2015 Scottie Creek Borderlands Culture History Project Summary of Activities



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Scottie Creek Research Manuscript 2015-03

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Overview of Activities

This document summarizes the work of the Scottie Creek Borderlands Culture History Project during the summer of 2015 directed by the Principal Investigator Norman Alexander Easton of the School of Liberal Arts at Yukon College, Whitehorse.

Our work in 2015 consisted of about a month of continued analytical lab work in late May and early June, followed by continued excavation of the Holocene and Pleistocene deposits of the Little John site (KdVo-6), and related archaeological survey and ethnographic participation in the region through the summer. A formal field school was not held this year due to low (3) registrations. Permissions and funding from the School of Liberal Arts was extended to undertake fieldwork with graduate student Jordan Handley of University of British Columbia and two paying student research interns. Dr. Douglas Hudson of the University of the Fraser Valley joined us in the context of a professional development activity in a 3 Credit Special Topics in Northern Studies – Field Methods in Archaeology and Anthropology, and Wendy Marshall of Toronto joined us a non-credit Intern registered in ANTH 225-L from June 29 through July 23. Handley participated from June16 through July 13. Hudson participated from June 18 through July 13. Graduate student Michael Grooms was to join us but had to withdraw his participation due to a lack of funding for travel to Yukon. He hopes to join us in analytical lab work in the fall. In addition, Dr. Ukjese van Kampen joined us for two weeks as an artist in residence, with funding from the Yukon Arts Center Culture Quest program, participating in all aspects of the program and engaging the local communities of Beaver Creek and Northway in a number of presentations and workshops on Athapaskan artistic traditions from July 11 through July 23. Jared Gomay, a Yukon College student engaged in a western subarctic ethno-ornithology project under the direction of Dr. Katie Aitkens and Easton, joined the project for three days, July 12 - 14. Visiting graduate students Merideth Wismer, a former student, and Francois Lanoë, worked on site for two days, June 27 and 28. Lanoë also reviewed the Little John Faunal Database with a view towards selecting samples in the fall of 2015 for isotopic analysis in support of his PhD dissertation. David and Ruth Johnny of the White River First Nation regularly joined our camp throughout the project as Upper Tanana Cultural Specialists, and Elder Jennie Sanford joined us on two occasions. In addition we were assisted by a number of community members, including Bessie and Wilfred Chasse and their children Blake, Robert, and Louis, Patrick and Jackie Johnny and their daughter Jolinda, Eldred, Chelsea, and Eddie Johnny,

In addition to our excavations at the Little John site, five related projects were undertaken.

The first was a week of survey and excavation at the Tok Terminal Station in Alaska in collaboration with Dr. Julie Esdale of the US Army Group Fort Wainwright. This proceeded as planned with our small crew of Easton, Handley, Hudson, and Marshall joining Dr. Esdale

and her crew at the Tok River State Campground July 4 through July 10, returning to Little John camp on July 11. Our efforts re-examined 5 known sites on the property and documented 7 additional new sites. A community tea and interpretation day was held on July 9 which was well attended by local residents from Tanacross, Tok, and Tetlin. A full report on this activity will be prepared for submission to local authorities and interested parties in the fall, but our initial results suggest that the property holds significant archaeological resources that link the site with other Tanana valley sites and the Little John site and we are anticipating further collaborative work in the coming years, including physical assistance at the Little John site.

The second was an Artist in Residence initiative in collaboration with the Yukon Art Center which provided funding from their Culture Quest program to support Ukjese van Kampen's participation from July 10 to July 23. He held discussions with local native artists and crafts people, presented illustrated lectures on his research into Athapaskan art traditions in Beaver Creek and Northway, and a discussion of beading styles with White River First Nation members at the Snag Village Camp. He is also tasked to produce a set of artistic works based on his experience in an art show which is scheduled at the Yukon Arts Center community gallery in January 2016.

The third was further exploration of sites located around Deadman Lake, Alaska, in collaboration with Bob Sattler of the Tanana Chiefs Conference and the Northway Village Corporation. We left Little John camp on the morning of July 17 and conducted a 2 by 2 meter area excavation at DML-09, which uncovered mid-Holocene artifacts and a late Pleistocene feature. We returned on July 20. I also spent two days, August 18 and 19, assisting Bob in resampling the Deadman basal sands and surveying land parcels at High Cache village and on the Chisana River.

The fourth was participation in the White River First Nation Healing and Culture Camp at Snag Village July 21 – 23. Ethnographic interviews were held during this time. An attempt was made to cross Snag Creek to undertake some archaeological survey but difficulties in access prevented this.

The fifth was a major geophysical survey of the Little John site in collaboration with the Mineral Technology program of Yukon College with Drs. Joel Cubley and Mary Samolcyk, funded by the Yukon College Research Fund. The first part of this work consisted of collecting 5 additional electrical resistivity measurements along 5 transects that will be combined with 3 others collected in 2013 to generate a 3-D model of the sediments and bedrock across the site. This work occurred July 29 – Aug 1. The second part of this work is the collection of a selection of vertical cores across the site; this work is scheduled for later in the early fall.

Significant work organizing records and collections related to the Scottie Creek Borderlands Research Project was also accomplished by our summer STEP research assistant Eryn McGillvary who could not join us in the field for health reasons. Finally, Easton worked towards completion of several manuscripts related to the Little John site.

Easton maintained regular liaison with administrators and members of the participating communities of Beaver Creek, Northway, Tetlin, Tok, and Tanacross. Field crew members attended a number of community events, including a horse-shoe tournament, Canada Day, and David Johnny's retirement party in Beaver Creek, the funeral potlatch for Elder Julius Sam in Northway, and the fourth of July baseball tournament in Tok. All these activities provided positive visibility to the program, allowed for public communication of our work, and further strengthened the reputation of the program for active community engagement.



My thanks to all who supported our work this summer, in particular Victoria Castillo, Chair of Liberal Arts, Andrew Richardson, Dean of the School of Health and Education, and Deb Bartlette, Vice-President Academic and Research.

Noman Alexander Easton

Daily Summaries of Activities

Wednesday June 17

Attended the Borderlands and Globalization Conference, at Yukon College. Presentations by Mr. David Johnny of White River First Nation and Norman Easton on the impacts of the Yukon-Alaska border on the traditional culture of the Upper Tanana *Dineh*.

Thursday June 18

Purchase / organize field supplies

June 19 – July 3 – Little John Camp, Beaver Creek, Northway

Friday June 19

Last purchases, depart for Little John. Arrive 11 pm. Set tent for Doug. Jordan in cabin. Norm in camper.

Saturday June 20

Set up camp in morning. Camp visit by Amanda Graham and **two folks from the borderlands** conference. Toured them at border and Ts'oogot Gaiy. Attend horseshoe tournament at Archie's for a few hours, then assist Johnny's in preparation for David Johnny's retirement party in the community hall. Dinner and dance follows. Return to camp c. midnight.

Sunday June 21

Continue camp set up. Evening visit by Eldred and Jessica with firewood – thank you nephew.

Monday June 22



Figure 1.Southwest Corner of Pit of Despair – East Lobe Area Start of Excavation June 22

Excavation begins with clearing walls and establishing levels in the southwest corner of the Pit of Despair (East Lobe). This entails intrusion into two new units – **N15 W14** and **N14**

W13 on the west and south of the primary Unit **N15 W13**, clearing out intrusive silts, muds, and leaves and exposing a working surface.

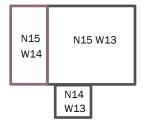


Figure 2. Layout of initial excavations, KdVo-6 2015

Cultural sediments that had slumped out of the wall onto the tarp were hand screened; no cultural material was recovered. After removing the remaining slump extensions into the western and southern adjoining units were excavated to provide a vertical working surface for further excavation.

N15 W14 is excavated along a North-South baulk 30 cm in width down to the bottom of the B Horizon to the top of the Loess above Paleosol stratum. **Cobbles/Pebbles in Association** (CPA) were recovered in the B stratum at c. 20 below the surface of the unit (50 cm below unit datum).

N14W13 is excavated 50 cm East to West and 30 cm North to South in the NW Quad with 10 cm along the West wall to preserve the datum. No cultural material was encountered in bringing this quadrant down to the surface of the Loess below the B Horizon.

Norm continues to set up lab and travel to village to pick up Artist in residence applications. Field notes and lab work on return. End excavations at 6 pm. Dinner and discussion of Chindadn / Denali complex.

Tuesday June 23





Figure 3. N16 W13 Bottom of Loess below B2, Top of PC, June 23

Up at 8 am. Begin excavations at 10 am. Continuing to clear slump in **N15 W13** and **N16 W13**, arriving at top of paleosol complex in N16 W13 and clean walls into the Paleosol Complex in N15 W13. A **Boiling Stone** was collected at the top of the PC.



Figure 4. N15 W13 SE Clean walls through Paleosol Complex, June 23

Norm into town to distribute AAA applications to other adjudicators and check on helicopter. Left messages with Dawson pilot.

Wednesday June 24

Hear helicopter heading back to Dawson. Sid Cammings came and went without getting out to camp so we missed out on a lift to Chief Johnson's lookout.

Jordan continued excavation in **N16 W13**, taking down the NE Quad to level with the SW Quad. **Three bone fragments** were found in the NE Quad within the Loess between PC1 and PC2 at a depth of c. 75 cm below Unit Datum (2015 Datum = SE Corner of Unit N13 W14 at plus 10 cm above surface).





Figure 5.N16 W13 SE Bone Fragments in Loess below P1/P2





Figure 6.N16 W13 End of Day Excavation, June 24



Figure 7. N15 W13 End of Day Excavation, June 24

Doug continued excavation in **N15 W13** bringing the entire unit down to a uniform depth of c. 95 cm. This removed the last of the visible paleosols and at end of day was consistent loess below paleosol across the entire unit.

Thursday June 25

Excavations in the morning.

Jordan continued with taking down the NW Quad of **N16 W13** to the loess level between paleosols to see if any more bones were present – there weren't. Extant Fauna was provenienced and bagged.



Figure 8.N16 W13 End of Day Excavations, June 25



Figure 9.N15 W13 End of Day Excavations, June 25

Doug continued excavations in **N15 W13**, beginning with hand screening remaining slump on top of tarp. He then excavated the unit through the lower loess below PC to a sandy silt with increasing numbers of frost fractured rock at depths of between 100 and 105 cm below unit datum, considered to be the base of excavation for this unit. No cultural material was found. Travel to Northway for Julius Sam's funeral and potlatch (Ruth Johnny's stepfather – second husband to Martha Sam). Good day. Back at Little John at 4 am after clearing Canada Customs.



Figure 10.Bertha Demit Grave Marker, Northway Village Cemetery

Friday June 26

Everyone sleeps in and we are underway about noon.

Doug and Jordan work Unit **N15 W14** today. They begin by clearing off deposits from previous excavations and end the day at the top of the B horizon across the entire unit, except the 30 cm baulk along the eastern quads which were previously taken down to the bottom of the B horizon. No cultural material was recovered.



Figure 11. N14 W14 End of Day Excavations, Top of B Horizon (no tephra), June 26

Francois Lanoë and Meredith Wismer arrive in the late afternoon. MW is a former student at the site from 2007 who has married Francois. Francois is a graduate student at XXX university who is conducting isotope analyses on late Pleistocene Beringia fauna and wishes to include samples from Little John.

David and Ruth visit in the evening and share stories with the students.

Saturday June 27

Norm in meeting with Francois who then examines our faunal photo database to get a sense of the Little John sample.

MW joins with DH and JH to excavate in **N15 W14** into the B horizon. Two large cobbles (c. 20 x 10 cm) are found aligned in the NW quad at 20 cm below surface (50 cm bud). Additional large and small pebbles and orange and red ochre are encountered within this stratum as well, suggesting that it might be the southeastern extent of the large hearth / pebble / cobble feature encountered in the B stratum in previous years in units to the north, west and northwest (Fe2012-06/07, N17 W16, N18 W16, Fe2013-04, N16 W18/19 and N17 W18/19). A long tubular ash lens trends East-West across the unit and is a suspected krotovina. It is designated **Feature 2015-01** and a level map is drawn.



Figure 12.N15 W14 End of Day Excavations, B Horizon, 30 cm below surface, June 27

Francois and Doug take on removing the plywood walls and much of the mud slump into Units **N16 W18/19 and N17 W18/19**. Francois trowel shaves slumped material from the west wall of this 2 x 2 m unit. No cultural material encountered, but this will allow further exploration of the lower levels of this unit later in the summer which was ended in 2013 due to permafrost.



Figure 13. Left: East Wall, Units N17/18 W18; Right: Francois Lanoë and Meredith Wismer, June 27 Francois and Meredith leave after lunch.

Sunday June 28

Doug and Jordan continued excavation of **N15 W14** through the B horizon to the loess below at about 60 cm below unit datum / 40 cm below surface. Additional ash encountered in the SE quadrant and wall suggests the suspected krotovina is not. The "feature" (**KdVo-6 Fe2015-01**) was pedestaled in any event and will be sectioned tomorrow. CPA and fire altered rock collected by quadrant. Only the two largest rocks were mapped.



Figure 14. Feature 2015-01 Pedestaled in N15 W14, June 28

Norm leaves for Whitehorse c. 5 pm to pick up Wendy Marshall on Monday since Michael Grooms won't be there. Arrive Whse 11:30 pm.

Monday June 29

Norm in Whitehorse picking up Wendy, checking in with Eryn (lab assistant), some purchases, and depart for Little John c. 5 pm; arrive c. 11 pm after dinner at Destruction Bay.

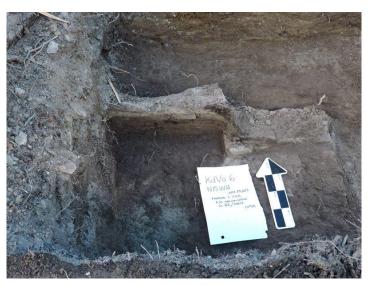


Figure 15. Sectioned Feature 2015-01in N15 W14, June 29

In my absence, Jordan and Doug continued excavation of **N15 W14**. The pedestaled **Feature 2015-01** was sectioned with the SW and NE being removed and photographed. The NW section was sampled. In section the deposit is a mix of B horizon and ash lenses, with B predominating. The ash is also dipping into the southern quads.



Figure 16. Top of Paleosol in N15 W14, 75cm DBUD/51 cm DBS, June 29

Continued excavation to end of B horizon at c. 64 cm DBUD. No cultural material encountered. Continued excavation through olive loess to top of paleosol complex at c. 75 cm DBUD in center of unit. No cultural material encountered. Continued excavation a further 5 cm across the unit. The northern units were blackish paleosol, while the southern quadrants contained a mixture of black paleosol with bright orange deposits; these were left pedestaled. End of day at 82 cm DBUD / c. 58 DBS.



Figure 17. Paleosol Hearth Feature 2015-02, c. 80 cm DBUD/58 DBS, end of day, June 29

Tuesday June 30

Doug excavating Unit N15 W14, Jordan excavating Unit N16 W13 with Wendy assisting screening and excavation with Jordan.



Figure 18. Paleosol Hearth Feature 2015-02 mapped outline, June 30

In Unit **N15 W14** the orange oxidized soils at 83 cm DBUD in the SW quad are designated **Feature 2015-02 – Paleosol hearth** and a level map is drawn, photographed, and soil

samples taken. A **Basalt Flake** was recovered in the NW quad at N85 E14 (n.b. measurements in field book and photo are from the north wall and west wall respectively) at 92 cm DBUD – 62 cm DBS from within a Paleosol matrix with calcined bone fragments.

locati Cochar NIS

Figure 19. Basalt Flake, N15 W14 associated with Feature 2015-02, Paleosol Hearth at 62 cm DBS

Continued excavations through the basal Paleosol complex into loess with colluvium to a DBUD of c. 100 cm to complete the day. A **soil and charcoal sample** (**RCS2015-01**) was taken from the base of the Paleosol / top of the Loess below Paleosol at 92 cm DBUD / 73 cm DBS in the NW quad.



Figure 20. N15 W14 Charcoal Sample and end of day at c. 100 cm DBUD/70 cm DBS, June 29

In Unit N16 W13 exposure of the paleosols in section along the east – west midline and north indicates continuation of bowled hearth deposit continuing from adjacent units to north and east. It is designated Feature 2015-03 and mapped at surface and photographed. The N17 W13 Baulk remaining from last year was removed but the flake observed in the wall last year was not recovered. Wood fibers were encountered along the border between N17 W13 and N16 W13 and a sample was taken.





Figure 21. N16/17 W13 Baulk Wood Fibers Sampled, June 30

In the NE quad of **N16 W13** a **long bone fragment and a Basalt Flake** were found in situ at 84 cm DBUD and **another Basalt Flake** was recovered in the screen from this level.





Figure 22. N16 W13 Long Bone fragment and Basalt Flake at 84 cm DBUD, June 30

The NW quad was then excavated to see if there were any more cultural materials in association with the others in the NE quad; none was found. Below c. 84 cm an abundance of fair sized **charcoal** was encountered in mottled Paleosols, with loess and oxidized loess with calcined bone fragments, along with more fibrous wood fragments. **A large charcoal fragment was collected** (**RCS2015-02**) from the NW quad at 87 cm DBUD.



Figure 23. Charcoal Sample in N16 W13 NW Quad at 87 cm DBUD, June 30



Figure 24. N16 W13, excavation at end of day, June 30

Wednesday July 1

Canada Day. Into village for parade and bbq all morning, returning to camp after showers and laundry c. 3 pm. Doug readings, Norm notes, Wendy excavating in N16 W13 into Paleosol Complex, Jordan preparing profile wall.

In **N16 W13** the NW quad was taken down to level with the NE quad. Both are still within the **Paleosol Complex with calcined bone** present and **oxidized loess lenses**. The SW quad is cleaned of surface slump to reveal intact paleosols which will be further excavated. No cultural material was encountered.



Figure 25. N16 W13 Excavation at End of Day with intact Paleosols beneath slump, July 1 Jordan prepared the **South wall of N15 W13** for a hand drawn profile.



Figure 26. N15 W13 South Wall prepared for profile, July 1

Thursday July 2

Heavy rains most of the day. Jordan and Wendy work on Scraper technology, taking photographs and descriptions. Doug sketches artifacts, gets some readings done. Norm in town trying to sort out the Art and Archaeology program. Late afternoon the weather breaks and Jordan gets back to **profiling S wall of N15 W13**, while Doug and Wendy work down the hearth feature in **N16 W13**.

n.b. The field camera failed to record photographs from July 2nd through July 7th. Photos for these days have been collected from other participants.

Friday July 3

Jordan completed profile of south wall of N15 W13.

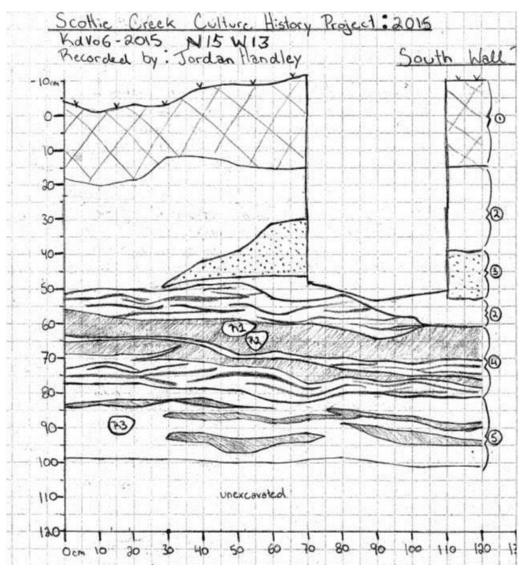


Figure 27. Completed Profile, N15 W13, South Wall, July 3

Doug began taking down O/A of **new Unit N15 W15**. A considerable number of pebbles and cobbles are found in the B Horizon, suggesting the continuation of the large hearth feature found in units to the west and north.



Figure 28. New Unit N15 W15, O/A removed, emergent Hearth Feature?, July 3 Wendy continued excavation of hearth feature in N Quads of N16 W13.

July 4–July 11 Tok Fuel Terminal Survey US Army Garrison–Fort Wainwright

Saturday July 4

Broke camp and packed and left for Tok c. 11 am to join an archaeological survey of the Tok Fuel Terminal in collaboration with the US Army Garrison – Fort Wainwright with Julie Esdale. Stopped at Border, Tetlin Refuge Interpretation Center, Deadman Lake site, Nabbia Niign, and arrived at Tok River State Campground c. 1:30 AK time. Julie's camp is set up and we proceeded to Tok Terminal property to meet with crew there engaged in surface survey. Two bifaces, several microblades, a burin and burin spall, and multiple flakes located on surface of road cutting through the main southwestern outcrop of the hill above the terminal (TNX-XXXXXXX). Returned to Tok River and set up camp. Julie Esdale arrives and plans for Sunday made. Yukon College VP Deb Bartlette and her husband Ted arrive to work with us for a couple of days.



Figure 29. Tok Fuel Terminal Site with known archaeological sites

Sunday July 5

Crew participated in shovel tests across the TNX-XX site. A number of positive tests and coherent profiles found, indicating the site is not entirely disturbed. Larry Johnathan from Tanacross was on site most of the day – he found a second biface on the surface near the apex of the hill by the telephone pole. Julie and I went over to the eastern portion of the hill and scouted around for likely survey sites there. Evening dinner at Fast Eddy's paid for by Norm.



Figure 30. Deb Bartlette and Will Rasic excavating Unit 2 at TNX-XX

Monday July 6

Crew continued to assist in shovel tests at the TNX-XX site throughout the day. Two new units are established, one off the road (Unit 2) and another higher on the hill on the road next to where the second biface was found (Unit 3). The grid is nearly complete by the end of the day.



Figure 31. Julie Esdale and Colin working Unit 3 at TNX-XX

Tuesday July 7

Crew completed grid shovel testing of the TNX-XX site. Some of Julie's crew left around noon to start another project near Delta Junction. Norm and Julie set up the Total Station and begin mapping in surface finds on the lower bench of the site.



Figure 32. Wendy Marshall and Julie Esdale working the total station at TNX-XXX

Wednesday July 8

Deb and Ted departed the crew this morning after three excellent days of work. Two excavation units were continued at TNX-XX and some afternoon survey work on the east side of the hill undertaken, with several positive tests along the most easterly high point. Total station mapping continued at the main site. Norm visited with Joe Young in the morning and after lunch travelled into Tanacross village to check in tribal administrator Galen Isaac and invite villagers to come to the open house scheduled for Thursday. Kate XXXX, Julie's assistant arrived in the afternoon to join us for the remainder of the project.





Figure 33. BBQ Guests and crew enjoying the evening at Tok River Campground, July 8

In the evening we hosted a BBQ for Kim and Brenda Sanford and their daughter Camille (a former Little John student and summer assistant). Bob Sattler, Archaeologist with Tanana Chiefs Conference, and wife Pam arrive in time to join us. Julie Esdale off to Glenn Allen for the night, due back around noon on Thursday.

Thursday July 9

All my crew along with Colin and Laurance working East Lobe survey on surface rises inside the forest west of break in slope in the morning. Two sites prove positive. The remainder of Julie's crew left around noon for their days off, while a new crew of six joined us. After lunch I took most of Julie's crew over to the east side of the hill and orientated them for survey work there. Jordan assisted in excavation of the second unit, Wendy continued survey work, and Doug worked with the Total Station crew. Held a discussion with Bob Sattler regarding regional work with Northway Village and agreed to join him at Deadman Lake on Friday July 17 through Monday July 20. David and Ruth Johnny showed up at about noon.



Figure 34. Interpretive Sign for Community Open House, July 9

We also held a community open house at the base of the hill from 3 pm to 6 pm. It was reasonably well attended with members of the Demit, Titus, and Johnathan families joining us, as well as Tanacross Chief Herbie Demit and Tribal Administrator Galen Isaac, and children, and 8-10 others (about 30 people in all through the afternoon). Several tours of the hillside were given. Julie off site to Glen Allen for the night.



Figure 35. Some of the visitors to the Open House share tea and tales, July 9

Friday July 10



Figure 36. L: TNX-XX, two positive test pits R: Untested promontory to southwest, July 10

L: TNX-XX, two positive test pits R: Untested promontory to southwest, July 10

Last working day at Tok Terminal. Jordan and Wendy working 2nd unit with others at TNX-XXXX. The unit is proving to be deeper than the test indicated. Doug off with crew to OSL sample Hurricane Bluff near Big Delta. Norm morning admin in Tok. East Lobe crew with Julie located new site in lower section between West and East lobes. Norm survey with East Lobe crew in pm – flakes found in test pits, no formed tools. Several of the promising promontories in the area were not tested and we hope to revisit here next year. The West Lobe crew traverse the northern border of the site. No sites located. A Google lidar map indicates that the West and East portions of the site are two separate geological features.



Figure 37. Google Earth map of Tok Terminal topography showing differing strikes of West and East hills

At the end of the day the second excavation unit is still not completed with several flakes coming up at c. 35-40 cm below surface, suggesting that this might be a second component below the flakes found above at c. 15-20 cm below surface.

Saturday July 11

Broke camp at Tok River in the morning. Picked up fresh food and brunch at Fast Eddy's. Return to Little John and clear customs c. 4 pm. Showers and laundry. Return to LJ camp c. 6 pm. Ukjese van Kampen, artist in residence on site, along with daughter Yataya. We provided them an orientation to the site and spend the evening with David and Ruth discussing Athapaskan art styles.

July 12 – 16 – Little John Camp

Sunday July 12

Doug and Ukjese map hearth feature (2015-05) in N15 W15 and sample Cobbles/Pebbles in Association, and then continued excavation of the B Horizon.

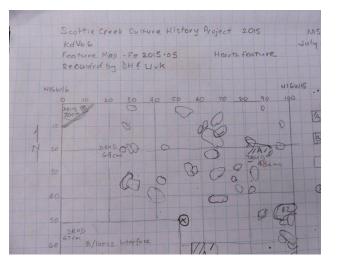




Figure 38. Feature 2015-05, N15 W15 at c 48 - 64 cm DBUD, July 12



Figure 39. Feature 2015-05, N15 W15 at c 47 – 64 cm DBUD, from East and West, July 12

The SE and NW quads of **N15 W15** were taken down to level of the SW quad at c. 64 – 72 cm DBUD (the level slopes down from east to west). **One Basalt Flake** was recovered in the screen material from c. 58 DBUD but quad unknown. **Another Flake** was found in the NW quad at 68 cm DBUD. **Two charcoal samples RCS2015-04 and RCS2015-06** were collected from the SE quad at 58 cm BDUD and the NW quad at 65 cm BUD respectively.



Figure 40. N15 W15 Excavation at end of day, June 12



Figure 41. N16 W13 Excavations at start of day, July 12

Wendy and Yataya continue excavation of **N16 W13** in the NE and NW quads. A **cluster of four Basalt Flakes** were recovered in the NE quad at c. 85 cm DBUD in the lower mid-section of the Paleosol Complex.



Figure 42. Cluster of Four Basalt Flakes, N16 W13, Lower Middle Paleosol, c. 85 cm DBUD, July 12

Two Bone Fragments were recovered in the NW quad of N16 W13 at c. 101 cm DBUD and a **charcoal sample RCS 2015-03** was recovered from 105 cm DBUD in the NW quad as well.



Figure 43. Charcoal Sample and Bone Fragments, N16 W13, Lower Paleosol, c. 101 cm DBUD, July 12

Ruth visits to instruct on sewing and they are able to complete a small fur hat for Jordan's baby.

Yukon College biology student Jared Gomay arrives c. 5 pm for two day visit on ethnoornithology project.

Evening visit by Bessie and Wilfred Chasse and kids, Chelsea Johnny and Delamae Sam. Lots of discussion about Athapaskan beading styles.

Norm tries to get community center for Monday presentation by UvK and catches up on these notes and photo catalogue.

Rain most of the day and camp is tired and slow but we do okay.

Monday July 13

Doug Hudson and Jordan Handley pack and leave camp c. 10 am. Wendy elevated to ARCOM - NCO Crew Chief. Jared and Yataya complete excavation of N16 W13. Wendy and Ukjese continue excavation of N15 W15. Wet tents from Tok camp hung, dried, and bagged. Ended the day with community presentation in evening.

The NW and NE quads of **N16 W13** were excavated into the loess below the paleosol complex; no cultural material was encountered. The final SW quad was partially brought down. **Calcium deposits and small charcoal pieces** were found in the Paleosol Complex but no artifacts by the end of the day.



Figure 44. N16 W13Excavation at end of day, July 13

Excavation of N15 W15 below Feature 2015-05 continued until encountering a second cobble and pebble concentration which is designated Feature 2015-06 at c. 57-61 cm DBUD in the SE, NE and eastern portion of the NW quads. It can be seen in profile along the unexcavated east wall and is bowl-like in appearance. This is excavated to the loess in the SE quad. Two large charcoaled pieces of what appears to be different plants were collected as RCS2015-06 A & B from the SE quad at 73 cm DBUD.



Figure 45. N15 W15 end of day with excavation of Fe2015-06 in SE quadrant, July 13

An evening community presentation by Ukjese on Athapaskan art styles was held at the Beaver Creek Community Center. Twenty-six people attended which is a good turnout in a community with only 80 people. After the presentation there was an engaging question and answer session. David and Ruth Johnny brought over a number of items made by local Elders for Ukjese to examine.



Figure 46. Gathering for Ukjese van Kampen's presentation on Athapaskan Art, July 13



Figure 47. Unfinished Beaded Shoulder Design by Bessie Sam, c. XXXX



Figure 48. An example of traditional Upper Tanana Design motifs combined with contemporary political content, beaded by Bessie Sam, c. XXXX

Tuesday July 14

Norm picked up Dana XXX the Beaver Creek swimming pool lifeguard at 8:45 am who volunteered for the morning excavations and returned her at noon. Local Kathy Lan Li and a friend also joined us late in the afternoon and assisted in excavations in N15 W15. Ukjese, Jared, and Yataya also removed the final slump in Units N15/16 - W18/19 (previously and recorded as N16/17 W18/19 and now adjusted due to designation error in 2013)¹ excavated to permafrost in 2013. The morning was clear and warm but thunderstorms moved in during the mid-afternoon and a steady heavy rain and cool air chilled the crew's

¹ In 2014wediscovered that 2013 Total Station shots from the Bernie datum were Plus One Meter North of Map Grid. We will adjust our final records accordingly.

work. Jared spent two hours after lunch birding down at the wetlands around Nii-ii / Sourdough village and decided to leave on his return. We closed down excavations at 5 pm.

N15/16 - W18/19 (2013 designated N16/17 W18/19) two by two meter excavation was cleared of the remaining slump down to end of 2013 excavation plywood and plastic, which was then removed to expose the unexcavated surface which has been silted in with a shallow layer of fine silt sediments over the past two years of run-off.



Figure 49. N15/16 - W18/19 (2013 designated N16/17 W18/19), top of units (N and S) after removal of backfill, July 14 After lunch we began straightening and cleaning the North wall of these units to expose the stratigraphy. The extremely wet clumpy slump and wall cleaning sediments were hand screened; no cultural material was recovered.



Figure 50. N15/16 - W18/19 (2013 designated N16/17 W18/19), units (N and S) at end of day, July 14

In the morning Jared finished leveling out the SW quad of **N16 W13**; no cultural material was encountered. **This unit is basically finished** although we intend to shovel out an additional ten centimeters across the unit and perhaps a little more to see what we might see and complete hand drawn profiles.





Figure 51. N15 W13, end of excavation, July 14

In **N15 W15** Wendy continued excavations of **Feature 2015-06**, a second hearth feature which lies within a brown soil matrix with ash pockets and is separated from Feature 2015-05 above it by a layer of grey loess as can be seen in profile along the northern wall of the unit. It seems to lie within the uppermost paleosol unit (P1?).

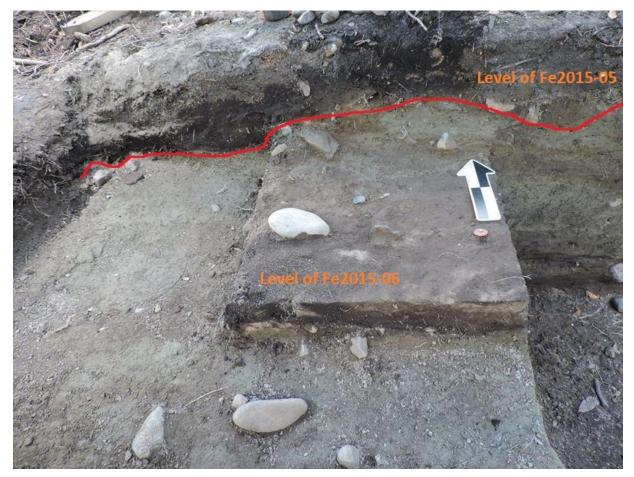


Figure 52. N15 W14 showing the vertical differences between Features 2015-05 and 2015-06



Figure 53. N15 W15, views to West and East of unexcavated Feature 2015-06, July 14 (pin marks RCS2015-07)

A **charcoal sample (RCS2015-07)** was collected from within the feature at a depth of 57 cm DBUD and the two large cobbles from 57 and 61 cm DBUD collected.

Wednesday July 15

We continued excavations in N15 W15 and N15/16 - W18/19 through a warm sunny day after an evening of thundershowers.

In N15/16 - W18/19 Ukjese began trowelling off the northern quads.

In **N15 W15** Wendy took a new photo of the now dry unit for start of day documentation since yesterday's end of day photo was pretty wet. She then continued excavation of **Feature 2015-06** in the NE quad, taking **a sample of the matrix**.

Thursday July 16

Ukjese and Yataya continued in N15/16 - W18/19 while Wendy began work in N15 W15 but was then given the rest of the day off – she is quite tired from her work over the past weeks and we want her fresh for Deadman Lake.

In **N15 W15** Wendy began removing loess below the first paleosol but was relieved before much was done. Norm and Wendy sorted through collected manuports from the B Hearth feature and photographed and bagged them.

In N15/16 - W18/19 the sediment which ran in over the spring snow melt was removed revealing sections of brown paleosols. This was drawn and photographed. The paleosol in the SE quad of N16 W19 was excavated in 5 cm levels until loess was exposed. End of day photos were taken and the unit covered with tarp. Norm will continue excavation of this unit later in the season to complete the unit.



Figure 54. N1516 W1819, end of excavation, July 16



Figure 55. Cobbles and Pebbles in Association, N15 W15 B Horizon

In evening we went into the village to shower and do laundry and share a pizza for dinner. Ukjese and Yataya chose to spend the night in the village while Norm and Wendy retired to Little John.

July 17 – 20 – Deadman Lake Excavations with Bob Sattler, Tanana Chiefs Conference

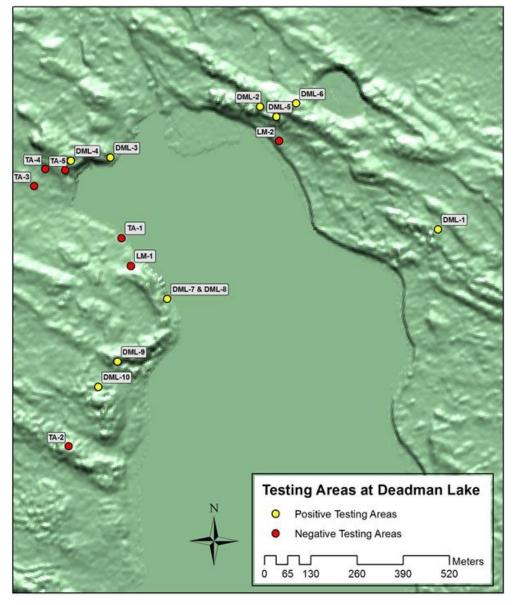


Figure 56. Known archaeological sites about Deadman Lake

Friday July 17

Crew consisted of Wendy Marshall, Ukjese and Yataya van Kampen, and myself, joining Bob Sattler of Tanana Chiefs Conference in further exploration of archaeological sites around Deadman Lake, Alaska. We left Little John c. 10 am and arrived at Deadman Lake campground c. 10:30 am Alaska time. Bob was not there and site 7 was occupied so we spent the remainder of the morning setting up camp at site 8. After noon I travelled to Northway Junction to pick up some items and wait for Bob, who arrived c. 1:30 pm. Mona Sam tells me Patrick Johnny has had a heart attack and medivaced to Vancouver. We travelled down to Northway to check in at the Council Office but most everyone has gone to Fairbanks to watch the kids dance group perform in the Eskimo and Indian Olympics.

Saturday July 18





Figure 57. L: Camp at Deadman Lake; R: Relocating Test Areas, July 17

Returned to camp and took the boat around the lake to relocate Bill Sheppard's test sites and the location of my **tests in 2009 which recovered a dart point in sands below the B horizon**; this turns out to be **Sheppard's DML-09**. We decide to put in a 2 by 2 meter unit at this site.

Set out 2 by 2 meter unit at **DML-09** in the morning and began removal of O/A horizon. A very thin and poorly developed B horizon lies above the White River Ash deposit, which we presume to represent the North Lobe eruption, c. 1,950 years ago.





Figure 58. L: Surface of 2 x 2 unit; R: B1 Horizon fire altered rocks, July 18

The crew took a long lunch while I travelled into Northway Junction to pick up a few missing items (milk, sugar, ice). Updated on Patrick's status – he is out of surgery for placement of a Stent and is doing well and expected back on Monday.

By the end of day we have cleared the tephra from the unit to the top of the B2 horizon. **Two** pieces of **Fire Altered Rock** were recovered from the thin **B1 in the NE unit**.





Figure 59. L: Surface of White River Tephra; R: Tephra removed to top of B2 horizon, July 18

Sunday July 19

Excavated through the B2 horizon through the day. The western quadrants contain a great deal of **Sharpening Flakes**, most **made on grey chert with black spots**, which Bob believes to be Livengood Chert. An **Obsidian Flake Core** was recovered in the NW quad of the SE unit. The flakes and core were **all recovered from the first two levels of the B2 horizon**, **0 – 10 cm below ash**. Units brought down below this were bereft of any cultural material. A **charcoal sample** was collected from the surface of the B2 horizon.



Figure 60. L: Obsidian Flake Core in situ; R: End of excavations, July 19

Monday July 20

The morning was spent continuing to excavate through the B2 horizon. **Small Sharpening Flakes** continued to be recovered from the western quads and a **Thumbnail Scraper** made on Black Chert or very fine Basalt was recovered from the SW quad of the NE unit. A **large charcoaled stick was collected** for dating from the NW quad of the NE unit. Within the NE quad of the NW unit and the NW quad of the NE unit polygon freeze-thaw fractures were encountered towards the **base of the B2 horizon**. The top of sands were reached in the NE quad of the NW unit by noon.



Figure 61. L: Thumbnail Scraper in situ, NE unit, SW; R: Charcoaled stick in situ, NE unit, NW, July 20



Figure 62. L: Freeze-thaw polygons in lower B2 horizon; R: Top of first Sand horizon, July 20



Figure 63. State of Excavations at Noon. L: Units from the East; R: Units from the South

After lunch Bob prepared his contour map of the site with total station measurements. Trowel excavations continued in most units while Norm shovel-shaved the remaining B Horizon from the two northern quads of the NE unit down to the top of the sands, bringing three contiguous quads to this level along the NE wall of the 2 by 2 unit. Excavation was halted in the other units and these **three quads were shovel shaved and screened through the sand deposits**. These consisted of discrete horizons. The first consisted of tan silty sand. The second consisted of black and white coarse sand interbedded with thin beds of grey fine sand. The white matter in the black sands were **gastropod remains of at least two different species** which were collected for identification and radio carbon dating. A thicker bed of grey fine sand overlaid another black sand deposit in the NE section of the shovel trench.

Table 1. Sedimentary Strata, DML-09, NE Wall, NE Unit, July 20, 2015			
Unit	Horizon	Composition	DBS cm
1	0/A/B1	Organic litter and thin B horizon	0 - 5
2	Tephra	White River Ash deposit – North Lobe, c. 1,950 years BP	5 - 18
Зa	B2	B horizon below Tephra with artifacts	18 - 30
3b	B2	B horizon with polygons, no artifacts	30 - 40
4	Silty Sand	Tan silty sands	40 - 53
5	Coarse Sand	Black coarse sands with gastropods, intersected with fine	
		grey laminae	53 - 84
6	Fine Sand	Massive Grey Fine Sands with Feature 2015-01 and -02	84 - 94
7	Coarse Sand	Black coarse sands with gastropods	94 - 109

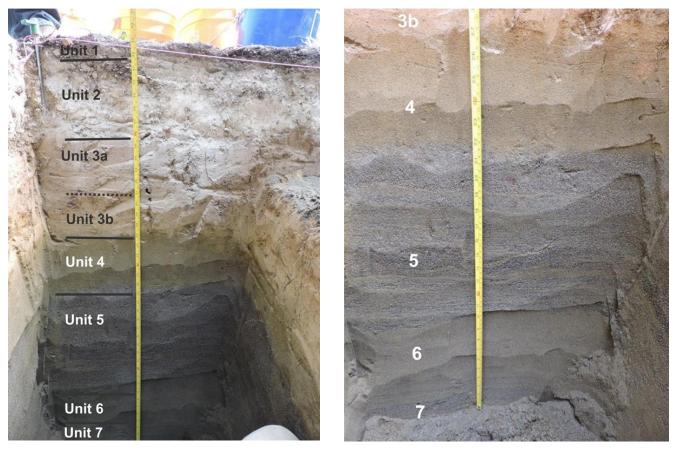


Figure 64. Sedimentary Strata, DML-09, July 20 - see table below for Unit descriptions

We decided to excavate to this level in the NW section of the trench by trowel in order to sample the gastropods in this level with control to ensure they were not mixed with the ones above in order to get an accurate date. During this excavation we encountered DML-09 Feature 2015-01, which lay immediately below Unit 5 and atop Unit 6.

The feature is comprised of three sedimentary components distinctive from the surrounding matrix (n.b. the sand exposed in the middle of the feature is the basal sand exposed by cutting through it with the trowel upon initial exposure). The primary component is a lightly cemented tan-cream granular sediment (1). Beneath and surrounding this is a brown organic sediment (2). On the periphery of the feature, principally along the northern edge, is an olive sandy silt (3). The feature was drawn in by Bob. The three sediment components were sampled separately and the remainder of the feature removed as a bulk sample, leaving the profile shown in the photos below.



Figure 65. DML-09 Feature 2015-01, Circular Concentration of Altered Sediments, NE quad of NW unit



Figure 66. DML-09 Feature 2015-01 Profile after removal of sample, showing feature below sedimentary Unit 5 and atop Unit 6, July 20. L: W Wall; R: S Wall (holes are stadia rod impressions)

We continued excavation of the center of the test trench in an attempt to reach the lower coarse black sands to sample for additional gastropods. Almost immediately we came across another brown organic feature in the grey sands. Circular in outline and roughly 5 by 7 cm NS and EW it was sampled for 2 cm and found to continue into the sands. Given its direct association with the first feature and the lateness of the day, it was decided to end excavation at this point for the season. A metal dust pan was placed over the outline and

the trench and contiguous units backfilled over a layer of blue tarp with spruce boughs and excavated sediments.

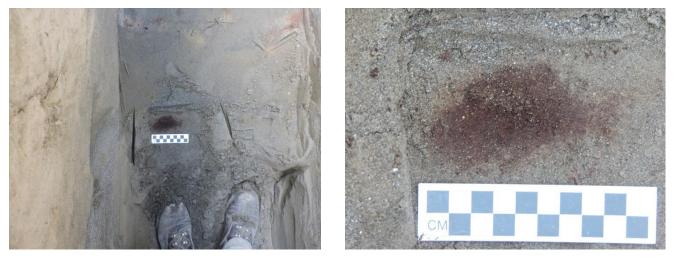


Figure 67. DML-09 Feature 2015-02, possible Post Hole in association with Fe2015-01, July 20



Figure 68. L: DML-09 Test Units backfilled; R: 2015 Field Crew

Returned to campsite for dinner. Eldred Johnny and Jessica dropped by to let me know that David Johnny was medivaced to Whitehorse with a suspected heart attack on Sunday but that he has word that it was not, just exhaustion and that he is well and will be back on Tuesday. We packed up camp, and departed for Canada. Cleared customs and arrived at Little John camp c. 11 pm.

July 21 – 24 – Little John Camp and Snag Village

Tuesday July 21

Ukjese, Yataya, and Wendy depart for showers in Beaver Creek and then on to Snag Village camp where the White River First Nation is holding a culture camp. I stay behind to catch up on notes and records arriving at the Snag camp c. 5:30 pm. Other participants have returned to Beaver Creek for lands meeting but Ukjese was able to present some of his findings on Athapaskan art to a subgroup of the 30 or so people at the camp in the afternoon. Quiet evening in camp as everyone rests up from the work of the previous two weeks.



Figure 69. Snag Village Culture Camp on right bank of the White River

Wednesday July 22

Folks arrive at Snag camp c. 11 am from Beaver Creek. The remainder of the morning was spent with Elders chatting and sewing, younger women preparing lunch, and some camp maintenance by the younger men. Ukjese gives a presentation focused on beading styles attended by about 8 participants, followed by discussion. Roland Peters continues knife making with others, while beading carries on in the cook tent. At 3 pm Ukjese, Yataya, and Wendy depart for Whitehorse. The remainder of the afternoon is taken up with notes and hanging out with the camp participants.

Left Snag camp c. 7 pm for Little John camp. About half way up the Snag road at about 7:45 I rounded a bend to find a cougar standing on the road. We looked at each other for a few moments and then it sauntered into the woods heading northwest – I was so astonished I didn't think to take a photo. Checked out emails in village and settled down at Little John c. 10:30 pm. participants.



Figure 70. L: Ukjese van Kampen discusses beading styles; R: WRFN women beading, Snag Village Culture Camp, July 22 <u>Thursday July 23</u>

While on my way to Snag Village stopped at the RV park and met the new Deputy Minister of Tourism, Murray Arsenault. Discussed the Little John project and other community aspirations (Sid's Museum, Walking Book, Snag) for a bit and then continued down to Snag. Took down Marilyn's canoe with a view of crossing Snag Creek and hiking up native trail to first and maybe second overlooks on the north side of the creek to undertake some survey work but the road has been washed out and it is not possible to cross the gap.



Figure 71. L: Mouth of Snag Creek, R: View upstream, July 23

David and I hiked down to the mouth of Snag Creek with Chelsea and Eddie to check an alternative egress but that too does not work out. The solution is to build a bridge at the Upper Village site but not today. Returned to the camp and enjoyed some time with the

folks, including listening to old tapes from the early 1990s with me, Bessie John, and Andy Frank talking about the borderlands. Quite moving to hear Bessie's voice again.... Returned to Little John arriving c. 10 pm.

Friday July 24

Spent most of the day at the Little John camp catching up on notes, cleaning up from Deadman excursion, and doing a little maintenance around the camp.

July 25 – 27 - Whitehorse

Saturday July 25

Travelled to Whitehorse for some time off over the weekend. Brought down a load of gear.

Sunday July 26

Day off in Whitehorse

Monday July 27

Went into College to drop off July Visa receipts, met with Eryn and Hiedi.

Tuesday July 28

Worked on camp admin in the morning. Took the remainder of the day off for more sleep and rest.

July 29 – August 1 – Little John Camp Geophysical Survey

Wednesday July 29

Prepared for departure and got away at 12:30, arriving at the Little John camp in heavy rains c. 6:30 pm. Joel and Mary are settled into the cabin. Dinner and discussion of data collection. Early bed for all.

Thursday July 30

We begin work at 9 am, laying a line from the base of the outcrop to the verge of the highway. This takes the better part of the morning but by 12:30 the current is turned on and lunch taken. The current will run for at least two hours. Angel and Robert Lee Demit drop by, as well as two cyclists on their way to Anchorage. Joel and Mary lay a shorter line perpendicular to the first in the afternoon while I work on artifacts, dates, and photos.

Friday July 31

Two more resistivity lines are laid and measured through the day. One is another long line from the westerly base of the hill to the highway, the second a shorter east-west transect.

<u>Saturday August 1</u>

A final resistivity line is laid along an east-west transect along the crest of down below in the morning. Joel and Mary do some surface geo-mapping of dips and strikes and collect rock samples and pack up to leave camp. Accompany them to village to pay for return gas. Visit at the horseshoe tourney for a while and enjoy a quiet evening in camp.



Figure 72. L: Final Resistivity Line, R: Joel and Mary Mapping Outcrop, August 1

Sunday August 2

Pack gear in the morning and return to Whitehorse, arriving c. 9 pm.

August 3 – 7 - Whitehorse

Monday August 3

Returned truck. Caught up on correspondence, including Reger consultation regarding Deadman Lake stratigraphy.

Tuesday August 4

Dropped off receipts at the college and met with Eryn in the lab and Victoria. Booked off for holidays.

Friday August 7

Packed up and returned to Little John, arriving c. 9 pm.

August 8 – 19 – Little John Camp

Saturday August 8

Edited field photos in the morning. Worked on artifact catalogue problems in the afternoon.

Sunday August 9

Worked on calibration of Little John dates using the OxCal program for most of the day.

Monday August 10

Picked up **Nisha Sanyal** at 9:30 am in village. Site orientation and then set to work **excavating SO3 W21**, an unfinished unit down below from 2013. Photos of start of day. Clean up unit, which is variously excavated by quadrants: NW and NE are Level 4 c. 40 cm bud, SE is Level 3 c. 30 cm bud, and SW is Level 2 c. 20 cm bud. Nisha is working the NW, which is B2 and has some FAR and scattered charcoal. Norm is working the SE which has ash pockets, small FAR, and scattered charcoal.



Figure 73. S03 W21 (left unit) Beginning of continued excavation, August 9

SO3 W21 SE 35 – 39 dbud (B2): 1 black obsidian flake, 1 grey banded obsidian flake (Wiki Peak), 4 grey chert flakes.

SO3 W21 NW 43 – 47 dbud (B2 – due to slope to the west through this unit this is the same natural level as above): 1 grey chert Biface Thinning Flake, 1 grey obsidian BTF, 1 grey obsidian Flake, 1 grey chert medial Microblade, 1 chunk of red ochre.

Returned Nisha to village, c. 1:30 pm. Worked on artifact catalogue problems until arrival of Kathy Yan Li c. 3:30 pm. The two of us continued excavation of S03 W21.

S03 W21 NW: One small pebble hammerstone collected in situ at E93.5 N91.5 Z 43 cm – photo taken.

SO3 W21 SE: hearth elements of larger charcoal pieces and fire reddened soil encountered c. 38 – 40 cm dbud, trending SE to NW through center of Quad. End bucket at this level.

Photos taken. **Charcoal sampled. RC2015-08** = E 82-96 N 10-24 Z 39 Low B2 with Loess emerging in the extreme northern section of the Quad. Bucket contains one bone fragment.



Figure 74. S03 W21 L: Pebble Hammerstone in situ, NW, R: RC2015-08 in situ, SE

SO3 W21 SE: two artifacts collected in situ. **1 Grey chert flake** at E 82 N 39 Z 44. **1 Large basalt flake** at E 85 N22 Z 44 – both below previous RC2015-08. Ended level at z 44. Bucket contained 2 artifacts. **1 grey obsidian flake**. **1 thick grey chert flake**, triangular in cross section, 2 parallel arrises on dorsal surface, edge modified both lateral margins.

SO3 W21 NW: ended level at c. 47.5 – 48 cm dbud. Loess appearing in NE, SE, and E central. Bucket collection was 3 artifacts, one bone, and 1 geofact (in three pieces). **1 CPA-pebble hammerstone. 2 grey obsidian flakes. 1 medium mammal metapoidal** (distal) fragment. 3 slate like fragments of same stone, pinkish, burned?



Figure 75. S03 W21 End of Day - pins in SE mark in situ artifacts, Aug 9

End of day photos taken. Catalogue materials and write up field notes. End of day c. 10:30 pm.

Tuesday August 11

Gordon John drops by early am for coffee and visit coming back from looking around for moose. Cloudy morning turns to rain by 10:30 am. Work on radiocarbon data sets.

Wednesday August 12

Morning spent integrating Upper Tanana archaeology dates from Potter into OxCal and generating a variety of graphics integrating these with Little John dates.

Afternoon excavating SW Quad of SO3 W21. This unit was left more or less at top of Hearth Ash last year at c. 26 to 33 cm bud across the quad. Cleaned of a few cm to get a fresh level photo.

By end of day (c. 5 pm) I had excavated and levelled the quad into the low 40 cm bud. I took a carbon sample, RC2015-09 from 35 to 37 cm bud in the NE of the SW Quad along the perimeter of the ash in reddened B soil. Four artifacts and one larger piece of FAR were collected. Small FAR was noted through the screen, as well as lots of small charcoal pieces.

- 1 grey chert Flake, burned with reddish hue and potlid fractures on dorsal surface, 32 bud.
- 1 large FAR spall, c. 34 bud, in white ash.
- 1 dark grey chert Flake, B Ash, 39 bud.
- 2 small obsidian Sharpening Flakes, c. 40 cm bud.

Catalogued materials and notes.

Thursday August 13 - Monday August 18

I spent these days working on a variety of analytical projects. I reviewed and revised the obsidian paper, incorporating new assignment of Group P obsidian to the Hoodoo Mountain/Airdrop Lake source, which required revision of all the tables and recalculation of the statistical numbers. I continued to tease out component attributes from the radiocarbon dates. I formed the East lobe dates into 5 groups based on their unit proximity and collated the nearest profile and field note data, examining these sources to obtain a clearer understanding of their stratigraphic context. It is clear that the vertical and horizontal excavation mapping project is going to be critical to complete the interpretation of the dates. I experimented with plotting several wall profiles in Grapher 7. All the Excel data needs to be transposed both vertically and horizontally and the measurements placed into negative numbers in order for this to work.

During the week we also corresponded with Dick Reger regarding the Deadman Lake sands and shells and he has tentatively identified the shells and offered his initial interpretation of their presence.





Figure 76. Shells from Deadman Lake Sands. L: Valvata; R: Stagnicola

More extensive notes related to this are contained in the Deadman Lake file proper; here I will provide a short extract of his comments.

"For my identifications, I initially determined that both gastropod species are not airbreathing snails. My source of information for the following identifications is the excellent book by Clarke (I981), which I have used to identify freshwater snails and clams here on the Kenai Peninsula."

"This collection of 16 low-spiral snail shells is almost certainly Valvata, most likely V. sincera helicoides Dall, 1905, the northern valve snail (Clarke, 1981, p. 48–49). I could not see the surface textures or angle of coiling well enough in the photograph to feel totally comfortable with that identification, but the site location relative to the distribution of this species is indicative."

"One small individual and the fragment of a second individual high-spiral snail are almost certainly Stagnicola, probably S. (Stagnicola) elodes (Say, 1821), the common stagnicola, formerly identified as Stagnicola (or Lymnaea) palustris (Müller) (Clarke, 1981, p. 142–143). I am fairly confident of this identification because of the distinctive angle of coiling and the distribution of this snail."

"These gastropods lived in freshwater environments, perhaps in small drainages or ponds within the sand dunes or perhaps in a lake during a higher lake level. I don't know how much higher than the modern lake level you recovered these fossils, but that could be well worth determining in the field. Dating these remains could introduce the concept of high Holocene lake levels in the upper Tanana River valley, which we know occurred here on the Kenai Peninsula after dating many ice-shoved ramparts on several different lakes. You might look for ice-shoved ramparts and other evidence of former shorelines around the margins of Deadman Lake and nearby lakes." This is all very exciting stuff and Bob and I will be returning to Deadman Lake on Tuesday in order to resample the levels in order to get a larger collection of the gastropods for identification purposes and dating. Depending on the date returned we could be looking to expand our search for Pleistocene sites higher above and further back from the current terrace. Bob and I both agree that Dick should be included as a co-author on the paper announcing these dates.

On Monday evening David Johnny came out to Little John and we spent a few hours discussing a variety of topics. After a week of fine sunny weather the day was cloudy and overnight it rained heavily.

Tuesday August 18

Still cloudy and rainy through the day. Off to meet Bob Sattler at Big Scottie Creek bridge at 2 pm Alaska time. I passed on to realty assessor Hans some of the history of the land parcel obtained from David Johnny. The big cabin was built and home to Dorothy and Bucko Thomson, who had come up from the Stikine valley following some difficulties Bucko, who was a big burly guy, had gotten enmeshed in. This was in the early 1970s, maybe 1972. They were on their way to Fairbanks when their truck broke down near Scottie Creek and they camped out there and then just stayed. Dorothy hired David and his brothers to help build the cabin and the other houses. She paid well and was good to work with. Bucko died there one winter of pneumonia and Dorothy put him in sleeping bag and stored him outside until the ground thawed in the spring, when she buried him next to the cabin! The grave is on the right side of the house as you approach the front. After that Dorothy decided to move to Beaver Creek and the day she was travelling there to settle down she was killed in a car accident not far from 1216.



Figure 77. Positive test pit at High Cache village site, August 18

Bob and I went down to the Island Lake access road but Bob was reluctant to go down very far due to a concern that the truck would get stuck in the muskeg it crossed, particularly since there had been (and continued to be) so much rain. We then proceeded to the High Cache trailhead and walked down to the village site where I identified the layout of the settlement and provided some further historical detail on who lived there and local land use. We traversed and placed several test pits along the central terrace all of which were negative. Returning to the village site we found Hans had arrived and placed a final test pit along the bank of Desper Creek. Here we found multiple burned bone fragments, fairly robust and likely caribou or moose, and a few flakes. We documented the stratigraphy and returned to the road where we split up for the night c. 9:30 pm Alaska time.

Wednesday August 19

After a wet night at Little John I travelled over to Deadman Lake to join Bob and Hans, arriving c. 9:30 am Alaska time.



Figure 78. Sampled East wall of Deadman Lake site with pink matrix near base, August 19

We re-excavated the northeast corner of the 2 x 2 we had excavated earlier and took a series of samples along a column from the east wall along a column of 5 cm depth per sample. At the base of the grey sands we encountered another deposit / feature of the pinkish matrix found previously, along with light brown concentrations of organic sediments. Both were not continuous across the unit. Bob is now thinking this might represent some sort of lacustrine clay deposit, but I'm less certain. We backfilled the unit and departed c. 11:30 am Alaska time. We then travelled to the Dolly Duke land parcel and traversed the

property from the road down to the Chisana River and back to the road, placing several test pits along the way – all were negative. We ended back at the road c. 5 pm where we split up. I travelled to Tok to meet with the Youngs and have dinner, returning to Beaver Creek about 10 pm Yukon time.

Thursday August 20

Began packing up the office in the morning. In the afternoon I met with Beat and Jill Ledeberger regarding possible public interpretative program next year presented at the hotel which they have purchased from Westmark. Jane and Tuffy joined us and we discussed the possibility of the community partnering with the College to develop a community history booklet over the winter that would include a place names map and historic places along the highway from the Donjek River to Northway. Jane will follow up with her college contacts and I will look into a possible Community Development Fund application to assist in the costs of this initiative. I also discussed the initial results of the field season with Tuffy of WRFN.

Friday August 21

Spent the day completing packing up the camp and truck, storing a large amount of gear in the lab tent for transport back to Whitehorse in September when we return to do the coring of the site with the large mineral resources truck. In the evening the Johnny's and Peters came out to camp for a potluck dinner in sunshine, a nice ending to this stage of fieldwork.

Saturday August 22

Awoke to light rain and completed cleaning up camp and packing the truck, leaving the camp a little after noon and arriving back in Whitehorse about 7 pm. This will complete my summary of 2015 fieldwork. I'll add some additional notes related to the geological coring later in September.