Report of Analysis, 2010-01 Dave Tennessen December 2010

Introduction

In September of 2010, the author received 63 samples of wood charcoal collected by the National Park Service from nine archeological sites in Alaska. The samples were analyzed for the purpose of assigning the specimens to taxonomic categories prior to selecting samples for radiocarbon dating. The following report describes the methods of analysis and the results obtained.

Methods

As defined here, wood and charcoal analysis consists primarily of the visual examination of wood or charcoal samples for the purpose of assigning those samples to a taxonomic category. Analysis also involves preparing wood and charcoal specimens for examination, and the selection of a sub-sample from samples consisting of multiple pieces. Wood and charcoal analysis can be conducted for a variety of purposes, including understanding patterns of human wood use and assisting in the selection of radiocarbon samples.

Analysis began with an initial examination of the sample and the assignment of a sequential number (2010-01 through 2010-63) to each individual sample. Samples were not examined in any specific order. The initial examination involved general observations regarding the extent of decay, the degree of fragmentation and, if multiple pieces are present, the likelihood that the individual fragments had originally been a single piece. Fresh fractures, consistent alignment of cellular tissue, similar degrees of decay and distortion and refitting fragments indicate that a sample consisting of multiple fragments may have originally been a single piece. Because the examination of wood and charcoal is time consuming, it is extremely useful for field personnel to note if samples originally consisted of single or multiple pieces.

Samples originally consisting of more than one piece were separated into size grades prior to examination. The size grades utilized were: x>25.0 mm, 25.0 mm – 6.3 mm, 6.3 mm to 2.0 mm, 2.0 mm to 1.0 mm and, x<1.0 mm. Size-grading is useful,

because different wood taxa may have different potentials for fragmentation (Rossen and Olson 1985). Examining specimens from a range of size-grades thereby increases the likelihood of identifying the full range of taxa present in the sample. However, handling small pieces of wood or charcoal during examination often results in further fragmentation, which may make subsequent handling more difficult.

Because the samples were all relatively small, i.e. easily contained in a standard sized petrie dish, they were size-graded by hand using a microscope with a 1 mm grid reticle. From the size-graded sample, a sufficient number of pieces were examined to provide enough material for an AMS or radiometric date. Sufficient sample sizes for radiocarbon dates are based on conservative recommendations provided by Beta Analytic Inc. (2010). For wood samples, the recommended sizes are 20 to 50 mg for AMS dates or 50 g for radiometric dates. For charcoal samples, the recommendations are 10 to 50 mg for AMS dates or 20 g for radiometric dates. Because the examination of small pieces tends to produce very small, hard-to-handle fragments, pieces smaller than 2.00 mm were usually not examined.

Charcoal specimens were prepared for examination by intentionally fracturing them along the transverse, radial and tangential planes to produce clean surfaces for observation. This was accomplished using a razor blade, or the fingers while wearing latex or nitrile gloves.

Charcoal specimens were examined using a Leica MZ 12 dissecting microscope at magnifications between 8 and 160 times. A spreadsheet program was used to record observations about each specimen, including structural and cellular features, general condition, degree of fragmentation, weight, etc. The assignment of individual specimens to taxonomic categories was accomplished through the observation of diagnostic structural and cellular features in the transverse, radial and tangential planes. Observed features were compared with materials in the author's comparative collection or with published descriptions and photographs (e.g. Hoadley 1991; Panshin and De Zeeuw 1970).

Specimens were assigned to one of four levels of identification on the basis of these observations. These levels are: 1) unidentified wood or wood charcoal – the sample consists of wood or wood charcoal, but cannot be assigned to a more specific category; 2)

unidentified hardwood or softwood – the sample consists of wood or wood charcoal from either broadleaf deciduous or needle-leaf coniferous trees but cannot be assigned to a specific taxonomic category; 3) multiple possible genera, e.g. *Salix/Populus* or *Alnus/Betula* – the specimen possesses characteristics consistent with more than one genus; 4) genus, e.g. *Salix, Alnus* – sample possesses characteristics consistent with a single genus.

Following examination, specimens belonging to the same categories and sizegrade are combined and packed in polypropylene centrifuge vials. Because the labeling surface on each vial was limited, vials were labeled with a code consisting of a number between 1 and 5 representing the size grade (Table 1) and a letter representing the category to which the sample was assigned (Table 2), e.g. 2h is Alnus. Specimens that were size-graded, but not examined were labeled with the size grade number alone, e.g. 2 denotes unexamined specimens in the 25.0-6.3 mm size grade. Any other labeling on vials is noted in the comments section for that individual sample.

Number	Size grade
1	x>25.0 mm
2	25.0-6.3 mm
3	6.3-2.0 mm
4	2.0-1.0 mm
5	X<1.0 mm
(7.1.1.1)	

(Table 1)

Code	Category
Xa	Unidentified wood
Xb	Unidentified hardwood
Xc	Unidentified softwood
Xd	Salix/Populus
Xe	Alnus/Betula
Xf	Salix
Xg	Populus
Xh	Alnus
Xi	Betula
Xj	Picea
Unid	Unidentified material
Other	Various
(Table 2)	

Individual vials are *not* labeled with provenience information and therefore must not be separated from their respective bag and bag tag.

Results

The results of this analysis are presented below in two formats. In the Results 1 section (pages 4 through 38) the tables provide detailed information about individual samples. For each sample, the provenience, weight by size grade and the identifications of the specimens selected for examination, along with any relevant comments are listed. The order of this information reflects the order in which individual samples were examined.

In the Results 2 section (pages 39 through 43), the results are organized by site, excavation unit and depth. The tables on these pages provide the combined weight of specimens in each taxomonic category for each level. In addition, the proportion by weight of each taxonomic category, as a proportion of the total weight of the examined specimens, is provided.

Results 1

Sample: 2010-01

Provenience: SUT 022, TU 01, 73, SW quad, charcoal 6 cm below bottom of orange tephra

Sample weight by size grade

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
n/a	n/a	n/a	n/a	n/a	n/a	0.015

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
n/a	n/a	Unid hardwood	0.015	Consistent with Salix/Populus

Comments 2010-01: Sample consisted of single piece – not size graded.

Provenience: SUT 022, TU 01, 55 cm, NE corner, charcoal immediately above tephra layer, almost within it

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.000	0.123	0.251	0.028	nws*	0.174	0.576

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.021	Consistent with Salix/Populus
		hardwood		
2d	25.0-6.3	Salix/Populus	0.061	Sediment and charcoal in
				sample
3b	6.3-2.0	Unidentified	0.015	None
		hardwood		
3d	6.3-2.0	Salix/Populus	0.02	None

Comments 2010-02: Sample consisted of sediment mixed with charcoal fragments. Second, third and fifth size-grades present. Five pieces each from 2^{nd} (25.0-6.3) and 3rd (6.3-2.0) fractions examined. Charcoal less than 1.00 mm and sediment packed together as "Other."

Provenience: SUT 022, TU01, 89 cm, between NE and SE se corners, 28 cm below orange tephra

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.036	0.003	0.00	0.018	0.00	0.056

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.036	Consistent with Salix/Populus
		hardwood		
3a	6.3-2.0	Unidentified wood	0.001	All pieces did not register on
				scale
3b	6.3-2.0	Unidentified	0.002	All pieces did not register on
		hardwood		scale

Comments 2010-03: Single piece in 1^{st} (25.0-6.3) fraction and nine pieces in 2^{nd} (6.3-2.0) fraction examined.

Sample 2010-04

Provenience: SUT 022, TU 01, 90 cm between NW and NE corner, charcoal found right next 80-90 cm, artifacts 13 cm below orange tephra found in large hearth feature

Sample weight in grams by size grade						
x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.052	0.011	dnr*	0.036	0.00	0.099

Sample weight in grams by size grade

*dnr = weight did not register on scale

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.052	None
		hardwood		
3a	6.3-2.0	Unidentified wood	0.002	All pieces did not register on
				scale
3b	6.3-2.0	Unidentified	0.006	All pieces did not register on
		hardwood		scale

Comments 2010-04: Sample consists of charcoal and adhering sediment. Examined single piece in 2^{nd} fraction and seven pieces in 3^{rd} fraction.

Provenience: SUT 022, TU 01, 85 cm, NE corner, charcoal 9 cm below orange tephra rigt next to lithic artifacts.

x>25.0 (1)	25.0-6.3 (2)	6.3-2.0 (3)	2.0-1.0 (4)	x<1.0 (5)	Other	Total
0.00	0.023	0.005	dnr*	0.030	0.00	0.058

Sample weight in grams by size grade

*dnr = weight did not register

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.023	None
		hardwood		
3b	6.3-2.0	Unidentified	0.014	Consistent in condition and
		hardwood		features with samples in 2 nd
				size grade

Comments 2010-05: All pieces (n 2) in 2^{nd} size grade examined, five pieces in 3^{rd} size grade examined.

Sample 2010-06

Provenience: SUT 022, TU 01, 80 cm, SW corner, charcoal 17 cm below orange tephra

Sample weight in grams by size grade

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.035	0.00	0.00	0.00	0.00	0.035

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2e	25.0-6.3	Alnus/Betula	0.035	Single large piece

Comments 2010-06: None

Provenience: RO61110A, TU 02, 65 cmbs, W quad, charcoal

x>25.0 (1)	25.0-6.3 (2)	6.3-2.0 (3)	2.0-1.0 (4)	x<1.0 (5)	Other	Total
0.00	0.00	0.043	nws*	nws	0.394	0.437

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Description
3b	6.3-2.0	Unidentified	0.018	Pieces show significant
		hardwood		degradation

Comments 2010-07: Sediment and charcoal less than 2.00 mm not sorted packed as other. Sample also contained a possibly modern rootlet (A), a piece of pumice (B) and a lithic flake (C).

Sample 2010-08

Provenience: RO61110A, TU 02, 79 cmbs, W corner, charcoal

Sample weight in grams by size grade

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.00	0.00	0.00	0.00	0.755	0.755

Comments 2010-08: Sample consists of sediment, charcoal stained sediment and a piece of gravel. No identifiable charcoal.

Provenience: BL 01, TU 04, 20 cmbs, near north wall

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.057	0.002	nws*	nws	0.029	0.088

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.057	Single large piece
		hardwood		

Comments 2010-09: Only the single large piece making up the 2^{nd} size grade was examined. Two pieces in the 3^{rd} size grade not examined.

Sample 2010-10

Provenience: BL 01, TU 04, 24 cmbs, near S wall, right next to a flake

Sample weight in grams by size grade

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.80	0.00	nws*	nws	0.031	0.831

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.080	Consistent with Salix/Populus
		hardwood		

Comments 2010-10: Examined specimen consisted of a single large piece and two smaller fragments deemed to have broken off the larger.

Provenience: BL 01, TU 03, 52 cmbs, NW quad, charcoal

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.050	0.00	nws*	nws	0.066	0.116

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2d	25.0-6.3	Salix/Populus	0.050	Specimen very friable, fragmented considerably during examination

Comments 2010-11: Single large piece in 25.0-6.3 fraction. Sediment packed with charcoal contains rootlets.

Sample 2010-12

Provenience: BL 01, TU 03, 56 cmbs, charcoal, north wall

Sample weight in grams by size grade

	0 0	7 0					
x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total	
(1)	(2)	(3)	(4)	(5)			
0.00	0.00	0.012	0.001	nws*	0.049	0.062	

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
3b	6.3-2.0	Unidentified	0.004 Visible features consist	
		hardwood		with Salix/Populus
3d	6.3-2.0	Salix/Populus	0.006	None

Comments 2010-12: Five pieces in 3rd size grade, all examined. Two pieces in 4th size grade, neither examined. Other category includes sediment and charcoal less than 1.00 mm.

Provenience: BL 03, TU 02, 35 cmbs, charcoal, SE quad

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.037	0.00	nws*	nws	0.062	0.099

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.037 Observed features con	
		hardwood		with Salix/Populus

Comments 2010-13: Single large piece in 2^{nd} size grade. Sediment and charcoal smaller than 2.00 mm packed as other.

Sample 2010-14

Provenience: BL 03, TU 02, 35 cmbs, charcoal from profile, date for TU 02

Sample weight in grams by size grade

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.051	0.021	nws*	nws	0.081	0.153

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.051	None
		hardwood		
3a	6.3-2.0	Unidentified wood	0.007	Observed features suggest
				hardwood
3b	6.3-2.0	Unidentified	0.016	None
		hardwood		

Comments 2010-14: Two pieces in 2nd size fraction, 4 pieces in 3rd size fraction.

Provenience:BL 03, TU 02, 36 cmbs, charcoal, SW quad

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.00	0.014	nws*	nws	0.024	0.038

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
3b	6.3-2.0	Unidentified	0.014	None
		hardwood		

Comments 2010-15: Two pieces in 3rd size grade; sediment and charcoal smaller than 2.00 packed as other.

Sample 2010-16

Provenience:BL 03, TU 05, 60 cmbs, north wall, charcoal from profile associated with second band

Sample weight in grams by size grade

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.00	0.017	nws*	nws	0.095	0.114

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
3a	6.3-2.0	Unidentified wood	0.017	None

Comments 2010-16: Six pieces in 3rd fraction; much sediment adhering to charcoal; sediment and charcoal smaller than 2.00 packed as other

Provenience: BL 03, TU 03 22 cmbs, charcoal sample SE quad

bampie we	igne in granib	ej bize grade				
x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.591	0.056	nws*	nws	0.402	1.049

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.477	None
		hardwood		
2d	25.0-6.3	Salix/Populus	0.056	None
2e	25.0-6.3	Alnus/Betula	0.058	None
3b	6.3-2.0	Unidentified	0.010	None
		hardwood		
3d	6.3-2.0	Salix/Populus	0.046	None

Comments 2010-17: Four pieces in 2^{nd} size grade, two pieces in 3^{rd} size grade; sediment and charcoal smaller than 2.00 mm packed as other.

Sample 2010-18

Provenience: BL 03, TU 04, 60 cmbs, charcoal, SW quad

Sample weight in grams by size grade

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.120	0.00	nws*	nws	0.245	0.365

*nws = not weighed separately

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.120	Observed features consistent
		hardwood		with Salix/Populus

Comments 2010-18: Sixteen pieces of charcoal deemed to be single piece on the basis of similarities in form and apparent freshness of fractures, estimated to be in the 25.0-6.3 fraction; sediment and charcoal less than 2.00 mm packed as other

Provenience: BL 03, TU 05, 62 cmbs, SW wall, charcoal associated with lithic artifacts and lower gray band.

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.029	0.035	nws*	nws	0.024	0.088

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.029	None
		hardwood		
3a	6.3-2.0	Unidentified wood	0.012	None
3b	6.3-2.0	Unidentified	0.023	None
		hardwood		

Comments 2010-19: Single piece in 2^{nd} size grade, four pieces in 3^{rd} size grade. Similarities in form and degree of degradation suggest all specimens are from a single piece. Sediment and charcoal smaller than 2.00 mm packed as other.

Sample 2010-20

Provenience: BL 03, TU 05, 70 cmbs, charcoal, center this sample is directly out of the lower band in this unit

x>25.0 25.0-6.3 6.3-2.0 2.0-1.0 x<1.0 Other Total (1)(2)(3) (4) (5) 0.080 0.00 0.00 nws* 0.050 0.130 nws

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2d	25.0-6.3	Salix/Populus	0.080	None

Comments 2010-20: single piece in 2nd size grade; sediment and charcoal smaller than 2.00 packed as other.

Provenience: CHK 005, TU 01, 90 cm, NW, charcoal, within 5 cm of large biface, in charcoal band

Sample weight in grams by size grade

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.163	0.00	nws*	nws	0.042	0.205

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2h	25.0-6.3	Alnus	0.163	None

Comments 2010-21: Single piece in 2^{nd} size grade. Sediment and charcoal less than 2.00 packed as other.

Sample 2010-22

Provenience: CHK 005, TU 01, 54 cmbs, charcoal SW quad

Sample weight in grams by size grade

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.00	0.178	nws*	nws	0.744	0.922

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
3b	6.3-2.0	Unidentified	0.029	Observed features consistent
		hardwood		with Alnus/Betula
3h	6.3-2.0	Alnus	0.011	None

Comments 2010-22: Forty-six pieces in 3rd size grade; five examined. Sediment and charcoal less than 2.0 mm packed as Other. A single lithic flake (0.285 g) was found in sample. NOTE that numerical size-grade code on vials was initially incorrectly written as 2, instead of 3. This error was noted after the specimens had been placed in the vials. Rather than risk losing any of the examined material, the labeling on the vial was corrected by blacking out the incorrect number, and re-writing the number *after* the specimen category.

Provenience: CHK 005, TU 01, 58 cm, center, charcoal

(1) (2) (3) (4) (5)	x > 25.0	25.0-6.3	6.3-2.0	2.0 1.0	x<1.0	Other	Total
0.00 0.079 0.00 0.00 0.00 0.00 0.00			(3)	(4)	(\mathbf{J})	0.00	0.079

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2h	25.0-6.3	Alnus	0.079	None

Comments 2010-23: Sample consists of single piece in 2nd size grade.

Sample 2010-24

Provenience: CHK 005, TU 01, 52 cmbs, charcoal sample

Sample weight in grams by size grade

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.035	0.014	0.00	0.00	0.00	0.049

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2h	25.0-6.3	Alnus	0.035	None

Comments 2010-24: Sample consisted of two pieces, 1 each in 2^{nd} and 3^{rd} size grades. Because sample was deemed to be single piece, only the specimen in the 2^{nd} size grade was examined. White fibers visible on sample – possible fungal threads.

Provenience: CHK 005, TU 01, 58 cm, SE quad, charcoal

x>25.0 (1)	25.0-6.3 (2)	6.3-2.0 (3)	2.0-1.0 (4)	x<1.0 (5)	Other	Total
0.00	0.182	0.00	0.00	0.00	0.00	0.182

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.182	None
		hardwood		

Comments 2010-25: Sample consists of single large piece in 2nd size grade.

Sample 2010-26

Provenience: CHK 005, TU 01, SP#03, 140 cmbs, charcoal in excavated cultural deposit. Recovered from soil probe.

Sample weight in grams by size grade

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.00	0.014	nws*	nws	0.006	0.020

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
3h	6.3-2.0	Alnus	0.014	None

Comments 2010-26: Single piece in 3^{rd} size fraction. Sediment and charcoal less than 2.00 packed as other. White fibers – possible fungal threads – and rootlets present.

Provenience: CHK 005, TU 01, 63 cm, SE corner, charcoal

x>25.0 (1)	25.0-6.3 (2)	6.3-2.0 (3)	2.0-1.0 (4)	x<1.0 (5)	Other	Total
0.00	0.00	0.050	nws*	nws	0.433	0.483

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
3b	6.3-2.0	Unidentified	0.039	None
		hardwood		

Comments 2010-27: Nine pieces in 3^{rd} size fraction; five examined. Sediment and charcoal less than 2.00 mm packed as other.

Sample 2010-28

Provenience: CHK 005, TU 01, 61 cm, charcoal, NE

Sample weight in grams by size grade

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.271	0.00	nws*	nws	0.012	0.283

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2h	25.0-6.3	Alnus	0.271	None

Comments 2010-28: Single piece in 2^{nd} size grade. Sediment and charcoal less than 2.00 mm packed as other.

Provenience: CHK 005, TU 01, 58 cm NE/E, charcoal

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.00	0.041	nws*	nws	0.303	0.344

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
3b	6.3-2.0	Unidentified	0.041	None
		hardwood		

Comments 2010-29: Four pieces in 3rd size grade; sediment and charcoal less than 2.00 mm packed as other.

Sample 2010-30

Provenience: CHK 005, TU 01, 58 cm, NW charcoal

Sample weight in grams by size grade

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.152	0.006	nws*	nws	0.283	0.441

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2h	25.0-6.3	Alnus	0.152	None

Comments 2010-30: Two pieces in 2^{nd} size grade; one piece in 3^{rd} size grade. Based on fresh appearance of fractures, all three pieces assumed to be from same original piece. Sediment and charcoal less than 2.00 mm packed as other.

Provenience: CHK 005, TU 01, 80, SW quad, charcoal

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.092	0.00	nws*	nws*	0.071	0.163

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.092	None
		hardwood		

Comments 2010-31: Single piece in 2^{nd} size grade. Sediment and charcoal less than 2.00 mm packed as other.

Sample 2010-32

Provenience: CHK 005, TU 01, 97 cmbs, charcoal in dense charcoal band

Sample weight in grams by size grade

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.120	0.00	nws*	nws	0.021	0.141

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2j	25.0-6.3	Picea	0.120	None

Comments 2010-32: Single piece in 2^{nd} size grade. Sediment and charcoal less than 2.00 mm packed as other.

Provenience: CHK 005, TU 01, 80 cmbs, NW quad, charcoal

x > 25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
0.00	0.385	(3) nws*	(4) nws	(5) nws	0.465	0.850

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.385	None
		hardwood		

Comments 2010-33: Five pieces in 2^{nd} size grade, all examined. All five assumed to be from single original piece based on similarities in structure and degradation. Sediment and charcoal less than 6.3 mm packed as other.

Sample 2010-34

Provenience: CHK 005, TU 01, 90 cm, S wall, SW and SE quad, charcoal located near artifacts

Sample weight in grams by size grade

x>25.0 (1)	25.0-6.3 (2)	6.3-2.0 (3)	2.0-1.0 (4)	x<1.0 (5)	Other	Total
0.00	4.057	0.00	0.00	0.00	0.00	4.057

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2h	25.0-6.3	Alnus	4.057	None

Comments 2010-34: Sample consisted of two foil packets, each of which appeared to be a single piece after examination at 8x. Both examined, but similarities in friability and degradation suggests both are from a single original piece. Contents of two original foil packets packed separately in different centrifuge vials.

Provenience: CHK 005, TU 01, 75 cmbs, NE quad, charcoal

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	UNID	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.00	0.00	0.00	0.00	0.192	0.192

Sample weight in grams by size grade

*nws = not weighed separately

Comments 2010-35: Sample consists of carbonized material and carbon-stained sediment. No recognizable tissue was observed, may not be wood charcoal.

Sample 2010-36

Provenience: CHK 005, TU 01, 75, SW quad, charcoal

Sample weight in grams by size grade

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.339	0.002	nws*	nws	0.499	0.840

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.339	None
		hardwood		
3b	6.3-2.0	Unidentified	0.002	None
		hardwood		

Comments 2010-36: Sample consists of numerous pieces with little indication that they are originally from the same piece. Five pieces in 2^{nd} size grade, two pieces in 3^{rd} size grade. Sediment and charcoal less than 2.00 mm packed as other. Rootlets observed.

Provenience: CHK 005, TU 01, 78 cmbs, between NW and SW quad, charcoal

Bumple we	igne in grains	ey size grade			-	
x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.645	0.284	nws*	nws	0.540	1.469

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.453	Observed features consistent
		hardwood		with Alnus

Comments 2010-37: Seven pieces in 2^{nd} size grade, 5 examined. Thirty-two pieces in 3^{rd} size grade, none examined. Sediment, charcoal less than 2.00 mm and two unexamined pieces in 2^{nd} size grade packed as other. Sample is very wet, which probably accounts in part for its weight.

Sample 2010-38

Provenience: CHK 014, TU 01, 60 cm SE corner, charcoal

Sample weight in grams by size grade

x>25.0 (1)	25.0-6.3 (2)	6.3-2.0 (3)	2.0-1.0 (4)	x<1.0 (5)	Other	Total
0.00	0.355	0.00	nws*	nws	0.014	0.369

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.355	None
		hardwood		

Comments 2010-38: Single piece in 2^{nd} size grade. Sediment and charcoal smaller than 2.00 mm packed as other.

Provenience: CHK 014, TU 01, 58 cmbs, charcoal

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	1.145	0.00	nws*	nws	1.168	2.313

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.941	This category packed in two
		hardwood		vials
2h	25.0-6.3	Alnus	0.129	None

Comments 2010-39: Six pieces in 2^{nd} size grade, Sediment and charcoal smaller than 2.00 mm packed as other. Sample may have originally been single piece. Whitish fungal threads and rootlets present.

Sample 2010-40

Provenience: CHK 014, TU 02, 62 cm NE quad, charcoal

Sample weight in grams by size grade

	-B-10 - 11 B- 01 - 11 - 15	ej 2120 Braat				
x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.189	0.032	nws*	nws	0.311	0.532

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.008	None
		hardwood		
2h	25.0-6.3	Alnus	0.181	None
3a	6.3-2.0	Unidentified wood	0.004	Very degraded
3b	6.3-2.0	Unidentified	0.010	None
		hardwood		

Comments 2010-40: Two pieces in 2^{nd} size grade, both examined. Seven pieces in 3^{rd} size grade, five examined. Sediment and charcoal less than 2.00 mm packed as other.

Provenience: BL 02, TU 03, 25 cmbs, NE quad, charcoal from floor unit

Sumpre we	gine in granns	ey size grade				
x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.00	0.106	nws*	nws	0.048	0.154

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
3b	6.3-2.0	Unidentified	0.106	None
		hardwood		

Comments 2010-41: Three pieces in 3rd size grade. Sediment and charcoal less than 2.00 mm packed as other. Sample is very wet and degraded, rootlets present.

Sample 2010-42

Provenience: BL 02, TU 03, 50 cmbs, NW corner, 1 large piece of charcoal in cultural layer below black tephra by ~19 cm

Sample weight in grams by size grade

x>25.0 (1)	25.0-6.3 (2)	6.3-2.0 (3)	2.0-1.0 (4)	x<1.0 (5)	Other	Total
n/a	n/a	n/a	n/a	n/a	n/a	0.594

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
n/a	n/a	Alnus	0.594	Total sample

Comments 2010-42: Sample was noted to consist of a single piece – not size graded. Only a single piece examined.

Provenience: BL 02, TU 03, 52 cmbs, NE quad, charcoal in mottled black surface with black chared bands beneath the black tephra by \sim 16 cm

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.00	0.044	ns*	nws	0.005	0.049

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
3b	6.3-2.0	Unidentified	0.044	Large simple inter-vessel pits
		hardwood		suggest Salix/Populus

Comments 2010-43: Two pieces in 3rd size grade, both examined. Sediment and charcoal less than 2.00 packed as other.

Sample 2010-44

Provenience: BL 02, TU 03, 48 cmbs, SW quad, charcoal from unit floor in mottled deposit beneath upper cultural layer, below black tephra

Sample weight in grams by size grade

x>25.0 (1)	25.0-6.3 (2)	6.3-2.0 (3)	2.0-1.0 (4)	x<1.0 (5)	Other	Total
0.00	0.218	0.00	0.00	0.00	0.00	0.218

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.218	None
		hardwood		

Comments 2010-44: Single large piece in 2nd size grade. Sample did not split easily, possibly decayed rather than charred. Undifferentiated tissue on outside surface of sample may be bark.

Provenience: BLVD 01, TU 02, 25 cm, west corner charcoal, found with fire cracked rock

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.128	0.038	nws*	nws	0.084	0.250

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b-1	25.0-6.3	Unidentified	0.106	Visible features NOT
		hardwood		consistent with Salix/Populus
2b-2	25.0-6.3	Unidentified	0.022	Visible features consistent
		hardwood		with Salix/Populus
3a	6.3-2.0	Unidentified wood	0.006	None
3b	6.3-2.0	Unidentified	0.032	None
		hardwood		

Comments 2010-45: Sample consists of aggregated charcoal and sediment. Rootlets and whitish fibers – possible fungal threads present. Three pieces in 2^{nd} size grade, five pieces in 3^{rd} size grade – all examined. Sediment and charcoal less than 2.00 mm packed as other. Angular pieces of white material present in sample – possibly bone or tooth. Two different groups of unidentified hardwood were recognized.

Provenience: BLVD 01, TU 02, 28 cm, north wall charcoal sample wedged in with fire cracked rocks

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.192	0.006	nws*	nws	0.147	0.345

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2a	25.0-6.3	Unidentified wood	0.016	None
2h	25.0-6.3	Alnus	0.176	None
3a	6.3-2.0	Unidentified wood	0.006	None

Comments 2010-46: Two pieces each in 2^{nd} and 3^{rd} size grades – all examined. Sediment, charcoal less than 2.00 mm packed as other. White material, possibly bone tooth or shell similar to that seen in 2010-45 also present. A piece of this material was removed and packed as UNID.

Sample 2010-47

Provenience: BLVD 01, TU 02, 24 cm, west quad, charcoal

Sample weight in grams by size grade

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.282	0.016	nws*	nws	0.236	0.534

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.282	None
		hardwood		
3a	6.3-2.0	Unidentified	0.016	None
		hardwood		

Comments 2010-47: Two pieces in 2nd size grade, three pieces in 3rd size grade. Rootlets present in sample. Sediment and charcoal less than 2.00 mm packed as other. Unidentified material, possibly bark packed as UNID.

Provenience: BLVD 01, TU 02, 30 cm, NE charcoal

x>25.0 (1)	25.0-6.3 (2)	6.3-2.0 (3)	2.0-1.0 (4)	x<1.0 (5)	Other	Total
0.00	1.986	nws*	nws	nws	0.940	2.926

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	1.707	Visible features consistent
		hardwood		with Alnus
2b-2	25.0-6.3	Unidentified	0.279	Visible features NOT
		hardwood		consistent with Alnus

Comments 2010-48: Seven pieces in 2^{nd} size grade, five examined. Charcoal less than 6.3 mm packed as other. Sample is large, wet and contains numerous rootlets. Specimens categorized as 2b packed in 5 vials. Material in other category packed in 2 vials.

Sample 2010-49

Provenience: EXP 005, charcoal samples

Sample weight in grams by size grade

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.162	0.041	nws*	nws	0.319	0.522

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2a	25.0-6.3	Unidentified wood	0.028	None
2b	25.0-6.3	Unidentified	0.134	Visible features consistent
		hardwood		with Alnus
3a	6.3-2.0	Unidentified wood	0.007	None
3b	6.3-2.0	Unidentified	0.034	None
		hardwood		

Comments 2010-49: Sample consists of numerous pieces. Bag description does not suggest that all belonged to single original piece. Five pieces each from 2^{nd} and 3^{rd} size grades examined.

Provenience: BL 01, TU 01, 22 cmbs, W wall, charcoal, good to date from profile

Dumple weig	Sint in Grunns	by bille grade				
x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.092	0.025	0.00	nws*	0.033	0.150

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.092	Visible features consistent
		hardwood		with Alnus
3b	6.3-2.0	Unidentified	0.014	Visible features consistent
		hardwood		with Alnus
3c	6.3-2.0	Unidentified	0.011	None
		softwood		

Comments 2010-50: One piece in 2^{nd} size grade, two pieces in 3^{rd} – all examined. Sediment and charcoal less than 1.00 mm packed as other.

Sample 2010-51

Provenience: BL 01, TU 01, NE quad, 12 cmbs, charcoal

Sample weight in grams by size grade

x>25.0 (1)	25.0-6.3 (2)	6.3-2.0 (3)	2.0-1.0 (4)	x<1.0 (5)	Other	Total
0.00	0.809	0.079	nws*	nws	0.286	1.174

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2c	25.0-6.3	Unidentified	0.809	None
		softwood		
3b	6.3-2.0	Unidentified	0.039	None
		hardwood		
3c	6.3-2.0	Unidentified	0.040	None
		softwood		

Comments 2010-51: Four pieces in 2^{nd} size grade, three pieces in 3^{rd} size grade – all examined. Rootlets present in sample.

Provenience: BL 01, TU 01, 25 cmbs, House floor charcoal sample collected from the north wall profile. This sample would date the occupation of the house.

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	1.383	0.217	nws*	nws	22.343	24.03

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.250	None
		hardwood		
2h	25.0-6.3	Alnus	1.133	None
3a	6.3-2.0	Unidentified wood	0.038	None
3b	6.3-2.0	Unidentified	0.179	None
		hardwood		

Comments 2010-52: Very large sample consisting mostly of sediment and rootlets with embedded charcoal. Very tiny, live grub or larva observed as well as possible fungal threads. Five pieces examined from both the 2^{nd} and 3^{rd} size grade. Unexamined pieces in 2^{nd} and 3^{rd} size grades as well as remaining material not separated from sediment (and repackaged new foil packet) all weighed together as other.

Provenience: BL 01, TU 01, 19 cmbs, charcoal

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	2.629	0.041	nws*	nws	0.122	2.792

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	2.629	Visible features consistent
		hardwood		with Alnus/Betula

Comments 2010-53: Three pieces each in 2^{nd} and 3^{rd} fraction. All pieces in 2^{nd} fraction examined. No piece from 3^{rd} fraction examined. Sediment and charcoal less than 2.00 packed as other.

Sample 2010-54

Provenience: BL 02, TU 01, 19 cm, NE corner, charcoal

Sample weight in grams by size grade

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total	
(1)	(2)				Other	Total	
(1)	(2)	(3)	(4)	(5)			
0.00	0.069	0.00	0.00	0.00	0.00	0.069	

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.069	None
		hardwood		

Comments 2010-54: Sample consists of single piece in 2nd size grade.

Provenience: BL 02, TU 01, 53 cmbs, charcoal SE quad

x>25.0 (1)	25.0-6.3 (2)	6.3-2.0 (3)	2.0-1.0 (4)	x<1.0 (5)	Other	Total
0.00	0.00	0.00	0.00	0.00	1.162	1.162

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

CodeSize gradeIdentificationWeight	ht (g) Comments
Unidn/aUnidentified1.162	Sample is too degraded for identification

Comments 2010-55: Sample consists of very badly degraded charcoal mixed with sediment. Too degraded for identification.

Sample 2010-56

Provenience: BL 02, TU 01, 26 cm, SW corner, charcoal

Sample weight in grams by size grade

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.076	0.00	0.00	0,00	0.00	0.076

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	6.3-2.0	Unidentified	0.076	Visible features consistent
		hardwood		with Alnus

Comments 2010-56: Sample consists of two pieces in 2nd size grade.

Provenience: BL 02, TU 01, 30 cm, NW corner, charcoal

x>25.0	25.0-6.3	6.3-2.0	2.0 1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.245	0.00	0.00	0.00	0.00	0.245

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.245	Consistent with Salix
		hardwood		

Comments 2010-57: Sample consists of single piece in 2nd size grade, with small amount of adhering sediment.

Sample 2010-58

Provenience: BL 02, TU 01, 34 cm, SW wall in situ charcoal, found at bottom of charcoal layer

Sample weight in grams by size grade

	0 0	, 0					
x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total	
(1)	(2)	(3)	(4)	(5)			
0.00	0.699	nws*	nws	nws	0.239	0.938	

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified hardwood	0.280	Visible features and condition consistent with specimen classified as @h
2h	25.0-6.3	Alnus	0.419	None

Comments 2010-58: Sample consists of four pieces in 2nd size grade with rootlets and adhering sediment. Sediment and charcoal less than 2.00 mm packed as other.

Provenience: BL 02, TU 01, 46 cm, east wall burned wood in situ

x>25.0 (1)	25.0-6.3 (2)	6.3-2.0 (3)	2.0-1.0 (4)	x<1.0 (5)	Other	Total
0.00	2.137	0.00	0.00	0.00	0.00	2.137

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2h	25.0-6.3	Alnus	2.137	None

Comments 2010-59: Sample consists of single piece in 2nd size grade with small amount of adhering sediment.

Sample 2010-60

Provenience: BL 02, TU 01, 30 cm, west wall profile, charcoal found in W wall within charcoal layer

Sample weight in grams by size grade

x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	1.571	0.00	nws*	nws	0.262	1.833

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2h	25.0-6.3	Alnus	1.571	None

Comments 2010-60: Sample consists of single large piece in 2^{nd} size grade, with a number of small pieces deemed to be detached from above-mentioned piece in 2^{nd} size grade on basis of similarity in form and degradation. Sediment and charcoal less than 2.00 mm packed as other.

Provenience: CHK 005, TU 02, 82 cm, NW quad, charcoal

x>25.0	25.0-6.3	6.3-2.0	2.0 1.0	x<1.0	Other	Total
0.000	0.840	0.263*	(4) nws	(5) nws	2.694	3.85

Sample weight in grams by size grade

*Weight listed represents 20 pieces in 3^{rd} size grade separated from sediment; nws = not weighed separately.

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2h	25.0-6.3	Alnus	0.840	None
3b	6.3-2.0	Unidentified	0.053	Visible features consistent
		hardwood		with Alnus
3h	6.3-2.0	Alnus	0.085	None

Comments 2010-61: Sample consists of charcoal embedded in sediment. Many pieces were in alignment, and several deemed to be from same original piece. Three pieces in 2^{nd} size grade – all examined. Twenty pieces in 3^{rd} size grade were separated from sediment – five examined. Remaining 15 pieces packed separately. Sediment and charcoal including pieces less than 6.3 mm but not separated from sediment packed as other.

Provenience: CHK 005, TU 02, 75 cm, NW corner, charcoal

Building to the	Sine in granis	J DIEC Grade				
x>25.0	25.0-6.3	6.3-2.0	2.0-1.0	x<1.0	Other	Total
(1)	(2)	(3)	(4)	(5)		
0.00	0.519	0.281	nws*	nws	4.175	5.515

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.247	Visible features consistent
		hardwood		with Alnus
2c	25.0-6.3	Unidentified	0.09	No resin ducts observed
		softwood		
2h	25.0-6.3	Alnus	0.182	None
3a	6.3-2.0	Unidentified wood	0.082	None
3b	6.3-2.0	Unidentified	0.014	None
		hardwood		

Comments 2010-62: Sample consists of charcoal embedded in sediment. Five pieces in 2^{nd} size grade – all examined. Seventeen pieces in 3^{rd} size grade – five examined. Remaining 12 pieces packed separately. Piece of pumice or decayed sandstone (0.382) packed as A.

Provenience: CHK 005, TU 02, 64 cmbs, NE quad of test, charcoal

x > 25.0	25.0-6.3	6.3-2.0 (3)	2.0-1.0 (4)	x<1.0	Other	Total
0.00	0.101	0.069	nws*	nws	7.530	7.70

Sample weight in grams by size grade

*nws = not weighed separately

Identifications of specimens examined

Code	Size grade	Identification	Weight (g)	Comments
2b	25.0-6.3	Unidentified	0.101	Visible features consistent
		hardwood		with Alnus
3a	6.3-2.0	Unidentified wood	0.006	None
3b	6.3-2.0	Unidentified	0.052	Visible features consistent
		hardwood		with Alnus

Comments 2010-63: Sample is wet and consists of charcoal embedded in sediment. One piece in 2^{nd} size grade – examined. Seven pieces in 3^{rd} size grade – five examined. Sediment and unextracted charcoal – all of which appears to be less than 6.3 mm – packed as other.

Results 2

In this section, results are organized by site, test unit and depth. The tables on these pages provide the combined weight of specimens in each taxomonic category for each level. In addition, the proportion by weight of each taxonomic category, as a proportion of the total weight of the examined specimens, is provided. The information presented below may be useful in assessing spatial and temporal patterns in wood use. However, because the primary objective was the identification of specimens for radiocarbon dating, the number of examined specimens was generally small, and most of the examined specimens were drawn from two only size grades, 25.0-6.3 mm and 6.3-2.0 mm.

Sample	Depth	Total	Unid	Unid	Unid	Salix/	Alnus/	Alnus	Picea	Unid
ID	_	wt*	wood	HW	SW	Populus	Betula			
51	12	0.888	0.00	0.039	0.849	0.00	0.00	0.00	0.00	0.00
				(0.04)	(0.96)					
53	19	2.629	0.00	2.629	0.00	0.00	0.00	0.00	0.00	0.00
				(1.00)						
50	22	0.117	0.00	0.106	0.011	0.00	0.00	0.00	0.00	0.00
				(0.91)	(0.09)					
52	25	1.600	0.038	0.429	0.00	0.00	0.00	1.133	0.00	0.00
			(0.02)	(0.27)				(0.71)		

*Total weight of examined material, not the total weight for the sample.

BL	01,	TU	03
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Sample ID	Depth	Total wt*	Unid wood	Unid HW	Unid SW	Salix/ Populus	Alnus/ Betula	Alnus	Picea	Unid
11	52	0.050	0.00	0.00	0.00	0.050	0.00	0.00	0.00	0.00
						(1.00)				
12	56	0.010	0.00	0.004	0.00	0.006	0.00	0.00	0.00	0.00
				(0.40)		(0.60)				

*Total weight of examined material, not the total weight for the sample.

Sample	Depth	Total	Unid	Unid	Unid	Salix/	Alnus/	Alnus	Picea	Unid
ID	_	wt*	wood	HW	SW	Populus	Betula			
09	20	0.057	0.00	0.057	0.00	0.00	0.00	0.00	0.00	0.00
				(1.00)						
10	24	0.80	0.00	0.080	0.00	0.00	0.00	0.00	0.00	0.00
				(1.00)						

BL 02, TU 01

Sample	Depth	Total	Unid	Unid	Unid	Salix/	Alnus/	Alnus	Picea	Unid
ID	_	wt*	wood	HW	SW	Populus	Betula			
53, 54	19	2.698	0.00	2.698	0.00	0.00	0.00	0.00	0.00	0.00
				(1.00)						
56	26	0.076	0.00	0.076	0.00	0.00	0.00	0.00	0.00	0.00
				(1.00)						
57, 60	30	1.816	0.00	0.245	0.00	0.00	0.00	1.571	0.00	0.00
				(0.13)				(0.87)		
58	34	0.699	0.00	0.280	0.00	0.00	0.00	0.419	0.00	0.00
				(0.40)				(0.60)		
59	46	2.137	0.00	0.00	0.00	0.00	0.00	2.137	0.00	0.00
								(1.00)		
55	53	1.162	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.162
										(1.00)

BL 02, TU 03

Sample ID	Depth	Total wt*	Unid wood	Unid HW	Unid SW	Salix/ Populus	Alnus/ Betula	Alnus	Picea	Unid
41	25	0.106	0.00	0.106 (1.00)	0.00	0.00	0.00	0.00	0.00	0.00
44	48	0.218	0.00	0.218 (1.00)	0.00	0.00	0.00	0.00	0.00	0.00
42	50	0.594	0.00	0.00	0.00	0.00	0.00	0.594 (1.00)	0.00	0.00
43	52	0.044	0.00	0.044 (1.00)	0.00	0.00	0.00	0.00	0.00	0.00

*Total weight of examined material, not the total weight for the sample.

BL 03, TU 02

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Sample	Depth	Total	Unid	Unid	Unid	Salix/	Alnus/	Alnus	Picea	Unid
ID		wt*	wood	HW	SW	Populus	Betula			
13, 14	35	0.111	0.007	0.037	0.00	0.067	0.00	0.00	0.00	0.00
			(0.06)	(0.33)		(0.60)				
15	36	0.014	0.00	0.014	0.00	0.00	0.00	0.00	0.00	0.00

*Total weight of examined material, not the total weight for the sample.

BL 03, TU 03

Sample	Depth	Total	Unid	Unid	Unid	Salix/	Alnus/	Alnus	Picea	Unid
ID		wt*	wood	HW	SW	Populus	Betula			
17	22	0.647	0.00	0.487	0.00	0.102	0.058	0.00	0.00	0.00
				(0.75)		(0.16)	(0.09)			

BL 03, TU 04

Sample ID	Depth	Total wt*	Unid wood	Unid HW	Unid SW	Salix/ Populus	Alnus/ Betula	Alnus	Picea	Unid
18	60	0.120	0.00	0.120 (1.00)	0.00	0.00	0.00	0.00	0.00	0.00

BL 03, TU 05

Sample	Depth	Total	Unid	Unid	Unid	Salix/	Alnus/	Alnus	Picea	Unid
ID		wt*	wood	HW	SW	Populus	Betula			
16	60	0.017	0.017	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			(1.00)							
19	62	0.064	0.012	0.052	0.00	0.00	0.00	0.00	0.00	0.00
			(0.19)	(0.81)						
20	70	0.80	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.00
						(1.00)				

*Total weight of examined material, not the total weight for the sample.

BLVD 01, TU 02

	, 10 0									
Sample	Depth	Total	Unid	Unid	Unid	Salix/	Alnus/	Alnus	Picea	Unid
ID		wt*	wood	HW	SW	Populus	Betula			
47	24	0.298	0.016	0.282	0.00	0.00	0.00	0.00	0.00	0.00
			(0.05)	(0.95)						
45	25	0.166	0.006	0.160	0.00	0.00	0.00	0.00	0.00	0.00
			(0.04)	(0.96)						
46	28	0.198	0.022	0.00	0.00	0.00	0.00	0.176	0.00	0.00
			(0.11)					(0.89)		
48	30	1.986	0.00	1.986	0.00	0.00	0.00	0.00	0.00	0.00
				(1.00)						

CHK 005, TU 01

Sample ID	Depth	Total wt*	Unid wood	Unid HW	Unid SW	Salix/ Populus	Alnus/ Betula	Alnus	Picea	Unid
24	52	0.035	0.00	0.00	0.00	0.00	0.00	0.035 (1.00)	0.00	0.00
22	54	0.040	0.00	0.029 (0.73)	0.00	0.00	0.00	0.011 (0.28)	0.00	0.00
23, 25, 29, 30	58	0.454	0.00	0.223 (0.49)	0.00	0.00	0.00	0.231 (0.51)	0.00	0.00
28	61	0.271	0.00	0.00	0.00	0.00	0.00	0.271 (1.00)	0.00	0.00
27	63	0.039	0.00	0.039 (1.00)	0.00	0.00	0.00	0.00	0.00	0.00
35, 36	75	0.533	0.00	0.341 (0.64)	0.00	0.00	0.00	0.00	0.00	0.192 (0.36)
37	78	0.453	0.00	0.453 (1.00)	0.00	0.00	0.00	0.00	0.00	0.00
31, 33	80	0.477	0.00	0.477 (1.00)	0.00	0.00	0.00	0.00	0.00	0.00
21, 34	90	4.22	0.00	0.00	0.00	0.00	0.00	4.22 (1.00)	0.00	0.00
32	97	0.120	0.00	0.00	0.00	0.00	0.00	0.00	0.120 (0.120)	0.00
26	140	0.014	0.00	0.00	0.00	0.00	0.00	0.014 (1.00)	0.00	0.00

CHK 005, TU 02

	0,100									
Sample	Depth	Total	Unid	Unid	Unid	Salix/	Alnus/	Alnus	Picea	Unid
ID		wt*	wood	HW	SW	Populus	Betula			
63	64	0.159	0.006	0.153	0.00	0.00	0.00	0.00	0.00	0.00
			(0.04)	(0.96)						
62	75	0.615	0.082	0.258	0.090	0.00	0.00	0.182	0.00	0.00
			(0.13)	(0.42)	(0.15)			(0.30)		
61	82	0.978	0.00	0.053	0.00	0.00	0.00	0.925	0.00	0.00
				(0.05)				(0.95)		

*Total weight of examined material, not the total weight for the sample.

CHK 014, TU 01

Sample	Depth	Total	Unid	Unid	Unid	Salix/	Alnus/	Alnus	Picea	Unid
ID		wt*	wood	HW	SW	Populus	Betula			
39	58	1.07	0.00	0.941	0.00	0.00	0.00	0.129	0.00	0.00
				(0.88)				(0.12)		
38	60	0.355	0.00	0.355	0.00	0.00	0.00	0.00	0.00	0.00
				(1.00)						

CHK 014, TU 02

Sample ID	Depth	Total wt*	Unid wood	Unid HW	Unid SW	Salix/ Populus	Alnus/ Betula	Alnus	Picea	Unid
40	62	0.203	0.004 (0.02)	0.018 (0.09)	0.00	0.00	0.00	0.181 (0.89)	0.00	0.00

EXP 005

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Sample	Depth	Total	Unid	Unid	Unid	Salix/	Alnus/	Alnus	Picea	Unid
ID		wt*	wood	HW	SW	Populus	Betula			
49	n/a	0.203	0.035	0.168	0.00	0.00	0.00	0.00	0.00	0.00
			(0.17)	(0.83)						

*Total weight of examined material, not the total weight for the sample.

RO61110A, TU 02

Sample	Depth	Total	Unid	Unid	Unid	Salix/	Alnus/	Alnus	Picea	Unid
ID		wt*	wood	HW	SW	Populus	Betula			
07	65	0.018	0.00	0.018	0.00	0.00	0.00	0.00	0.00	0.00
				(1.00)						
08	79	0.755	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.755
										(1.00)

*Total weight of examined material, not the total weight for the sample.

SUT 022 TU 01

Sample	Depth	Total	Unid	Unid	Unid	Salix/	Alnus/	Alnus	Picea	Unid
ID		wt*	wood	HW	SW	Populus	Betula			
02	55	0.117	0.00	0.036	0.00	0.081	0.00	0.00	0.00	0.00
				(0.31)		(0.69)				
01	73	0.015	0.00	0.015	0.00	0.00	0.00	0.00	0.00	0.00
				(1.00)						
06	80	0.035	0.00	0.00	0.00	0.00	0.035	0.00	0.00	0.00
							(1.00)			
05	85	0.037	0.00	0.037	0.00	0.00	0.00	0.00	0.00	0.00
03	89	0.039	0.001	0.038	0.00	0.00	0.00	0.00	0.00	0.00
04	90	0.060	0.002	0.058	0.00	0.00	0.00	0.00	0.00	0.00
			(0.03)	(0.97)						

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