which was constructed in 1926. The first suspension bridge here was completed in September of 1863, with construction supervised by Joseph Trutch utilizing a design by A.S. Hallidie. When the Cariboo Wag-

on Road was finished, Nlaka'pamux packing businesses became less lucrative as freight prices were driven very low (Cave 1987). DkRi 10 is within Spuzzum First Nation IR#3A, and consists of pre-contact and historic materials situated on a rocky bench on the west bank of the Fraser River. Archaeological materials are probably associated with the use of the location as a fishing station, while more recent materials are associated with the Cariboo Wagon Road, the CPR, and use by the Spuzzum First Nation in the 1800s and 1900s.

In particular, the west side of the river at Alexandra was where Annie York's grandmother, Amelia York, lived during the late 1800s. Both women are prominent elders of the Spuzzum First Nation, and Annie York is the co-author of a very important indigenous history of this area (Laforet and York 1998). A photograph from 1887 of the Alexandra Bridge location is housed at the McCord Museum in Montreal (Figure 2). This photograph shows the suspension bridge first constructed in 1863 and later heavily damaged in a flood in 1894. It also shows completed CPR construction, and multiple buildings on the west side of the river.

DkRi 39 is located on the east bank of the Fraser River and consists of at least 15 small cultural depressions which probably functioned as cache pits. The site is within Alexandra Bridge Provincial Park. This is a possible location of the Nlaka'pamux village of Tikwalus (Harris 1997:106). This village is shown on maps pre-dating 1858, such as AC Anderson's Fraser River map based on his travels in 1846 and '47 (Anderson 1858) and a map prepared for the British Parliament in 1858 (Groeneveld-Meijer 1994). AC Anderson's journal mentions visiting



Figure 2. 1887 photograph of the original 1863 Alexandra suspension bridge, taken looking north. The large square structure at the west end of the bridge is a toll house, probably owned by Joseph Trutch, while the building to the north and uphill from the toll house belonged to Amelia York (both are circled). The Laforet and York (1998) history includes this photograph and specifically identifies these buildings (Notman 1887).

the settlement on May 27, 1847 (Anderson 1847). Tikwalus, however, is not shown on later maps. For instance, two separate maps prepared by the Royal Engineers in 1859 (Mayne 1859) and 1860 (Mayne 1860), which are particularly concerned with this stretch of the river, do not show the village. Regardless of its location, a potential explanation for Tikwalus' absence from post-1858 maps is that it was one of the Nlaka'pamux communities destroyed in the War of 1858.

Surface and subsurface survey was conducted throughout the Alexandra Bridge project area, including identification and collection of surface artifacts, shovel testing, and evaluative excavations.

This work succeeded in identifying the location of Amelia York's house, the location of the former toll house, dating the ancient occupation of DkRi 10, and dating the utilization of one of the cultural depressions at DkRi 39.

DkRi 39: Cache Pit Site

At this site within Alexandra Bridge Provincial Park, 15 cultural depressions (probably cache pits) were recorded. Underground cache pits in the Fraser Canyon were generally used as food storage near winter dwellings and fishing stations for roots, berries and dried salmon (Alexander 1993). To keep rodents such as mice away, cache pits were usually lined with grass

or pine needles, and juniper berries were used to discourage insects in the cache pits (Alexander 1993).

Two cache pits were chosen for evaluative testing units of 1m x 0.5m in area and 120 cm in depth. While no significant stratigraphy was observed in one of the caches, the other showed an ash lens in a likely location for the bottom of the pit while it was active. A single sample of carbon collected from this ash lens produced a calibrated median date of AD 1668 (uncalibrated 232 +/-26 BP D-AMS 015057, calibrated online with CALIB). Material culture observed within the cache pits consisted of lithic debitage, primarily composed of granular basalt, andesite, vitreous basalt and chert. It is unknown whether these depressions are associated with Tikwalus. Further work within Alexandra Provincial Park is warranted.

DkRi 10: West Side of Alexandra Bridge

A total of four evaluative excavation units and 109 shovel tests were completed at this location, leading to a largely complete survey of the site. The archaeological assemblage for the west side of the bridge is very diverse, from a projectile point dating to the Shuswap horizon (3500 BP; Carlson & Dalla Bona 1996) to historic materials dating to the early to mid-1900s. Construction activity has extensively disturbed stratigraphy at the site.

Surface survey identified the location of two historic buildings, while subsurface testing helped to document the deep history and history of disturbance, especially during the last 130 years, from transportation construction activities. No samples were collected for radiocarbon dating because of this disturbance.

Pre-contact materials identified throughout the project area were consistent with the use of the location for camping, fishing, hunting, and woodworking. Use of this location goes back at least to the Shuswap horizon (circa 3500 BP), as a coarse-grained basalt biface made in this style was identified in the vicinity of the west end of Alexandra Bridge within

Level 3 of EU 91E280N. Another projectile point made of vitreous basalt dating to the Plateau horizon (circa 2400-1200 BP) was identified within Level 2 of the same evaluative excavation unit. Shovel testing revealed a third projectile point, made of quartz crystal and dating to the Kamloops horizon (circa 1200-200 BP). Other significant artifacts included a fragment of a nephrite chisel and a ground stone bead (Figure 3).



Figure 3. Pre-contact materials at DkRi 10. Clockwise from top left: Shuswap horizon biface, Kamloops horizon projectile point, ground stone bead, and Plateau horizon projectile point.

In Spuzzum: Fraser Canyon Histories, Laforet and York (1998) provide detailed information related to the location of Annie York's grandmother, Amelia York's house, which burned down in the 1920s. The authors specifically identify Amelia York's house in the 1887 photograph of the bridge (Figure 2), which allowed us to cross-reference the photograph in the field with the current topography of the location to highlight the most probable location for this house.

Intensive investigation of this location led to the identification of numerous late 1800s-early 1900s artifacts, a flat bench, and a subterranean rock-lined root cellar. The root cellar is discussed in Laforet and York (1998:32):

In the 1970s the house was gone... The cellar was still visible. Amelia York had a cupboard full of dishes: willow-ware platters,

fruit dishes, a red glass sugar bowl

We are confident the cellar identified in the field is the same one mentioned in Laforet and York, as it is a distinctive feature present in the location of the house in the 1887 photograph. This location also revealed ceramic tableware fragments, primarily earthenware (Figure 4). A number of these fragments belong to a single large serving plate using a Plymouth pattern manufactured in England by the New Wharf Pottery Co. between 1877 and 1894 (Birks n.d.).

Squared and burned timbers consistent with house construction are present, all in the location shown on the 1887 photograph. Fragments of lantern



Figure 4. New Wharf Pottery Co. (England) earthenware serving plate fragments (DkRi10:79) from Amelia York's house.

glass and stove parts were identified, along with the remains of the treadle from a sewing machine (Figure 5). It matches the "Success" model marketed in the 1898 Sears, Roebuck and Co. catalogue; the most basic version cost \$8.50 (Sears, Roebuck and Company 1898).

We are confident the location of Amelia York's house has been determined, especially with the presence of an artifact assemblage consistent with a late 1800s to early 1900s household. These artifacts, including the sewing machine, were almost certainly owned and used by Amelia York, and show her and her family to have had significant financial means. This is important as the late 1800s to early 1900s were a time of intense attack upon indigenous people by the Canadian Federal Government (Harris 1997). According to Laforet and York (1998:31), Amelia York had a "well-established family and considerable authority" within the Spuzzum community in the late 1800s and early 1900s.

Another historic structure present in this project area is what was likely a toll house shown in the 1887 McCord Museum photograph at the immediate west end of the 1863 bridge (Figure 2). The building is identified as a toll

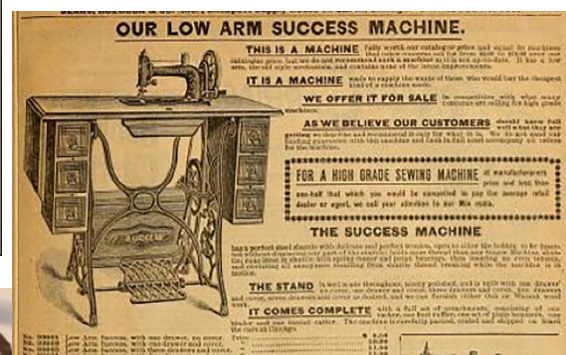


Figure 5. 1898 Sewing machine treadle (DkRi10:80) belonging to Amelia York, along with Sears, Roebuck and Co. catalogue entry from 1898.

house by Cave (1987:64) in a detailed proposal to the Historic Sites and Monuments Board of Canada for the designation of Alexandra Bridge as part of a Fraser Canyon National Historic Park. The structure is also shown in an 1870 photograph in the BC Archives (Item A-03928), which demonstrates it was present prior to CPR construction.

In the field, the west end of the existing suspension bridge has burned milled lumber (Figure 6), brick, square nails, container and window glass, and other historic materials consistent with the structure as shown in the 1870 and 1887 photographs. These materials are in the location shown in the 1870 and 1887 photographs. A toll house at Alexandra Bridge is mentioned in the BC Government Sessional Papers of 1882-83, when a new stove was approved for the building at a cost of \$39 (Public Accounts 1882-83:53). The structure was likely first built by Joseph Trutch, who collected tolls at this location after the completion of the 1863 suspension bridge (Laforet and York 1998).



Figure 6. Squared and milled lumber with square nails, probably remnant of the 1860s toll house.

With the construction of the existing bridge in the 1920s, extensive earthmoving was completed on the west side of the river. The 1926 bridge used the existing abutments from 1863, but the bridge was designed to be higher so it could not be reached by flood waters. Therefore, along with raising the bridge, the ground itself and the road approach to the bridge was also raised by major earthmoving activity. This construction buried portions of the toll house location and also caused extensive disturbance immediately north of the bridge. Disturbed sediments were noted in the majority of shovel tests and within the four evaluative excavation units.



Figure 7. KPU alumnus Tanis Place in front of a rectangular bark-stripped CMT (#084). This tree had tool marks from a metal adze, but could not be reliably dated.

DIRi 56: Anderson River CMT site

This site is located adjacent to the presumably very ancient trail which connects the indigenous community of Tuckkwiowhum with the Coldwater and Nicola drainages to the east via Spius Creek. It is recorded by the Archaeology Branch as a pre-contact trail designated DIRh 9. CMTs at the site include tapered and rectangular bark-stripped western red-cedar (Figure 7). A total of 57 CMTs were recorded.

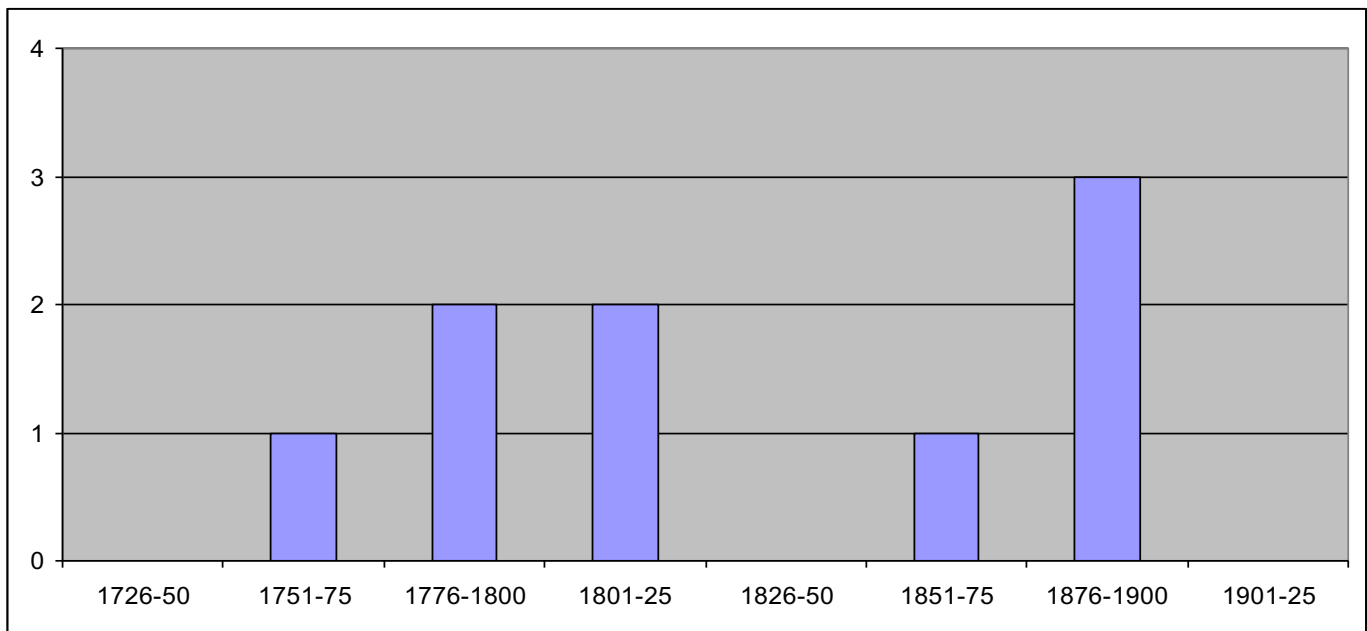


Figure 8. CMT dates from DIRi 56, in 25 year intervals.

Attempts were made to extract dendrochronological samples from all live CMTs; however, only nine CMTs were suitably sound for dating of the strip-ping events. Dates for the CMTs at this site are quite old, with the range extending from 1763 to 1898 (Figure 8).

DkRi 136: CPR Engineers Camp

This site is situated on the west side of the Fraser River just upstream of the mouth of the Anderson River (Figure 1). It sits on a narrow bench above a cliff, overlooking the CPR tracks approximately 40 m below. Archaeological features identified at the site include a low-density surface scatter of historic artifacts, a trail, a coal-fired stove, and 14 large roughly-rectangular platforms.

Initially the site was thought to be a camp related to the Royal Engineers, who were active in the Fraser Canyon in the years following 1858. A well-constructed trail travels through the site, connecting it to the historic indigenous communities of Shryptahooks and Scaucy to the south, and Kopchitchin to the north. This trail is shown on a map published in 1860 which details the travels of Lieutenant Mayne (Royal Navy, seconded to the Royal Engineers) in 1859 (Figure 9).

However, field investigations at DkRi 136 produced a small artifact assemblage which fit much better with an 1880s date as opposed to 1859. Review

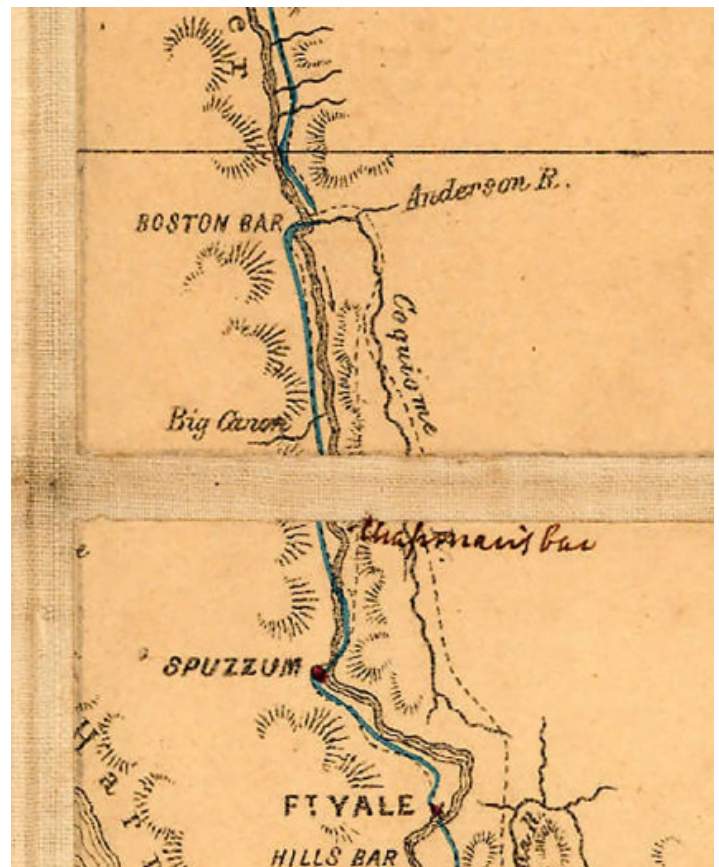


Figure 9. 1860 map of the Fraser Canyon area, showing the route followed by Lt. Mayne in May of 1859. Blue line represents the route of his party (Arrowsmith 1860).

of Mayne's journal for his party's travels on the west bank of the Fraser revealed no mention of a long-term campsite with a mess area or platforms, and his cooking apparatus was for a campfire, not a heavy-duty coal fueled stove (Mayne 1862). Mayne's camps were all short-term, and DkRi 136 is not a Royal Engineers site. So who created this site?

A major component of the DkRi 136 site is the 14 platforms, each from 5 to 15 m in length, some with rockwork on their downslope side (Figure 10, left). We determined these are tent platforms, most likely for canvas wall tents. These tents were used during the 1858 gold rush, but even more so during the construction of the CPR in the 1880s. An online review of CPR construction archive photographs showed many examples of canvas wall tents, especially in locations used by surveyors and construction engineers (as opposed to labour camps). We believe that DkRi 136 was used by engineers supervising construction of the tracks on the Onderdonk contract #60 of the CPR. Another significant feature at the site is a rock platform which held a coal burning stove, also likely situated inside a canvas mess tent (Figure 10, right). A similar site has been documented in Roger's Pass by Parks Canada within Mt. Revelstoke and Glacier National Park, along with tent platforms and a rock platform in the mess area (Rooney 2010).

A comprehensive survey of the camp was com-

pleted, and all tent platforms and other features were mapped. Excavation of the coal stove feature revealed stove parts, construction tools such as chisels and heavy-duty awls, machine cut square nails, and bottle glass. Slag from incomplete burning of low-grade coal was also present in large quantities, with over 10 kg in the stove excavations. The assemblage fits well with the hypothesis the camp was used by CPR engineering or survey staff.

Underlying the historic assemblage within the stove feature is a much older deposit with debitage, several cores from flake removal, and a chert biface which matches the morphology of Plateau Horizon projectile points (2400 to 1200 BP; Figure 11). This is a common pattern in the archaeology of the Fraser Canyon, with the area's colonial footprint superimposed upon indigenous materials from a much deeper history.

DIRi 3: Tuckkwiowhum

This site is a very large and ancient Nlaka'pamux village situated on the east side of the Fraser River near the confluence of Anderson Creek (Figure 1). Previous KPU projects have demonstrated that the site has been inhabited since at least the Lochnore phase (5000 to 3500 BP). An HBC census, conducted from Fort Langley in 1830, shows 840 inhabitants at the site (Harris 1997:107). The site was surveyed as an Indian Reserve in 1861 by James Turnbull of the Royal Engineers, making it one of the earliest reserves in



Figure 10. Left: tent platform with rock revetment on downslope side. Right: coal stove structure, with stove parts on surface.



Figure 11. DkRi 136 artifacts from the coal stove feature. Left: carriage bolt with square nut (late 1800s). Right: Plateau horizon projectile point, 2400 to 1200 BP, buried beneath the 1880s construction.

mainland British Columbia (Pegg and Kolaric 2013). By 1878, when the Indian Reserve Commission, led by G.M. Sproat, surveyed the inhabitants of the site, 237 people were recorded (Harris 1997:121). Previous investigations at the site have documented Nlaka'pamux life in the mid-1800s, showing that despite fighting a war in 1858, the village's inhabitants were relatively well off and displaying an often successful entrepreneurial approach to colonialism that has been repeatedly documented in historic sources.

In the 2011 field season, two mid- to late 1800s house depressions were investigated. For the 2015 field season, Boston Bar First Nation selected two additional house depressions (CD 6 and 7) situated closer to the bank of the Fraser River, which were determined to date to the proto-historic period. In line with previous methodology, 1 m x 1 m excavation units were situated to obtain baseline information about the house depressions, such as age and stratigraphy, as this portion of the site was previously unrecorded. Five excavation units were completed in CD 6 and four within CD 7.

CD 6

The five excavation units completed in this house depression revealed no discernable anthropogenic stratigraphy due to mixing caused by tree roots. In particular, a very large bigleaf maple tree situated within the depression has resulted in so much root

growth that for the units nearest this tree, almost 50% of the volume of the excavation consisted of wood. Modern artifacts such as round wire-cut nails, bottle glass, and an iron axe head were commingled at significant depths with much older lithic tools. No floor, clear features, or other cultural stratigraphy was identified.

The location has been utilized at least since the Shuswap horizon (circa 3500 BP), as an unfinished lanceolate projectile point was identified. Microblades (10,000 to 2000 BP; Carlson and Dalla Bona 1996; Odell 2004; Sutton and Arkush 1996) are present as well. Because of the lack of discernable stratigraphy, it is unknown whether these artifacts are associated with the occupation of the house or if they are independently present.

CD 7

In contrast to CD 6, this house depression has well-preserved stratigraphy, with a clearly defined floor, central hearth, post holes, and preserved structural and roofing timbers. Modern artifacts were identified only in the A horizon (approximately 10 cm below surface). Four radiocarbon samples were dated from this house depression, and were calibrated using Stuiver and Reimer (2016; Table 1). One of the dates is anomalous; it is much more recent than the others and not old enough for reliable calibration. We initially believed the sample was charcoal from a post hole, but instead consider this feature a misidentified

Table 1. Summary of Radiocarbon Results, CD 7, DIRi 3.

Sample Number	Description	Radiocarbon age	1 SD	Median calibrated date
D-AMS 015053	Charcoal from central pit hearth, feature 8	157 BP	28	1773
D-AMS 015054	Charcoal from tree root, feature 10. Anomalous date.	69 BP	28	n/a - too young for calibration
D-AMS 015055	Charred birch bark on floor of house, feature 7	148 BP	25	1779
D-AMS 015056	Charred Douglas-fir roof beam, feature 2	178 BP	26	1768

burned tree root. The remainder of the samples, from a hearth, from birch bark on the floor, and from a roof beam match very well, are all clearly associated with the house, and demonstrate occupation of the house in the late 1700s circa AD 1770.

Numerous wood or bark organic objects and features were identified within the house depression. A rock-lined pit hearth was investigated near the centre of the depression (Figure 12, right). Adjacent to this hearth were large ochre fragments and a large multi-layered sheet of charred birch bark, which may have been a basket. All are clearly associated with the hearth itself: the hearth matrix had smaller ochre flecks present. On the eastern side of the house depression, split

Douglas-fir timbers from the collapsed roof were identified, some with obvious tool marks. The fir timbers were arranged in a lattice pattern (Figure 12, left).

Considering CD 7 dates to circa AD 1770, the complete absence of colonial market economy artifacts is significant. The house pre-dates the construction of fur trade posts in what is now British Columbia. Fur trade posts were established in Kamloops in 1811, Fort Astoria in 1811, Fort Vancouver in 1825 and Fort Langley in 1827. Simon Fraser's party was assisted down the Fraser Canyon by Nlaka'pamux in 1808 (Harris 1997; Laforet and York 1998). Depending on the actual precise date of last occupa-



Figure 12. Charred Douglas-fir roof beams, Feature 2 (left); rock lined pit hearth, Feature 8 (right).

tion of this house, it may pre-date the establishment of Spanish settlement on the West Coast. From the perspective of colonial forces, the Fraser Canyon was still peripheral in the late 1700s, though certainly the impacts of colonialism would still have been very important here. Archaeological evidence has been used to argue for smallpox presence in the Interior Plateau by Campbell (1989) in the mid-1500s and by Jones (2003) in the 1660s. Horses were likely present here by the early 1700s (Thomson 1994:98).

Conclusion

KPU's 2015 Applied Archaeology Field School has contributed important new knowledge, especially with regards to baseline data, related to several previously unknown or under-investigated sites. In particular, DkRi 10 has now been nearly fully surveyed, leading to the documentation of Amelia York's house, the location of the toll house for the suspension bridge, and the presence of an archaeological assemblage associated with indigenous use into deep history. DIRi 56, the CMT site situated near the trail between the Fraser Canyon and the Nicola area now has a small sample of dates, several of which are unusually old. A CPR camp has been identified and preliminary data obtained, and two more house depressions at the Tuckkwiowhum site have been investigated. All of these sites are worthy of extensive further research.

Brian Pegg is part of the Anthropology Department at Kwantlen Polytechnic University. He has been directing KPU's field school since 2009, and has seen many of his students move on to rewarding archaeology careers.

Justin Hanna is a senior student at KPU, majoring in Anthropology. He is hoping to pursue archaeology in B.C. in the very near future, while also returning to school to complete a Master's degree.

Elpiniki McKave is a BA graduate with a double major in Anthropology and Political Science, she also completed a certificate in Non-Governmental Organizations and Non-Profit Studies. Currently, Elpiniki is working as an archaeologist in British Columbia and has plans to pursue a Master's degree.

Jonathan Munro is a graduate of KPU with a dou-

ble major in Anthropology and Criminology and he was thrilled to be part of the KPU Field School team.

Tanis Place is a BA graduate of KPU with a major in Anthropology. Tanis plans on pursuing a job in archaeology in British Columbia.

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