Core Descriptions

Riggle Pond, Oak Ridge Prairie County Park, Griffith, Lake County, Indiana (41.514049°N, 87.377883°W)

Landscape position: near center of pond; sediment/water interface at about 4.0 m water depth. Began sediment coring after allowing Livingston corer to settle in about 40 cm of loose sediment.

Depth (m)	Description
4.40-4.65	Peat, fibrous, becomes less fibrous and more silty with depth; very dark brown (10YR 2/2) at top to dark brown (10YR 3/3); uniform, large plant fragments, not calcareous, gradual lower boundary.
4.65-4.75	Loam, very dark gray (10YR 3/1), somewhat fibrous, uniform, slightly calcareous, abrupt boundary indicated by color change.
4.75-5.34	Silt loam, dark olive brown (2.5Y 3/3) to olive brown (2.5Y 4/3); uniform; somewhat fibrous, not calcareous, abrupt lower boundary.
5.34-5.39	Silt loam, stratified, dark olive brown (2.5Y 3/3) to olive brown (2.5Y4/3) layers, <1cm thick, not calcareous.
5.39-5.40	Core loss.
5.40-5.80	Sandy loam to loam (coarsening upwards), dark grayish brown (2.5Y 4/2), uniform, sand layers (5 mm thick) at 5.54 and 5.74 m depth; somewhat calcareous, gradual lower boundary.
5.80-6.08	Silt, dark grayish brown (2.5Y 4/2), uniform, slightly calcareous.
6.08- 6.40	Core loss.
6.40-6.75	Silt, gray (10YR 5/1), vaguely laminated, somewhat calcareous; clear lower boundary, small inclusion (5 mm thick, 2 cm wide) of brown organic material at top (contamination?). Outer ~1c m of core readily oxidized to 10YR 6/2 (light brownish gray); this oxidation rind continues to base of remainder of core.
6.75-6.90	Silt loam, stratified, dark olive brown (2.5Y 3/3) to olive brown (2.5Y4/3); layers are < 1 cm thick, not calcareous, clear lower boundary.
6.90-7.10	Silt, gray (10YR 5/1), laminated (2 mm thick layers), somewhat calcareous, flecks of very dark gray organic material throughout, clear lower boundary.
7.10-7.38	Silt, gray (10YR 5/1), bioturbated (rounded burrows, ~ 8 mm across), burrows are light brownish gray (10 YR 6/2) and matrix is very dark gray (10YR 3/1), color boundaries are sharp; somewhat calcareous.
7.38- 7.40	Core loss.
7.40-7.80	Silt, gray (10YR 5/1), vaguely laminated, clear lower boundary. Two thin (~2 mm) layers of medium sand at 7.53m and 7.69 m; not calcareous, clear lower boundary.
7.80-7.97	Silt, gray (10 YR 5/1), bioturbated, rounded burrows about 1-2 cm in diameter, light brownish gray (10 YR 6/2), not calcareous, clear lower boundary.
7.97-8.10	Silt, gray (10 YR 5/1), uniform, not calcareous, clear lower boundary.
8.10-8.36	Silt, gray (10 YR 5/1), bioturbated (rounded burrows <1cm in diameter), root traces, not calcareous, clear lower boundary.

8.36-8.38	Loamy sand, sand is medium-grained, gray (10 YR 5/1), uniform, not calcareous.
8.38- 8.40	Core loss.
8.40-8.53	Silt loam, dark gray (2.5 Y 5/1), uniform. ~1cm layers of wood fragments and other plant macrofossils at ~8.50 m; not calcareous, clear lower boundary.
8.53-8.88	Silt, gray (2.5Y5/1), laminated with thin (~ 1 mm) layers of black material, not calcareous, disturbed lower boundary.
8.88-9.09	Sand, medium (~250-500 mm), very well-sorted, light olive brown (2.5 Y 5/3), common dark organic splotches with visible plant fragments, disturbed, clear lower boundary. Silty material similar to above occurs as a 1 to 5 mm thick rind and is attributed to soft sediment deformation due to mechanical disturbance.
9.09-9.29	Sand, medium (~250 - 500 mm), olive brown (2.5Y 4/3), well sorted, uniform, calcareous. Sections of black material at 9.12-9.19 and 9.25-9.28. m Uncommon deoxidation observed as local orange yellowish stains. Not calcareous.
9.29-9.40	Core loss.
9.40	End of boring.

Stratigraphic interpretation: Equality Formation (entire core).

Core PC1: Plum Creek Forest Preserve, Chicago Heights, Cook County, Illinois (41.490658°N, 87.534400°W)

Landscape position: on edge of wide, shallow depression (kettle) on the Tinley Moraine.

Depth (m)	Description
0.0-0.27	Silty loam, black (10YR 2/2), uniform, roots, not calcareous, clear lower boundary.
0.27-0.35	Sandy loam, uniform, brown (10YR 5/3), no fossils, not calcareous, clear lower boundary.
0.35-0.47	Silty clay loam, dark grayish brown (2.5Y 4/2), uniform, few sesquioxide concretions and orange (deoxidized) rounded domains (~< 5 mm across), few rootlets, not calcareous, gradual lower boundary.
0.47-0.56	As above, but with few, discontinuous, thin layers of medium sand.
0.56-1.2	Core loss.
1.2-1.5	Sand and gravel, dark olive brown (2.5Y 3/3), massive, gravel pieces 0.5 cm to 3 cm across, wood fragments and rootlets, calcareous, clear lower boundary.
1.5-2.0	Silt loam, grayish brown (2.5Y 5/2), massive, dark gray streaks (many concentrated at 1.72 m), pea gravel (<.5 mm) throughout, calcareous.
2.0-2.4	Core loss.
2.4-3.2	Silty loam, gray (2.5Y 5/1), uniform, small (<.5cm) gravel pieces throughout, calcareous.
3.2-3.38	Silt loam, stratified, dark olive brown (2.5Y 3/3) and olive brown (2.5Y4/3) layers, <1 cm thick, not calcareous.
3.38-3.39	Silt loam diamicton; calcareous

3.38-3.66	Core loss.
3.66	End of boring.

Stratigraphic interpretation: Peoria Silt (loess), about 0.6 m; Henry Formation (colluvium) 1.2-1.5 m; Equality Formation (lacustrine) 1.5-3.38 m; Wadsworth Formation, Wedron Group (till) 3.38-3.39 m.

PC2: Plum Creek Forest Preserve, Chicago Heights, Cook County, Illinois
(41.490666°N, 87.534216°W; about 20 m east of PC1)
Landscape position: on edge of wide, shallow depression (kettle) on the Tinley Moraine

Depth (m)	Description
0.0-0.18	Loam, black (2.5Y 2.5/1), uniform, modern roots, not calcareous, low density, clear lower boundary.
0.18-0.30	Silt loam, black (2.5 Y 0.5/1), darker than above unit, uniform, no fossils, not calcareous, clear lower boundary.
0.30-0.69	Peat, somewhat fibrous, black (10YR 2/1) to dark brown (10YR 3/3), wood fragments throughout, not calcareous.
0.69-1.2	Core loss.
1.2-2.83	Peat, very dark gray (2.5Y 3/1) to light olive brown (2.5 5/6), abundant wood fragments as much as 4 cm long, uniform, not calcareous.
2.83-3.19	Silty clay, gray (2.5Y 5/1), dark gray/black streaks 3.02-3.19 m, calcareous, clear lower boundary.
3.19-3.23	Silt, gray (2.5Y 5/1), some parts deoxidized to orange, calcareous, uniform.
3.23-3.66	Core loss.
3.66-3.90	Silty clay diamicton; vaguely stratified, dark gray (2.5Y 4/1), also black and orange (deoxidized); calcareous, clear lower boundary.
3.90-4.39	Silty loam diamicton, gray (2.5Y 5/1), uniform, some dark gray streaks, uncommon deoxidized (orangish) domains, calcareous.
4.39-4.88	Core loss.
4.39	End of boring.

Stratigraphic interpretation: Greyslake Peat (0.0-2.83 m); Equality Formation (lacustrine) 2.83-3.23 m; Wadsworth Formation, Wedron Group (till) 3.23-4.39 m.

PC3: Plum Creek Forest Preserve, Chicago Heights, Cook County, Illinois
(41.490006°N, 87.534084°W; about 70 m south of PC2)
Landscape position: on edge of wide, shallow depression (kettle) on the Tinley Moraine

Depth (m)	Description
0.0-0.30	Silty loam, black (10YR 2/1), few wood fragments, uniform, not calcareous, clear lower boundary.
0.30-0.35	Sand, medium, grayish brown (2.5Y 5/2), rare pea gravel, clear lower boundary.
0.35-0.61	Silty clay diamicton, grayish brown (2.5Y 5/2), pea gravel (<2%), uniform, not calcareous.
0.61-1.20	Core loss.

Stratigraphic interpretation: Peoria Silt (loess) 0.0-0.3 m; Henry Formation (sand and gravel) 0.30-0.35 m; Wadsworth Formation, Wedron Group (till) 0.35-0.61 m.

PC4: Plum Creek Forest Preserve, Chicago Heights, Cook County, Illinois (41.490048, 87.533959°W; about 12 m ENE of PC3)
Landscape position: on edge of wide, shallow depression (kettle) on the Tinley Moraine (deepest part of kettle fill sampled for study).

Depth (m)	Description
0.0-0.24	Silt loam, black (2.5Y 2.5/1), large wood fragments, massive, not calcareous, clear lower boundary.
0.24-1.43	Peat, black (5Y2.5/1), darker than above unit, not dense, wood fragments throughout, not calcareous (Core loss from 0.34-1.2 m).
1.43-1.90	Peat, very dark brown (10YR 2/2), wood fragments throughout, large wood fragments at base, uniform, not calcareous, clear lower boundary.
1.90-2.60	Peaty loam, black (5Y 2.5/1), not dense, no wood fragments, not calcareous (Core loss from 2.16-2.4 m).
2.60-2.87	Silt loam, very dark gray (10YR 3/1), uniform, no wood fragments, not calcareous, clear lower boundary.
2.87-3.19	Silty clay, light brownish gray (10YR 6/2) to grayish brown (10YR 4/2), uniform, no wood fragments, calcareous.
3.19-3.66	Core loss.
3.66-4.48	Silty clay diamicton, light gray (10YR 7/1), uniform, sandy section at 13.0- 13.1, some dark streaks, calcareous.
4.48-4.88	Core loss.
4.88	End of boring

Stratigraphic interpretation: Greyslake Peat (0.0-2.6 m); Equality Formation (lacustrine) 2.6-3.19 m; Wadsworth Formation (redeposited till) 3.19-4.48 m.

PC5: Plum Creek Forest Preserve, Chicago Heights, Cook County, Illinois (41.493075°N, 87.541679°W)
Landscape position: embayment of Lake Chicago inset in Tinley Moraine.

Depth (m)	Description
0.0-0.26	Silt loam, very dark gray (10YR 3/1), wood fragments, uniform, (modern soil?), not calcareous, clear lower boundary.
0.26-0.41	Silt loam, black (10YR 2.5/1), no fossils, uniform, not calcareous, abrupt lower boundary.
0.41-0.70	Sandy silt, grayish brown (10YR 5/2), some deoxidized domains with orange stains, some domains with black stains on peds; uniform, not calcareous.
0.70-1.2	Core loss.
1.2-1.72	As above, but olive brown (2.5Y 5/2) and calcareous, abrupt lower boundary.

1.72-1.89	Silty clay, gray (5Y5/1), dark streaks, uniform, calcareous, abrupt lower boundary.
1.89-1.90	Large wood fragment.
1.90-2.05	As above, but very dark gray (5Y 3/1), and vaguely stratified.
2.05-2.4	Core loss.
2.4-2.70	Sand, fine to medium, dark gray (10YR 4/1), with vaguely stained orange and black domains as above, no fossils, calcareous, abrupt boundary.
2.70-2.80	Silt loam diamicton, dark gray (2.5Y 4/1), pea gravel 1.5 cm across, uniform, calcareous, abrupt lower boundary.
2.80-3.10	Silty clay diamicton, dark gray (2.5Y 4/1), no wood, calcareous.
3.10-3.66	Core loss.

Bretz outcrop (see p. 40, Bretz, 1955): 41.478454°N, 87.532586°W. Landscape position: embayment of Lake Chicago inset in Tinley Moraine; cut bank along Plum Creek.

Range of depth (m)	Description
0-1.2 to 2.4	Silt loam; platy to medium angular blocky structure; gray to greenish gray (gleyed) with common orange or black stains along peds; abundant rootlets, not calcareous; abrupt to gradual lower boundary.
1.2 to 3.1	Silt loam; stratified; somewhat hard to soft, locally with loose sand and gravel at base; otherwise, composed of silt loam, gray to very dark brown; calcareous, gradual upper boundary. Includes laterally continuous beds of dark brown, silty peat with abundant needles, wood fragments, stumps, and larch cones. The gray beds are locally fossiliferous with needles, aquatic snails, and ostracodes.
1.2 to 3.1	Diamicton, silt loam matrix, uniform, dark gray, calcareous, hard, rare pebbles and cobbles; abrupt, nearly planar upper boundary. In many places, differentiation between this unit (till) and overlying fossiliferous silt loam (lacustrine sediment) is most readily observed by the overconsolidation and hardness of the former. Their field textures are similar.

Stratigraphic interpretation: upper unit, Cahokia Formation (alluvium); middle unit, Equality Formation (lacustrine); lower unit, Wadsworth Formation, Wedron Group (clast-poor till).

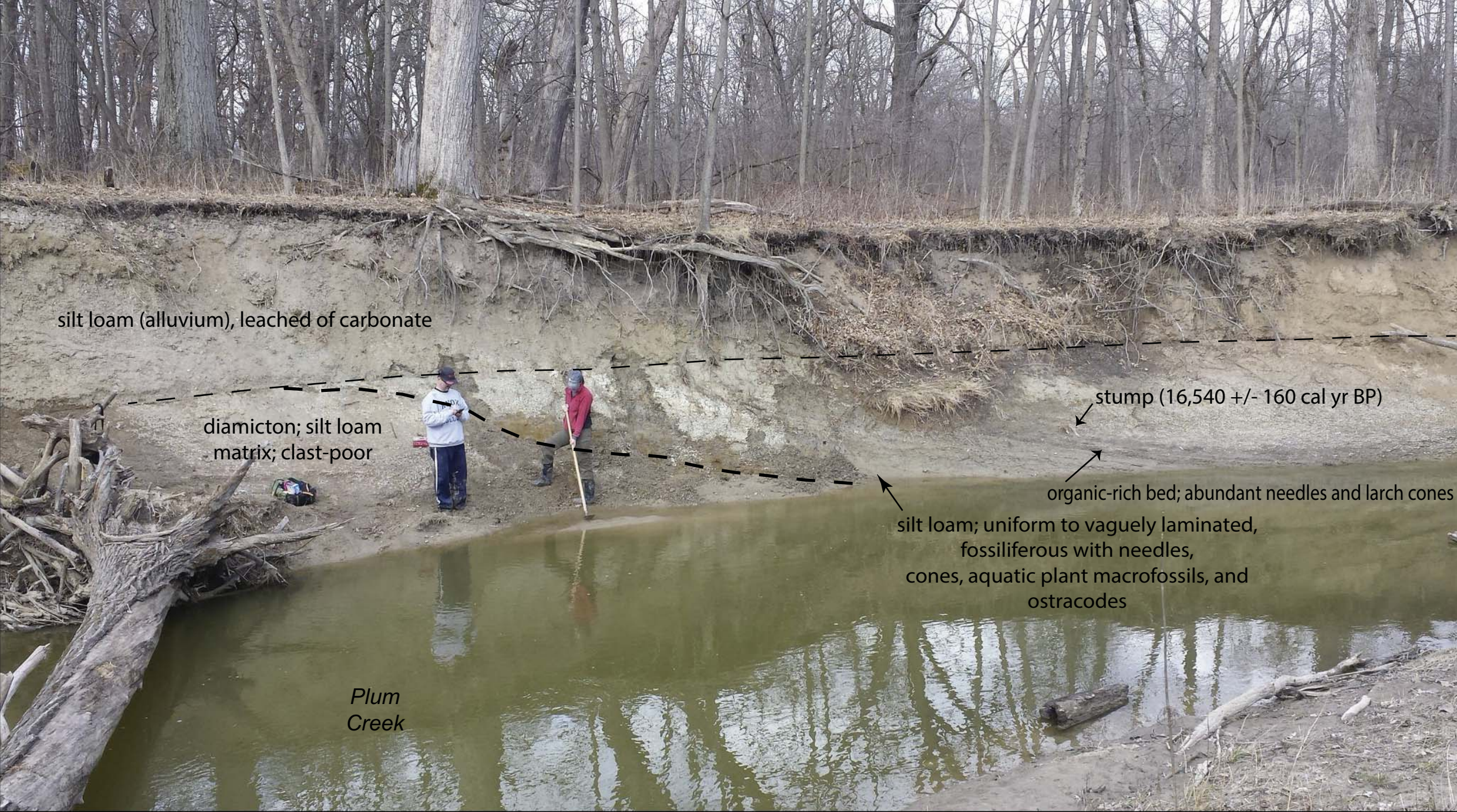
silt loam (alluvium), leached of carbonate
diamicton; silt loam
matrix; clast-poor
stump (16,540 +/- 160 cal yr BP)
organic-rich bed; abundant needles and larch cones
silt loam; uniform to vaguely laminated,
fossiliferous with needles,
cones, aquatic plant macrofossils, and
ostracodes
Plum
Creek

Figure DR1. Outcrop along Plum Creek (Bretz, 1955; page 40) that includes laminated deposits of the Equality Formation that yielded fossil wood for radiocarbon assay. The near-horizontal dashed contact is between the Cahokia Alluvium and older units; the heavier, inclined dashed contact is between diamicton of the Wadsworth Formation and fossiliferous silt loam of the Equality Formation. The people are about 1.8 m tall.

Data Repository Table DR1. Radiocarbon ages (from Curry et al., 2018)

Lab Number	County	State	Site	Material	Paleoenvironmental context	Lithostratigraphic unit	Latitude	Longitude	^{14}C yr B.P.	±	δ13C (‰)	Source(s)	Calibrated modal age	Calibrated σ_1 mean	Diachronic unit	Subphase/Lake Chicago	Questionable Date?	σ_1 up	σ_1 down	σ_1 intercepts	σ_1 area	σ_2 up	σ_2 down	σ_2 mean	σ_2 area	σ_2 intercepts
Calumet phase, Lake Chicago			N = 24																							
ISGS-943	Cook	IL	Lake Michigan North Shore Channel	wood	basal sand of Rose Hill spit	Dolton facies, Henry Formation	42	-87.68	10180	180	-26.1	Liu et al., 1986; Schneider and Hansel, 1990	11828	270	Calumet phase	Lake Chicago	OK	11591	12130	3	0.553	11254	12423	584.5	0.948	2
ISGS-1633	Cook	IL	Teasons Woods	wood	basal sand of Rose Hill spit	Dolton facies, Henry Formation	41.684837	-87.87358	10250	110	-28.2	Hansel and Johnson, 1996	12026	208	Calumet phase	Lake Chicago	OK	11758	12173	3	0.623	11600	12422	411	0.923	5
ISGS-950	Cook	IL	Lake Michigan North Shore Channel	wood	basal sand of Rose Hill spit	Dolton facies, Henry Formation	42	-87.68	10570	80	-25.7	Liu et al., 1986; Schneider and Hansel, 1990	12556	66	Calumet phase	Lake Chicago	OK	12517	12648	2	0.478	12377	12711	167	0.904	4
W-426	Cook	IL	Foster over North Shore Channel	wood	basal sand of Rose Hill spit	Dolton facies, Henry Formation	41.979562	-87.706164	10700	300	ND	Rubin and Alexander, 1958	12675	346	Calumet phase	Lake Chicago	OK	12221	12912	2	0.637	11699	13223	762	0.950	3
ISGS-1148	Cook	IL	Linden Ave., Wilmette	peat	basal sand of Rose Hill spit	Dolton facies, Henry Formation	42.073687	-87.685369	10750	70	-28.6	Schneider and Hansel, 1990	12692	42	Calumet phase	Lake Chicago	OK	12643	12727	1	0.687	12568	12750	91	0.955	1
ISGS-1118	Cook	IL	Linden Ave., Wilmette	peat	basal sand of Rose Hill spit	Dolton facies, Henry Formation	42.073687	-87.683123	10870	70	-28.4	Schneider and Hansel, 1990	12736	46	Calumet phase	Lake Chicago	OK	12703	12795	1	0.683	12676	12929	126.5	0.955	1
ISGS-1189	Cook	IL	Milburn Ave, Central St., Evanston	wood	basal sand of Rose Hill spit	Dolton facies, Henry Formation	42.0698725	-87.6837172	10890	140	-28.0	Schneider and Hansel, 1990	12748	124	Calumet phase	Lake Chicago	OK	12693	12940	1	0.683	12588	13066	239	0.955	1
ISGS-1097	Cook	IL	Rosehill Cemetery	wood	basal sand of Rose Hill spit	Dolton facies, Henry Formation	41.986058	-87.6837172	11000	80	-26.8	Liu et al., 1986; Schneider and Hansel, 1990	12823	97	Calumet phase	Lake Chicago	OK	12770	12963	1	0.683	12724	13041	158.5	0.955	1
ISGS-984	Cook	IL	Lake Michigan North Shore Channel	wood	basal sand of Rose Hill spit	Dolton facies, Henry Formation	42	-87.68	11010	130	-27.7	Liu et al., 1986; Schneider and Hansel, 1990	12861	119	Calumet phase	Lake Chicago	OK	12758	12995	1	0.684	12702	13099	198.5	0.955	1
ISGS-1121	Cook	IL	Linden Ave., Wilmette	wood	basal sand of Rose Hill spit	Dolton facies, Henry Formation	42.073791	-87.684059	11180	160	-28.1	Hansel and Johnson, 1986, 1996	13059	167	Calumet phase	Lake Chicago	OK	12841	13175	1	0.683	12727	13319	296	0.955	1
ISGS-1638	Cook	IL	Teasons Woods	organic silt	basal sand of Rose Hill spit	Dolton facies, Henry Formation	41.684837	-87.87358	11210	110	-27.7	Hansel and Johnson, 1996	13078	124	Calumet phase	Lake Chicago	OK	12963	13210	1	0.683	12809	13284	237.5	0.955	1
ISGS-1165	Cook	IL	Milburn Ave, Central St., Evanston	wood	basal sand of Rose Hill spit	Dolton facies, Henry Formation	42.064203	-87.684667	11250	180	-27.5	Hansel and Johnson, 1986, 1996	13106	185	Calumet phase	Lake Chicago	OK	12923	13293	1	0.683	12753	13431	339	0.955	1
ISGS-1164	Cook	IL	Patton Gym, Linden Ave., Wilmette	wood	basal sand of Rose Hill spit	Dolton facies, Henry Formation	42.06389	-87.676524	11310	210	-27.1	Schneider and Hansel, 1990	13137	207	Calumet phase	Lake Chicago	OK	12989	13402	1	0.683	12750	13501	375.5	0.939	2
ISGS-957	Cook	IL	Lake Michigan North Shore Channel	wood	basal sand of Rose Hill spit	Dolton facies, Henry Formation	42	-87.68	11370	150	-26.5	Liu et al., 1986; Schneider and Hansel, 1990	13230	136	Calumet phase	Lake Chicago	OK	13085	13357	1	0.684	12919	13494	287.5	0.946	2
UCIAMS-156036	Lake	IN	Riggle Pond, Oak Ridge Prairie Co. Pk., IN	needle	silt and fine sand in spit-defended lake	Equality Formation	41.514175	-87.37808	11545	30	ND	Bruegger, 2016	13400	44	Calumet phase	Lake Chicago	OK	13342	13429	1	0.688	13301	13456	77.5	0.955	1
ISGS-985	Cook	IL	Rosehill Cemetery	wood	basal sand of Rose Hill spit	Dolton facies, Henry Formation	41.986058	-87.6837172	11610	70	-26.8	Liu et al., 1986; Schneider and Hansel, 1990	13445	65	Calumet phase	Lake Chicago	OK	13362	13492	2	0.612	13299	13569	135	0.955	1
ISGS-1180	Cook	IL	Milburn Ave, Central St., Evanston	wood	silt and fine sand in spit-defended lake	Equality Formation	42.064203	-87.683825	11630	120	-28.0	Hansel and Johnson, 1986, 1996	13452	119	Calumet phase	Lake Chicago	OK	13327	13565	1	0.684	13247	13739	246	0.955	1
ISGS-1117	Cook	IL	Linden Ave., Wilmette	wood	basal sand of Rose Hill spit	Dolton facies, Henry Formation	42.073687	-87.683123	11740	270	-27.7	Hansel and Johnson, 1986, 1996	13505	286	Calumet phase	Lake Chicago	OK	13286	13857	2	0.659	13041	14400	679.5	0.955	1
UCIAMS-153755	Lake	IN	Riggle Pond, Oak Ridge Prairie Co. Pk., IN	needle	silt and fine sand in spit-defended lake	Equality Formation	41.514175	-87.37808	11745	35	ND	Bruegger, 2016	13554	49	Calumet phase	Lake Chicago	OK	13484	13581	1	0.686	13458	13637	89.5	0.890	2
ISGS-1159	Cook	IL	Central St., Evanston	wood	basal sand of Rose Hill spit	Dolton facies, Henry Formation	42.073791	-87.684059	11810	90	-25.8	Schneider and Hansel, 1990	13685	92	Calumet phase	Lake Chicago	OK	13557	13740	1	0.685	13447	13800	176.5	0.955	1
IU-67	Cook	IL	Calumet beach (west)	wood	basal sand of Calumet beach (west)	Dolton facies, Henry Formation	41.502186	-87.534958	11815	640	ND	Schneider and Reshkin, 1970	13685	861	Calumet phase	Lake Chicago	OK	13063	14784	1	0.683	12569	15954	1692.5	0.955	1
ISGS-1137	Cook	IL	Chandler Park (Ridge/Lincoln)	wood	basal sand of Rose Hill spit	Dolton facies, Henry Formation	42.064168	-87.686165	11870	100	-26.5	Schneider and Hansel, 1990	13729	108	Calumet phase	Lake Chicago	OK	13564	13780	1	0.684	13474	13962	244	0.955	1
UCIAMS-153757	Lake	IN	Riggle Pond, Oak Ridge Prairie Co. Pk., IN	needle	silt and fine sand in spit-defended lake	Equality Formation	41.514175	-87.37808	12015	35	ND	Bruegger, 2016	13810	48	Calumet phase	Lake Chicago	OK	13779	13874	2	0.489	13753	13996	121.5	0.955	1
UCIAMS-153756	Lake	IN	Riggle Pond, Oak Ridge Prairie Co. Pk., IN	needle	silt and fine sand in spit-defended lake	Equality Formation	41.514175	-87.37808	12160	30	ND	Bruegger, 2016	14052	54	Calumet phase	Lake Chicago	OK	13997	14105	1	0.685	13938	14162	112	0.955	1
Glenwood II phase, Lake Chicago			N = 13																							
W-140	Cook	IL	NE of Burnham/E Sauk Rd	wood	basal sand of Dyer spit	Dolton facies, Henry Formation	41.497479	-87.539567	12650	350	ND	Ruben and Suess, 1955	15091	603	Glenwood II phase	Lake Chicago	OK	14266	15471	1	0.683	13838	16024	1093	0.955	1
ISGS-1190	Cook	IL	NE of Burnham/E Sauk Rd	wood	basal sand of Dyer spit	Dolton facies, Henry Formation	41.497479	-87.539567	12660	140	-25.0	Hansel and Johnson, 1986, 1996	15100	275	Glenwood II phase	Lake Chicago	OK	14730	15280	1	0.683	14287	15490	601.5	0.955	1
UCIAMS-156034	Lake	IN	Riggle Pond, Oak Ridge Prairie Co. Pk., IN	needle	silt and fine sand in spit-defended lake	Equality Formation	41.514175	-87.37808	12705	35	ND	Bruegger, 2016	15145	68	Glenwood II phase	Lake Chicago	OK	15080	15216	1	0.683	14968	15288	160	0.955	1
UCIAMS-156035	Lake	IN	Riggle Pond, Oak Ridge Prairie Co. Pk., IN	needle	silt and fine sand in spit-defended lake	Equality Formation	41.514175	-87.37808	12915	35	ND	Bruegger, 2016	15367	105	Glenwood II phase	Lake Chicago	OK	15308	15517	1	0.684	15245	15620	187.5	0.955	1
UCIAMS-159243	Cook	IL	DYER 2 ST 3 20-40	needle	high-level lagoonal silts	Equality Formation	41.478459	-87.532544	13065	45	ND	Bruegger, 2016	15666	107	Glenwood II phase	Lake Chicago	OK	15568	15782	1	0.684	15394	15869	237.5	0.955	1
UCIAMS-159243	Cook	IL	DYER 2 ST 3 20-40	needle	high-level lagoonal silts	Equality Formation	41.478459	-87.532544	13065	45	ND	Bruegger, 2016	15666	107	Glenwood II phase	Lake Chicago	OK	15568	15782	1	0.684	15394	15869	237.5	0.955	1
UCIAMS-159241	Cook	IL	PC-5 5.45-5.65	needle	high-level lagoonal silts	Equality Formation	41.493094	-87.541728	13150	45	ND	Bruegger, 2016	15797	96	Glenwood II phase	Lake Chicago	OK	15703	15894	1	0.683	15613	16004	195.5	0.955	1
UCIAMS-159241	Cook	IL	PC-5 5.45-5.65	needle	high-level lagoonal silts	Equality Formation	41.493094	-87.541728	13150	45	ND	Bruegger, 2016	15797	96	Glenwood II phase	Lake Chicago	OK	15703	15894	1	0.683	15613	16004	195.5	0.955	1
UCIAMS-152222	Lake	IN	Riggle Pond, Oak Ridge Prairie Co. Pk., IN	needle	silt and fine sand in spit-defended lake	Equality Formation	41.514175	-87.37808	13260	60	ND	Bruegger, 2016	15949	108	Glenwood II phase	Lake Chicago	OK	15833	16048	1	0.683	15733	16149	208	0.955	1
UCIAMS-156033	Lake	IN	Riggle Pond, Oak Ridge Prairie Co. Pk., IN	needle	silt and fine sand in spit-defended lake	Equality Formation	41.514175	-87.37808	13275	35	ND	Bruegger, 2016	15972	88	Glenwood II phase	Lake Chicago	OK	15875	16051	1	0.684	15781	16122	170.5	0.955	1
UCIAMS-159244	Cook	IL	DYER 2 ST3 15	needle	high-level lagoonal silts	Equality Formation	41.478459	-87.532544	13355	50	ND	Bruegger, 2016	16077	97	Glenwood II phase	Lake Chicago	OK	15976	16170	1	0.684	15870	16252	191	0.955	1
UCIAMS-159244	Cook	IL	DYER 2 ST3 15	needle	high-level lagoonal silts	Equality Formation	41.478459	-87.532544	13355	50	ND	Bruegger, 2016	16077	97	Glenwood II phase	Lake Chicago	OK	15976	16170	1	0.684	15870	16252	191	0.955	1
UCIAMS-152221	Lake	IN	Riggle Pond, Oak Ridge Prairie Co. Pk., IN	wood	silt and fine sand in spit-defended lake	Equality Formation	41.514175	-87.37808	13450	50	ND	Bruegger, 2016	16185	90	Glenwood II phase	Lake Chicago	OK	16094	16273	1	0.683	15982	16376	197	0.955	1
Glenwood I phase, Lake Chicago			N = 5																							
UCIAMS-159242	Cook	IL	PC-5 6.55-6.75	needle	high-level lagoonal silts	Equality Formation	41.493094	-87.541728	13675	45	ND	Bruegger, 2016	16450	115	Glenwood I phase	Lake Chicago	OK	16363	16592	1	0.683	16278	16738	230	0.955	1
ISGS-7087	Cook	IL	Plum Creek (Bretz outcrop)	wood	high-level lagoonal silts	Equality Formation	41.476658	-87.533155	13700	80	-24.6	Bruegger, 2016	16540	157	Glenwood I phase	Lake Chicago	OK	16359	16673	1	0.683	16259	16860	300.5	0.955	1
UCIAMS-159238	Cook	IL	PC-4 9.3-9.5	needle	high-level lagoonal silts	Equality Formation	41.490438	-87.534164	13790	50	ND	unpublished	16680	132	Glenwood I phase	Lake Chicago	OK	16545	16809	1	0.683	16433	16933	250	0.955	1
ISGS-1549	Cook	IL	Lynwood Reservoir	wood	basal sand of Glenwood spit	Dolton facies, Henry Formation	41.504167	-87.541667	13870	170	-24.8	Hansel and Mickelson, 1988	16820	269.5	Glenwood I phase	Lake Chicago	OK	16527	17066	1	0.6835	16287	17336	524.5	0.9546	1
ISGS-1570	Cook	IL	Lynwood Reservoir	wood	basal sand of Glenwood spit	Dolton facies, Henry Formation	41.504167	-87.541667	14100	640	-25.8	Hansel and Mickelson, 1988	17120	836	Glenwood I phase	Lake Chicago	OK	16260	17932	1	0.6829	15396	18741	1672.5	0.9545	1
Glenwood phase, rejected ages			N = 3																							
C-801	Cook	IL	Glenwood	wood	basal sand of Glenwood beach	Dolton facies, Henry Formation	41.503777	-87.537612	10972	350	ND	Libby, 1955	12790	351	Glenwood phase	Lake Chicago	Questionable Date	12558	13260	1	0.683	11967	13591	812	0.955	1
W-161	Cook	IL	NE of Burnham/E Sauk Rd	wood	basal sand of Glenwood beach	Dolton facies, Henry Formation	41.497479	-87.539567	12200	350	ND	Ruben and Suess, 1955	14090	551	Glenwood phase	Lake Chicago	Questionable Date	13737	14838	1	0.683	13386	15407	1010.5	0.955	1
IU-62	Cook	IL	"Glenwood Beach"	wood	basal sand of Glenwood beach	Dolton facies, Henry Formation	41.502342	-87.53568	12400	300	ND	Schneider and Reshkin, 1970	14401	496	Glenwood phase	Lake Chicago	Questionable Date	14077	15068	1	0.683	13716	15586	935	0.955	1
Minimum ages, Tinley Moraine, study are			N = 5																							
UCIAMS-159240	Cook	IL	PC-4 13-13.6	rootlets	basal kettle lake	Equality Formation	41.490438	-87.534164	14050	45	-26.4	Bruegger, 2016	17069	98	Crown Point Phase (min)	Tinley Moraine (min)	OK	16980	17176	1	0.685	16850	17322	236	0.955	1
UCIAMS-159235	Cook	IL	PC-2 12.0-12.4	rootlets	basal kettle lake	Equality Formation	41.490438	-87.534164	14075	50	-25.7	Bruegger, 2016	17090	106	Crown Point Phase (min)	Tinley Moraine (min)	OK	17005	17217	1	0.683	16899	17371	236	0.955	1
UCIAMS-159237	Cook	IL	PC-2 12-12.8	rootlets	basal kettle lake	Equality Formation	41.490438	-87.534164	14085	45	-25.6	Bruegger, 2016	17104	102	Crown Point Phase (min)	Tinley Moraine (min)	OK	17022	17226	1	0.684	16933	17375	221	0.955	1
UCIAMS-159236	Cook	IL	PC-2 12.4-12.8	rootlets	basal kettle lake	Equality Formation	41.490438	-87.534164	14115	50	-25.8	Bruegger, 2016	17160	111	Crown Point Phase (min)	Tinley Moraine (min)	OK	17061	17283	1	0.684	16972	17408	218	0.955	1
UCIAMS-159239	Cook	IL	PC-4 9.8-10.4	needle	basal kettle lake	Equality Formation	41.490438	-87.534164	14140	50	-26.8	Bruegger, 2016	17192	110	Crown Point Phase (min)	Tinley Moraine (min)	OK	17100	17319	1	0.683	17013	17434	210.5	0.955	1
Ice-walled lake plain dates, NE IL			N = 6																							
Deerfield Moraine, Lake Border Morainic System																										
UCIAMS-46829	Lake	IL	Wadsworth Village Hall	*Dryas* leaves, stem	ice-contact lake sedimen	Equality Formation	42.427882	-87.907156	13650	40	ND	Curry and Petras, 2011	16430	106	Crown Point Phase (min	Deerfield Moraine (Lake Borc	OK	16337	16548	1	0.684	16255	16670	207.5	0.955	1
UCIAMS-63076	Lake	IL	Wadsworth Village Hall	*Dryas* leaves, stem	ice-contact lake sedimen	Equality Formation	42.427882	-87.907156	13910	35	ND	Curry and Petras, 2011	16910	109	Crown Point Phase (min	Deerfield Moraine (Lake Borc	OK	16767	16984	1	0.684	16625	17042	208.5	0.955	1
UCIAMS-63075	Lake	IL	Wadsworth Village Hall	*Dryas* leaves, stem	ice-contact lake sedimen	Equality Formation	42.427882	-87.907156	13695	40	ND	Curry and Petras, 2011	16540	115	Crown Point Phase (min	Deerfield Moraine (Lake Borc	OK	16392	16622	1	0.684	16313	16765	226	0.955	1
Tinley Moraine north																										
UCIAMS-26262	Lake	IL	Mill Valley	*Dryas* leaves, stem	ice-contact lake sediment	Equality Formation	42.444232	-87.97374	14070	40	ND	Curry, 2015	17087	94	Crown Point Phase (min	Tinley Moraine (min)	OK	17010	17198	1	0.683	16911	17351	220	0.955	1
UCIAMS-26263	Lake	IL	Mill Valley	*Dryas* leaves, stem	ice-contact lake sedimen	Equality Formation	42.444232	-87.97374	14110	35	ND	Curry, 2015	17160	97	Crown Point Phase (min	Tinley Moraine (min)	OK	17064	17257	1	0.685	16991	17383	196	0.955	1
UCIAMS-26264	Lake	IL	Mill Valley	*Dryas* leaves, stem	ice-contact lake sedimen	Equality Formation	42.444232	-87.97374	14420	40	ND	Curry, 2015	17563	80	Crown Point Phase (min	Tinley Moraine (min)	OK	17490	17649	1	0.685	17400	17775	187.5	0.955	1
Middle Illinois River Valley (Emiquon)			N = 14																							
UCIAMS-108717	Fulton	IL	Emiquon Wildlife Area	leaves	slackwater lake silt and fine san	Equality Formation	40.342937	-90.102592	12360	40	ND	Curry et al., 2014	14270	153	Michigan Subepisode	empty	OK	14186	14491	1	0.6834	14132	14689	278.5	0.9546	1
UCIAMS-110608	Fulton	IL	Emiquon Wildlife Area	needle	slackwater lake silt and fine san	Equality Formation	40.342937	-90.102592	12695	35	ND	Curry et al., 2014	15140	72	Michigan Subepisode	empty	OK	15066	15209	1	0.685	14940	15277	168.5	0.955	1
UCIAMS-110609	Fulton	IL	Emiquon Wildlife Area	wood	slackwater lake silt and fine san	Equality Formation	40.342937	-90.102592	12680	40	ND	Curry et al., 2014	15124	83	Michigan Subepisode	empty	OK	15033	15199	1	0.6831	14882	15268	193	0.9546	1
UCIAMS-110610	Fulton	IL	Emiquon Wildlife Area	wood	slackwater lake silt and fine san	Equality Formation	40.342937	-90.102592	12795	35	ND	Curry et al., 2014	15238	66	Michigan Subepisode	empty	OK	15169	15300	1	0.6835	15103	15398	147.5	0.9549	1
Beta-207030	Fulton	IL	Emiquon Wildlife Area	diffuse porous wood fragments	slackwater lake silt and fine san	Equality Formation	40.348584	-90.104611	11720	140	ND	Hajic et al., 2007	15701	97	Michigan Subepisode	empty	OK	15598	15792	1	0.684	15441	15897	228	0.9547	1
Beta-207030	Fulton	IL	Emiquon Wildlife Area	conifer wood, single piece	slackwater lake silt and fine san	Equality Formation	40.343093	-90.096765	12430	40	ND	Hajic et al., 2007	15701	97	Michigan Subepisode	empty	OK	15598	15792	1	0.684	15441	15897	228	0.9547	1
Beta-207030	Fulton	IL	Emiquon Wildlife Area	needles, wood, bark	slackwater lake silt and fine san	Equality Formation	40.343132	-90.090938	13080	40	ND	Hajic et al., 2007	15701	97	Michigan Subepisode	empty	OK	15598	15792	1	0.684	15441	15897	228	0.9547	1
Beta-207028	Fulton	IL	Hajic (2007) EMQ-30	conifer wood, bark	slackwater lake silt and fine san	Equality Formation	40.343132	-90.090938	12890	40	ND	Hajic et al., 2007	15339	105	Michigan Subepisode	empty	OK	15269	15479	1	0.684	15210	15598	194	0.9551	1
Beta-207031	Fulton	IL	Hajic (2007) EMQ-32	conifer wood, bark	slackwater lake silt and fine san	Equality Formation	40.34397	-90.102873	14830	50	ND	Hajic et al., 2007	18029	87	Michigan Subepisode	empty	OK	17942	18116	1	0.685	17866	18215	174.5	0.9547	1
Beta-207032	Fulton	IL	Hajic (2007) EMQ-33	bark, wood, leaves	slackwater lake silt and fine san	Equality Formation	40.3346112	-90.103231	11160	40	ND	Hajic et al., 2007	13052	36	Hudson Episode	empty	OK	13010	13081	1	0.6828	12922	13111	94.5	0.9547	1
Beta-207033	Fulton	IL	Hajic (2007) EMQ-33	wood, bark, needles	slackwater lake silt and fine san	Equality Formation	40.3346112	-90.103231	14440	50	ND	Hajic et al., 2007	17592	91	Michigan Subepisode	empty	OK	17501	17683	1	0.6845	17423	17829	203	0.9546	1
Beta-207035	Fulton	IL	Hajic (2007) EMQ-35	rotten wood and bark	slackwater lake silt and fine san	Equality Formation	40.349342	-90.104968	11300	40	ND	Hajic et al., 2007	13129	46	Hudson Episode	empty	OK	13097	13188	1	0.6872	13071	13249	89	0.9555	1
Beta-210773	Fulton	IL	Hajic (2007) EMQ-42	wood, bark, leaves, seeds	slackwater lake silt and fine san	Equality Formation	40.357563	-90.087178	14380	80	ND	Hajic et al., 2007	17530	121	Michigan Subepisode	empty	OK	17407	17649	1	0.6833	17251	17799	274	0.9547	1
Beta-210774	Fulton	IL	Hajic (2007) EMQ-49	wood, bark, needles	slackwater lake silt and fine san	Equality Formation	40.342956	-90.087745	14560	60	ND	Hajic et al., 2007	17720	102	Michigan Subepisode	empty	OK	17640	17844	1	0.685	17552	17938	193	0.9551	1
								14																		
Chicago outlet			N = 6																							
ISGS-1332	Will	IL	Land and Lakes	wood	tributary bottom marl and peat	Peyton Colluvium	41.666366	-88.056381	12500	110	-25.7	Hansel and Johnson, 1986, 1996	14737	285	Hudson Episode	empty	OK	14443	15013	1	0.6831	14200	15132	466	0.9546	1
ISGS-1417	Will	IL	Land and Lakes	wood	tributary bottom marl and peat	Peyton Colluvium	41.666366	-88.056381	10530	200	-26.3	Hansel and Johnson, 1986, 1996	12538	228	Hudson Episode	empty	OK	12223	12678	2	0.6135	11749	12805	528	0.9533	2
ISGS-1418	Will	IL	Land and Lakes	wood	tributary bottom marl and peat	Peyton Colluvium	41.666366	-88.056381	12770	180	-24.2	Hansel and Johnson, 1986, 1996	15217	337	Hudson Episode	empty	OK	14907	15581	1	0.6827	14389	15805	708	0.9545	1
ISGS-1433	Will	IL	Land and Lakes	wood	tributary bottom marl and peat	Peyton Colluvium	41.669649	-88.054078	12040	160	-25.3	Hansel and Johnson, 1986, 1996	13839	201	Hudson Episode	empty	OK	13721	14122	1	0.6829	13478	14460	491	0.9546	1
ISGS-1455	Will	IL	Land and Lakes	wood	tributary bottom marl and peat	Peyton Colluvium	41.666366	-88.056381	10180	110	-24.2	Hansel and Johnson, 1986, 1996	11840	230	Hudson Episode	empty	OK	11620	12080	1	0.6829	11350	12380	520	0.951	4
ISGS-1413	Will	IL	Land and Lakes	wood	tributary bottom marl and peat	Peyton Colluvium	41.669649	-88.054078	11880	110	-25.9	Hansel and Johnson, 1986, 1996	13732	127	Hudson Episode	empty	OK	13559	13813	1	0.6839	13471	13992	260.5	0.9546	1
Kankakee torrent-scoured lake			N = 4																							
UCIAMS-26256	Kendall	IL	Reservation Rd/Morgan Ck	stems, leaves, no Dryas	silty clay lake sediment above till	Equality Formation	41.637581	-88.37202	15750	45	ND	Curry et al., 2014	18968	68	Michigan Subepisode	empty	OK	18911	19046	1	0.6855	18870	19148	139	0.9551	1
UCIAMS-26257	Kendall	IL	Reservation Rd/Morgan Ck	stems, leaves, no Dryas	silty clay lake sediment above till	Equality Formation	41.637601	-87.907405	15660	60	ND	Curry et al., 2014	18894	68	Michigan Subepisode	empty	OK	18826	18961	1	0.6835	18761	19049	144	0.9549	1
UCIAMS-26258	Kendall	IL	Reservation Rd/Morgan Ck	stems, leaves, no Dryas	silty clay lake sediment above till	Equality Formation	41.637601	-87.907405	15670	140	ND	Curry et al., 2014	18904	153	Michigan Subepisode	empty	OK	18768	19073	1	0.6838	18632	19280	324	0.9546	1
UCIAMS-26259	Kendall	IL	Reservation Rd/Morgan Ck	stems, leaves, no Dryas	silty clay lake sediment above till	Equality Formation	41.637601	-87.907405	15470	110	ND	Curry et al., 2014	18741	108	Michigan Subepisode	empty	OK	18625	18840	1	0.6838	18502	18946	222	0.9549	1