

The Seeberger Rock Shelter Jackson, County Iowa

C.E. Heinzl, William Green, Michael Perry, Faith Luce and Pierce Matt

Thank you 😊

John Doershuk
Michael Perry
Mark Anderson

Joe and Chérie Haury-Artz
Seeberger Cave Analyses,
Jackson County, Iowa



Non-Human Faunal Remains

Robin M. Lillie

Human skeletal remains



William Green and Nicolette Blum Meister

Material Culture Access Request

December 10, 2018

Sample collection: Seeberger Cave Artifacts, Jackson County, Iowa,
Beloit College - George Collie & Paul Nesbit Excavation (1927)

Project begins



Beloit
College

Principal Investigator - Chad E. Heinzl, Ph.D.

Associate Professor of Earth and Environmental Science |

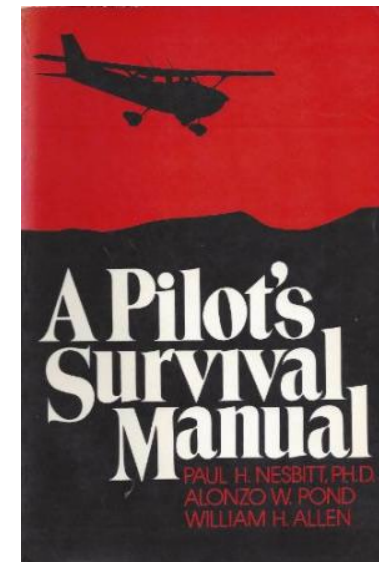
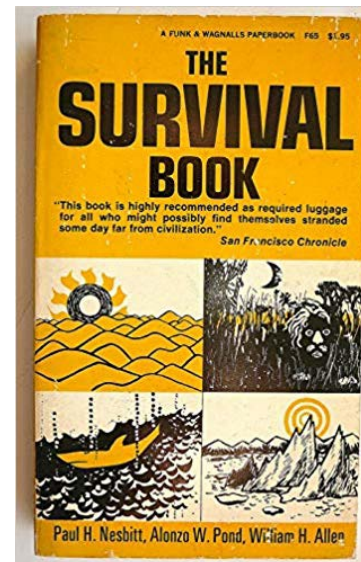
Handwritten signature of Chad E. Heinzl in blue ink.

University of
Northern Iowa

The logo for the University of Northern Iowa, featuring a stylized building and sun within a semi-circular frame.

Paul Homer Nesbitt

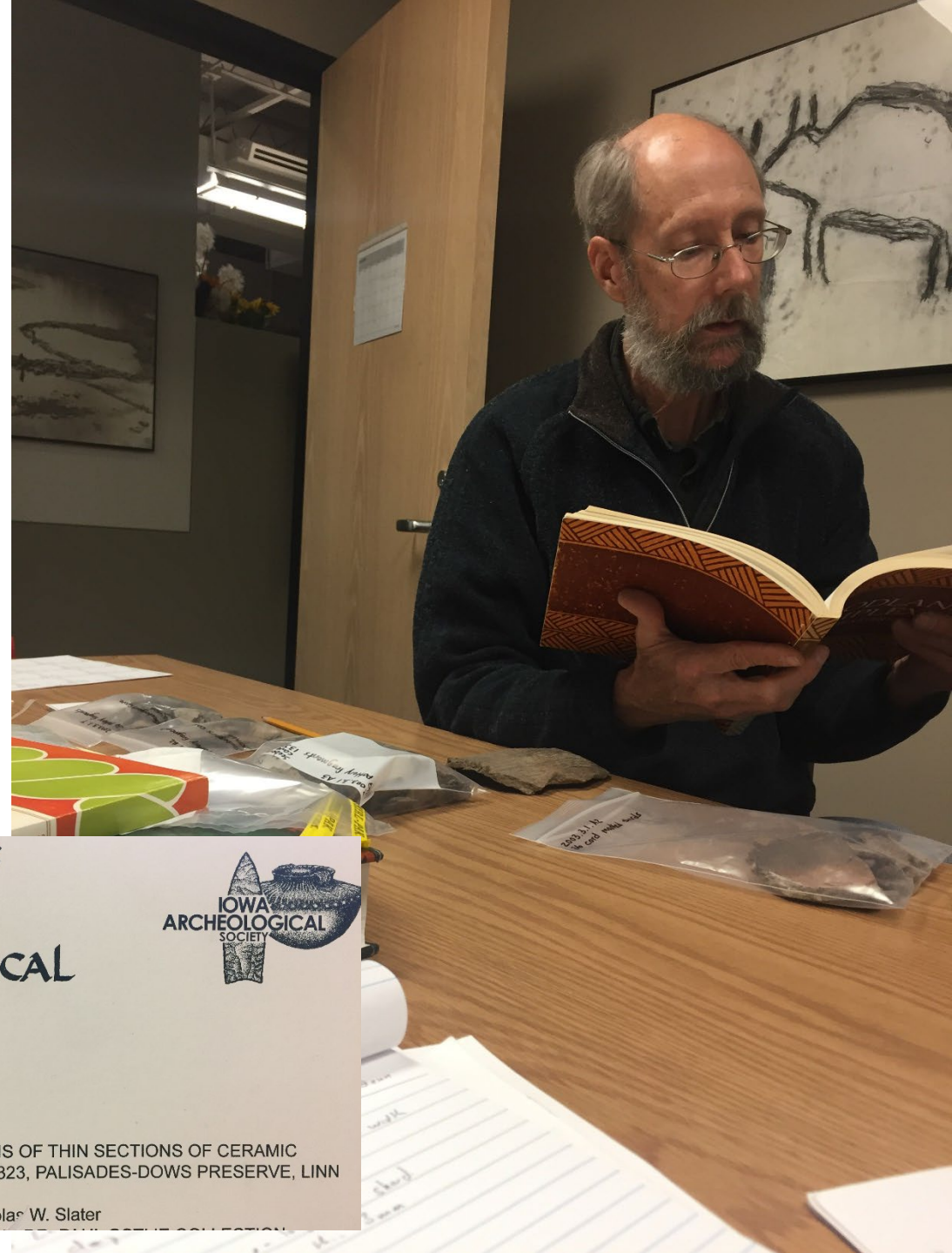
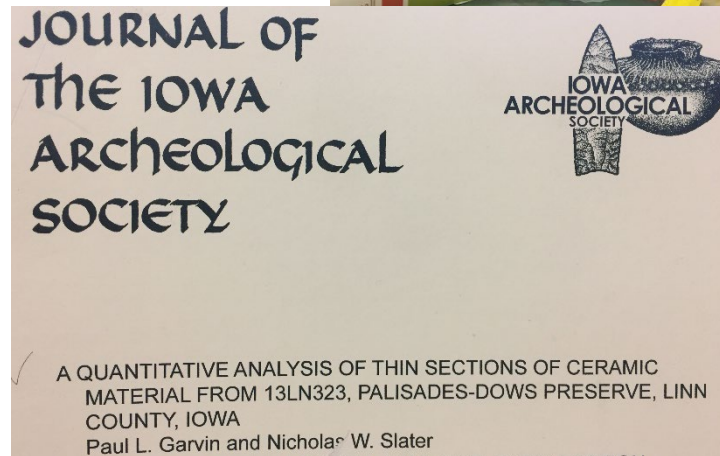
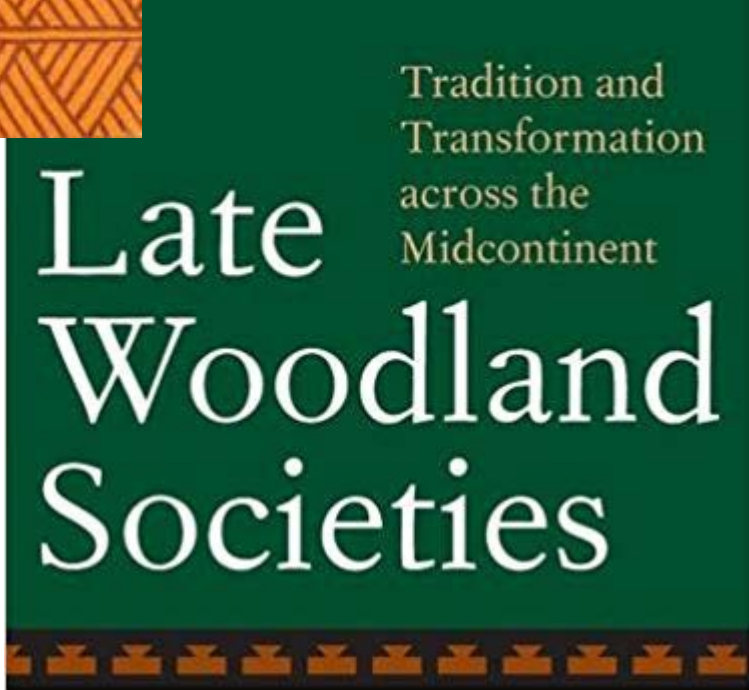
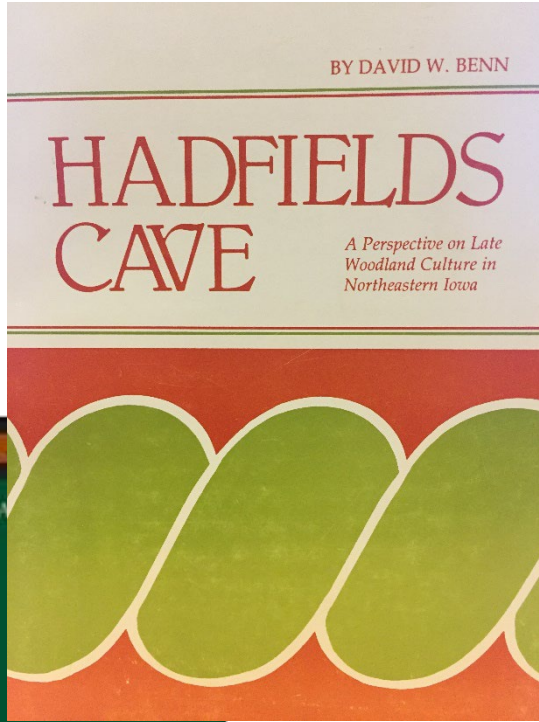
- 1926 Beloit College – Economics
- 1926 Seeberger Cave Excavations
 - Mentor George Collie, Beloit C. Prof.
- U. of Chicago M.S. and Ph.D.
- Beloit College Professor
- U.S. Army / Air Force Desert Warfare Research
- University of Alabama, Chair – Dept. of Anthropology



Michael Perry



Thomas E. Emerson, Dale L. McElrath, & A



Undergraduate Research



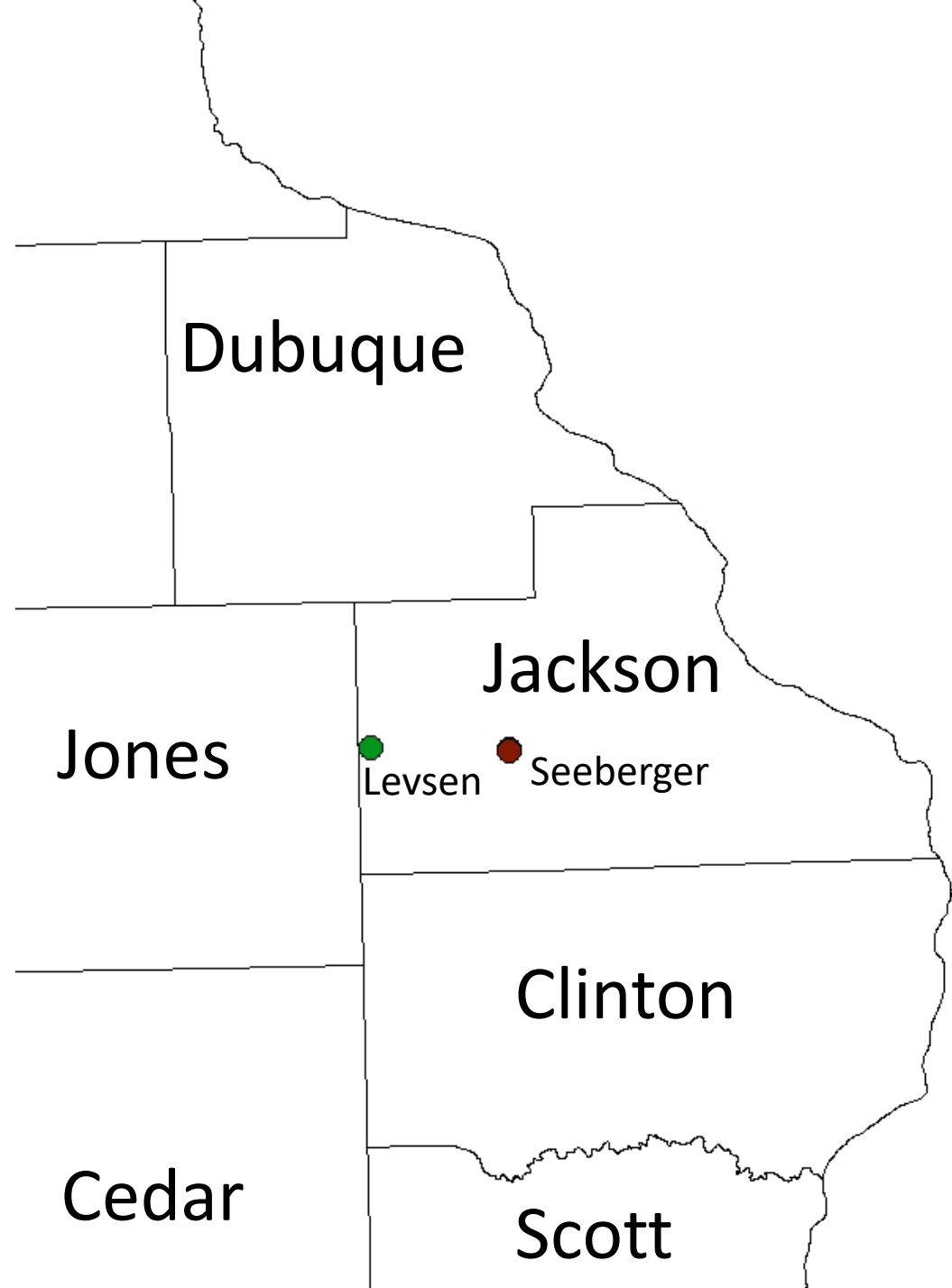
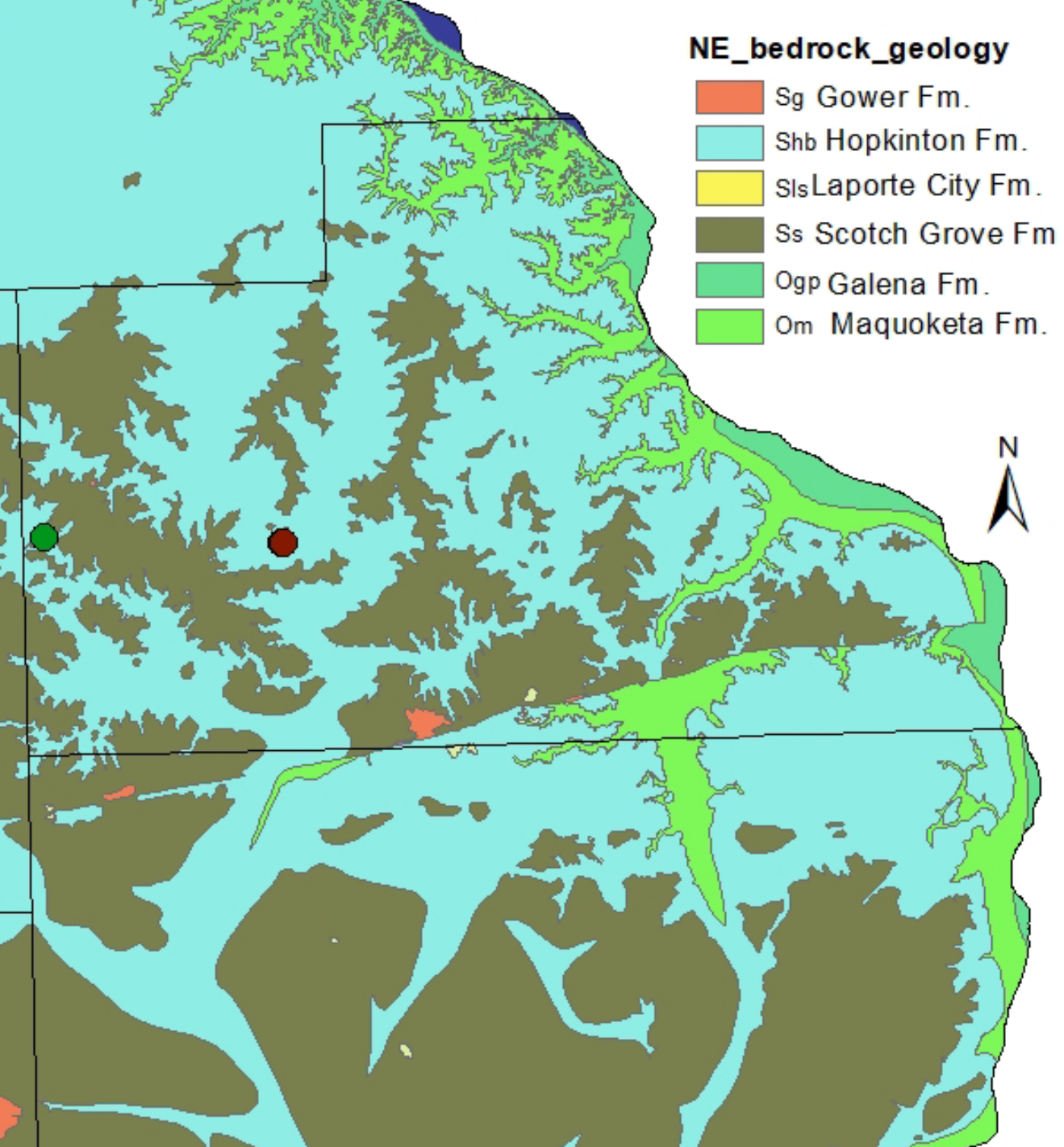
Beloit College archeological expedition members. Jordan Jephtha Markham (1916-2001), Thomas G. Coleman (1918-2007), Andrew Hunter Whiteford (1913-2006), Paul Homer Nesbitt (1904-1985), Barbara Rivet (1914-1990), Shirley Webb Kretschmer (1914-2016), and John William Bennett (1915-2005)

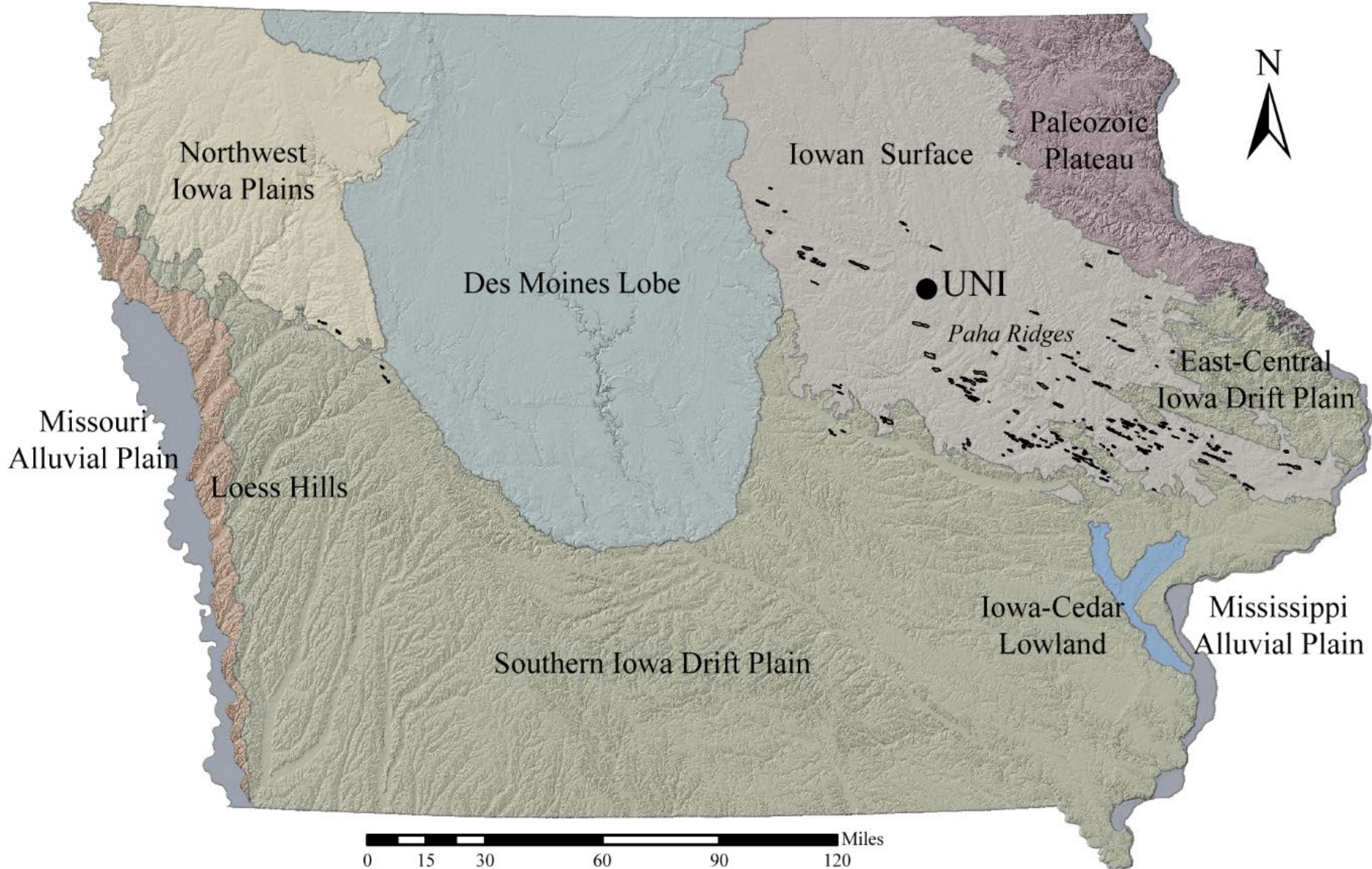


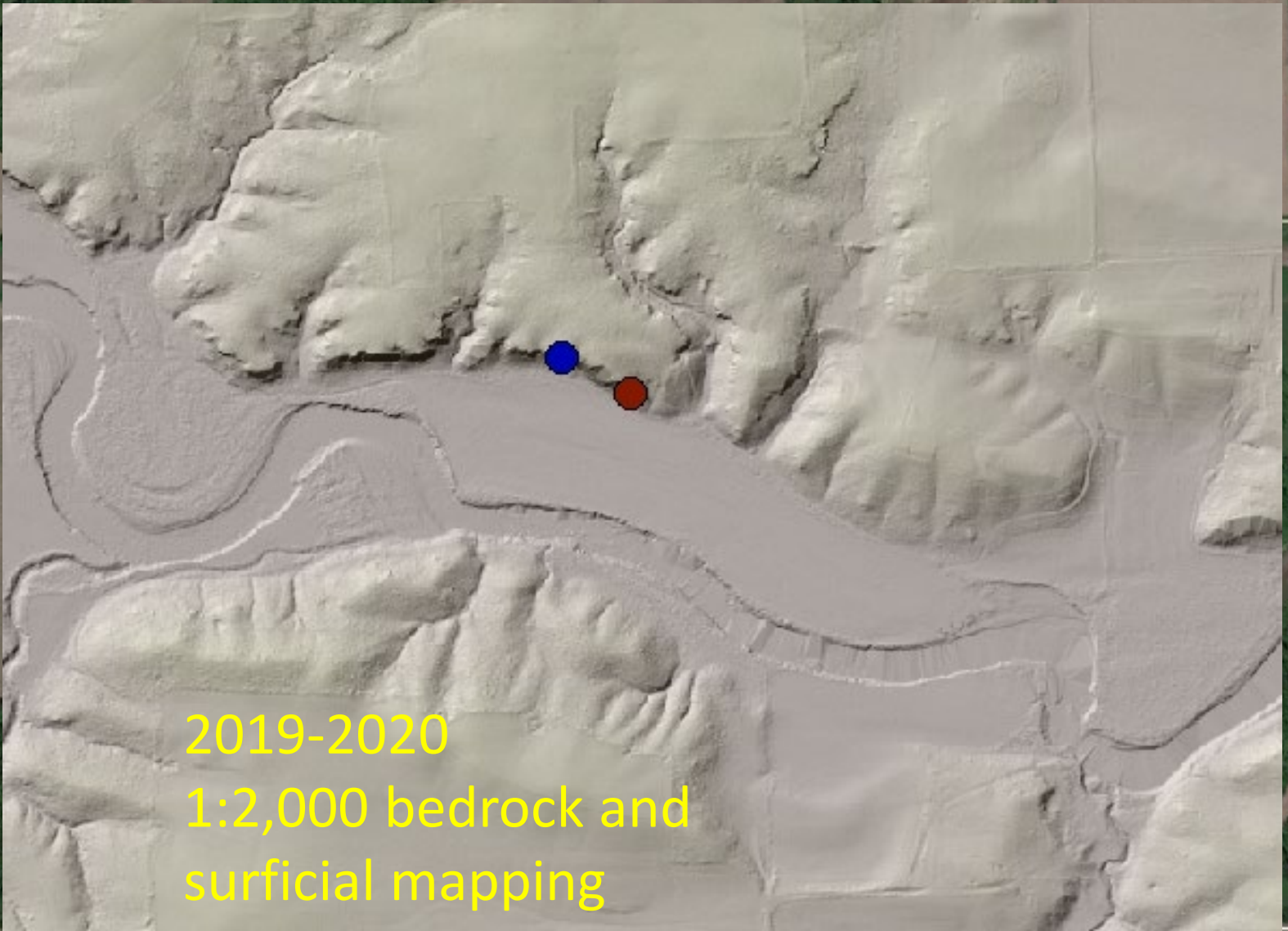
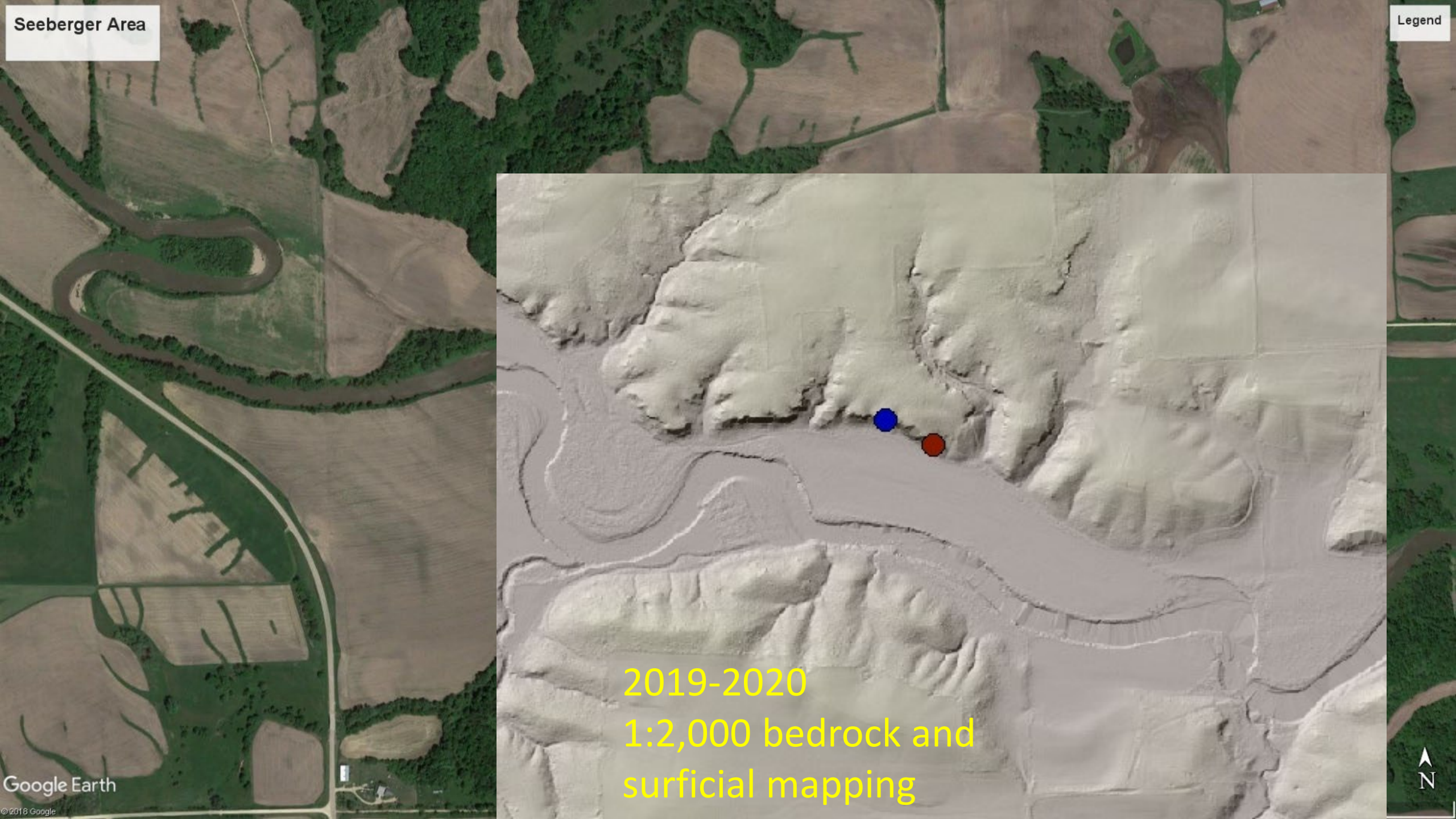
Pierce Matt

- Senior
- Environmental Science Major
- Working toward GIS Certificate









2019-2020
1:2,000 bedrock and
surficial mapping

Faith Luce

- Senior
- Environmental Science Major with a double minor in Earth Science and Geology



Artifacts

<u>Seriation</u>	1	20A2	A3	B	B2	T		
Historic		1						1
Late Late Woodland					1		3	4
Late Woodland	3		26	22		5	16	72
Madison Plain	2				1	2		5
Madison?	1							1
Minotts Cord Impressed	1							1
Early Late Woodland			7					7
Levsen			2	1				3
Spring Hollow Plain	4			5		1		10
Linn Ware?							3	3
Late Prehistoric								0
Oneota?	1		1					2
Mississippian/Oneota?						1		1
Mississippian?				10			10	20
Not determined (ND)				11	3	1	4	19
N = 149	12	1	36	49	5	10	36	149

Photography & Latex

2003.3.A2

1

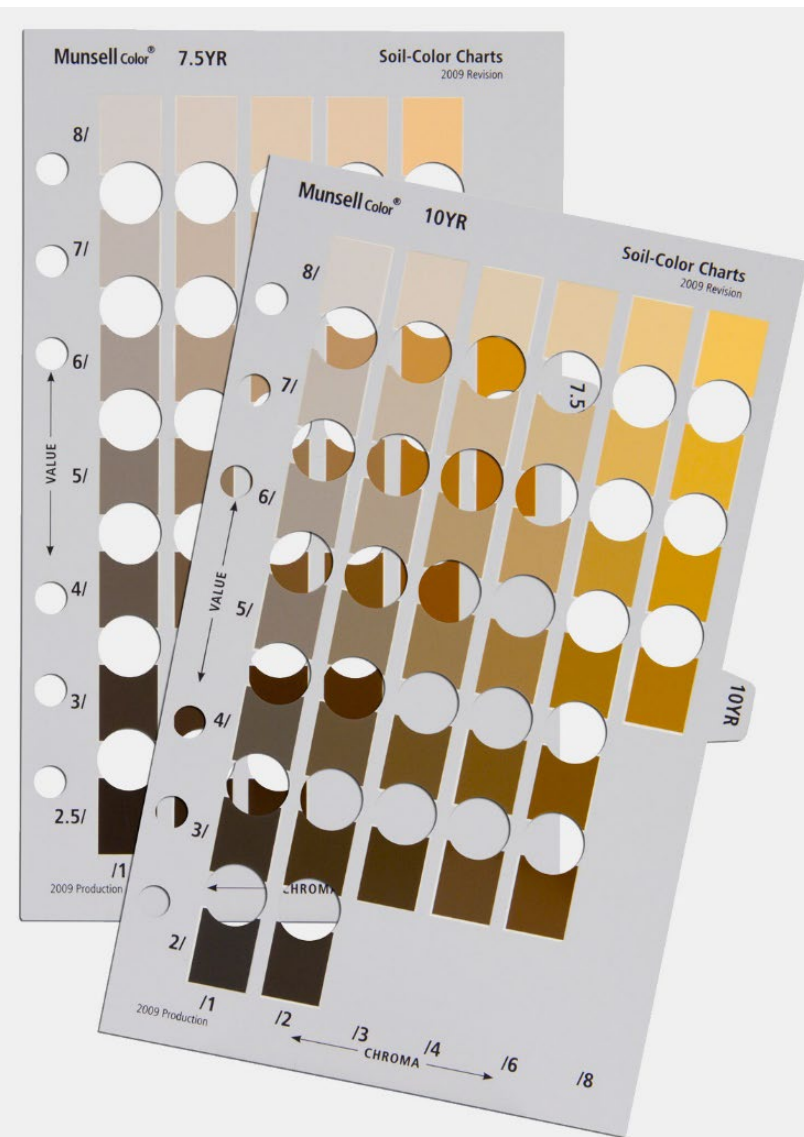


2003.3.1

1



Color (outside, inside, interior) - Munsell



Pottery Avg. thickness

Late Prehistoric	4.32
Oneota?	5.97
Mississippian/Oneota?	2.97
Mississippian?	2.79
Late Late Woodland	4.16
Late Woodland	5.27
Madison Plain	4.73
Madison?	5.79
Minotts Cord Impressed	6.08
Early Late Woodland	
Levsen	7.91
Spring Hollow Plain	4.71
Linn Ware?	6.47



© Florida Museum of Natural History

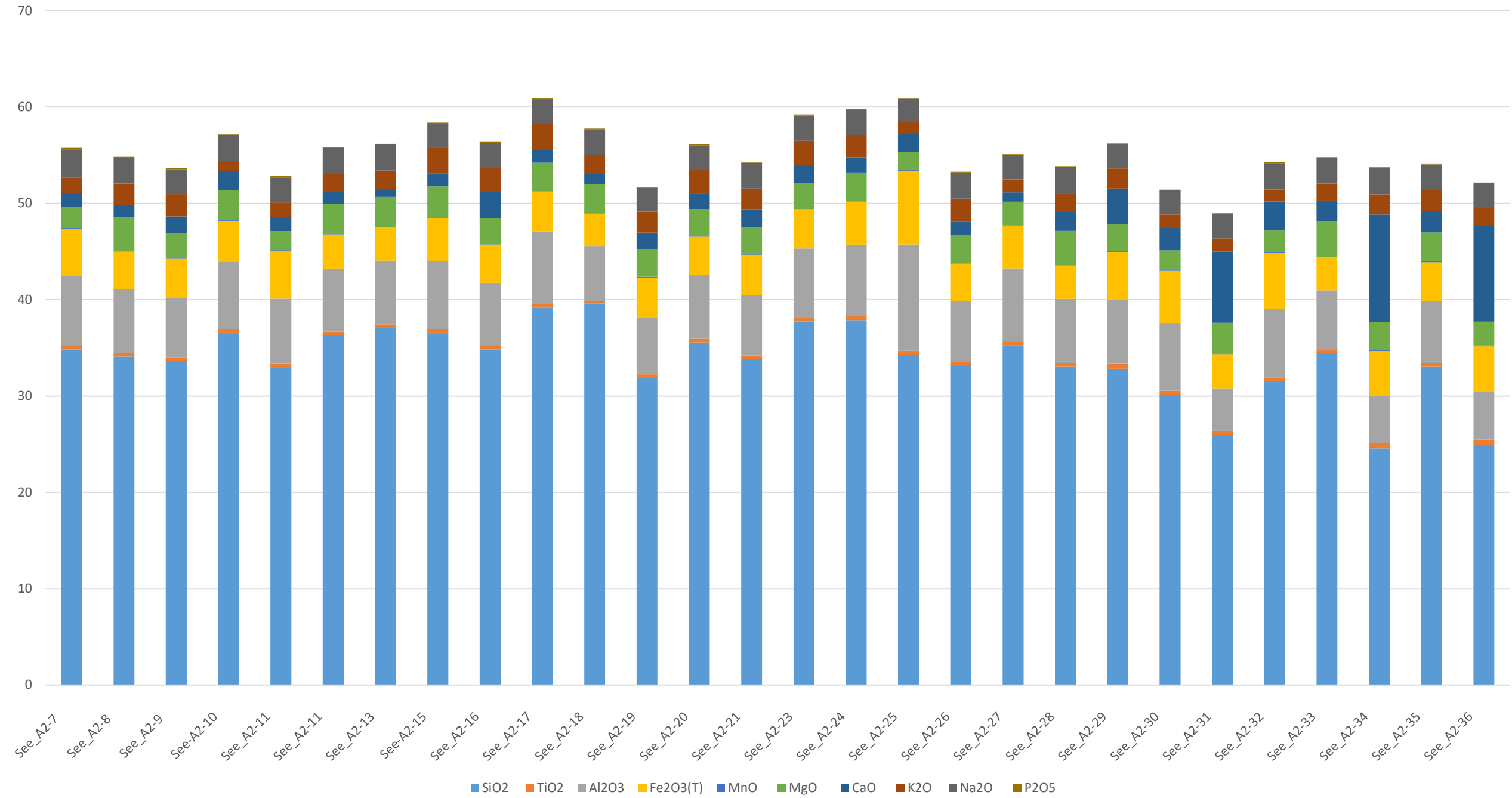


XRF



Nr	Ident	SiO2	TiO2	Al2O3	Fe2O3(T)	MnO	MgO	CaO	K2O	Na2O	P2O5	Unit	As	Unit	Ba	Co	Cr	Cu	Mo	Nb	Ni	Pb	Rb	S	Sc	Se	Sr	U	V	Y	Zn	Zr
		C	C	C	C	C	C	C	C	C	C		C		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
4	See_A2-7	34.83	0.39	7.2	4.92	0.096	2.21	1.45	1.6	2.92	0.145 %		5.187 ppm		666.19	9.942	62.786	23.963	0.749	11.089	50.952	22.085	64.679	1069.596	14.927	0.041	86.638	1.767	81.695	34.968	55.494	158.903
5	See_A2-8	34.1	0.38	6.61	3.92	0.071	3.45	1.29	2.24	2.68	0.09 %		3.324 ppm		678.803	7.611	54.542	25.944 B.D.L.		10.106	47.291	16.87	66.865	736.489	13.683 B.D.L.		104.368	1.94	73.495	21.889	73.685	140.141
6	See_A2-9	33.67	0.37	6.13	4.07	0.085	2.57	1.75	2.33	2.57	0.117 %		5.182 ppm		613.66	8.854	72.32	21.118	2.071	9.605	54.925	11.929	77.456	394.955	14.604	0.156	98.376	1.932	68.029	26.167	76.327	138.194
7	See_A2-10	36.47	0.44	7	4.29	0.045	3.13	1.97	1.1	2.69	0.051 %		3.016 ppm		636.068	9.932	74.024	42.222	1.969	8.294	32.936	10.87	35.526	431.317	15.185	0.747	72.611	1.676	90.903	14.192	36.476	155.516
8	See_A2-11	32.94	0.4	6.77	4.92	0.103	1.99	1.48	1.5	2.6	0.131 %		5.257 ppm		624.712	9.614	72.294	26.604	0.101	10.942	48.504	20.075	61.65	648.736	15.222	0.03	92.296	1.509	72.915	35.36	60.73	145.585
9	See_A2-11	36.33	0.37	6.54	3.55	0.03	3.11	1.28	1.86	2.68	0.056 %		1.498 ppm		683.832	5.6	76.357	21.412	1.627	13.363	28.214	12.277	66.785	530.632	12.832	0.088	75.191	1.641	72.199	16.535	53.552	146.894
10	See_A2-13	37.08	0.37	6.59	3.47	0.028	3.14	0.85	1.88	2.71	0.07 %		2.735 ppm		669.943	4.887	64.101	19.61	1.018	9.649	29.654	12.334	59.183	728.513	14.243	0.134	73.246	1.661	73.759	16.674	60.172	134.974
11	See_A2-15	36.47	0.45	7.08	4.51	0.088	3.16	1.34	2.64	2.53	0.115 %		2.813 ppm		655.319	8.162	61.721	42.081	1.493	11.508	54.371	14.599	79.533	450.836	14.549	0.338	91.797	1.623	78.575	24.707	88.294	143.601
12	See_A2-16	34.84	0.37	6.54	3.9	0.08	2.77	2.67	2.49	2.62	0.105 %		3.306 ppm		577.958	6.854	60.359	27.369	0.939	9.698	49.396	13.175	81.48	601.333	14.682	0.364	108.934	2.772	56.463	22.444	71.173	127.819
13	See_A2-17	39.15	0.4	7.53	4.1	0.07	2.97	1.33	2.69	2.53	0.112 %		4.577 ppm		676.28	7.575	59.348	21.459	0.665	10.05	47.658	10.688	74.606	617.984	13.77	0.491	94.128	1.206	70.032	22.408	70.736	146.671
16	See_A2-18	39.6	0.29	5.68	3.36	0.03	3.04	1.03	1.98	2.69	0.068 %		2.666 ppm		659.677	6.122	58.728	22.444	1.044	7.938	28.752	10.527	59.446	819.256	12.981	0.877	78.227	1.831	68.8	11.843	48.834	90.114
17	See_A2-19	31.87	0.38	5.9	4.16	0.08	2.78	1.8	2.17	2.46	0.07 %		3.071 ppm		640.229	10.148	65.112	31.044	1.49	12.146	53.351	14.045	72.721	634.447	13.825	0.191	91.9	2.103	72.699	22.476	72.794	140.183
18	See_A2-20	35.57	0.38	6.63	3.96	0.069	2.76	1.65	2.46	2.53	0.144 %		3.411 ppm		605.7	9.607	62.396	24.42	2.12	9.001	50.424	13.12	85.52	360.737	14.826	0.165	103.797	2.02	66.973	24.806	80.909	148.697
19	See_A2-21	33.83	0.38	6.63	4.16	0.069	2.84	1.78	2.21	2.69	0.094 %		3.411 ppm		640.014	9.607	62.396	24.42	2.12	9.001	50.424	13.12	85.52	360.737	14.826	0.165	103.797	2.02	66.973	24.806	80.909	148.697
20	See_A2-23	37.74	0.5	7.2	4.8	0.058	2.84	1.84	2.55	2.61	0.125 %		3.411 ppm		659.282	9.607	62.396	24.42	2.12	9.001	50.424	13.12	85.52	360.737	14.826	0.165	103.797	2.02	66.973	24.806	80.909	148.697
21	See_A2-24	37.88	0.4	7.2	4.8	0.058	2.84	1.84	2.55	2.61	0.125 %		3.411 ppm		659.282	9.607	62.396	24.42	2.12	9.001	50.424	13.12	85.52	360.737	14.826	0.165	103.797	2.02	66.973	24.806	80.909	148.697
22	See_A2-25	34.29	0.3	6.4	7.66	0.058	2.84	1.84	2.55	2.61	0.125 %		3.411 ppm		659.282	9.607	62.396	24.42	2.12	9.001	50.424	13.12	85.52	360.737	14.826	0.165	103.797	2.02	66.973	24.806	80.909	148.697
23	See_A2-26	33.21	0.5	7.2	3.89	0.079	2.83	1.84	2.55	2.61	0.125 %		3.411 ppm		659.282	9.607	62.396	24.42	2.12	9.001	50.424	13.12	85.52	360.737	14.826	0.165	103.797	2.02	66.973	24.806	80.909	148.697
24	See_A2-27	35.29	0.5	7.2	4.42	0.023	2.47	1.36	2.55	0.056 %		2.285 ppm		702.251	9.114	76.888	26.109		14.397	32.403	14.381	45.9	10.225		0.265	50.067	1.362	77.168	17.117	38.463	172.004	
25	See_A2-28	33.02	0.5	7.2	3.41	0.055	3.59	1.94	2.74	0.088 %		2.152 ppm		636.033	4.017	70.667	23.524		12.637	34.676	14.162	62.7	10.024		0.437	123.306	2.05	72.791	21.464	58.964	114.542	
28	See_A2-29	32.82	0.5	7.2	4.96	0.06	2.84	1.08	2.56	0.039 %		2.591 ppm		481.229	12.253	84.953	60.542		7.223	36.54	12.14		65.12		1.1	81.654	1.668	88.506	12.881	51.203	137.854	
29	See_A2-30	30.14	0.4	7.2	5.44	0.072	2.04	2.94	2.5	0.076 %		5.832 ppm		625.002	17.42	70.923	27.892		13.349	46.273	19.261		551.058	16.6	0.2	51.521	0.633	78.793	24.624	73.196	104.425	
30	See_A2-31	25.99	0.3	7.2	3.56	0.061	3.18	2.7	2.59	0.031 %		4.257 ppm		630.53	7.563	77.421	23.397		8.48	31.87	33.897		804.539	21.47		73.772	1.423	61.658	187.228			
31	See_A2-32	31.51	0.3	7.2	5.82	0.092	2.25	3.06	2.72	0.07		5.487 ppm		630.53	16.975	69.998	34.355		14.081	47.278	17.274		1353.397	16.858		59.936	0.885	97.385	24.915	68.556	95.453	
32	See_A2-33	34.43	0.5	7.2	3.46	0.032	3.69	2.07	2.68	0.00		2.365 ppm		6339	74.975	21.571			10.408	30.486	13.321		416.788	14.921		77.937	1.852	68.024	17.614	59.159	143.331	
33	See_A2-34	24.56	0.5	7.2	4.63	0.078	2.96	11.0	2.77	0.00		2.732 ppm		14.272	78.462	30.405			10.095	43.957	12.503		402.81	24.605		91.866	1.18	39.301	23.868	58.963	116.144	
34	See_A2-35	33.03	0.5	7.2	4.08	0.093	2.99	2.07	2.66			3.601 ppm		8.739	63.584	25.905			7.801	55.509	13.8		696.948	13.951		100.014	1.014	61.23	23.882	68.901	134.778	
35	See_A2-36	24.94	0.5	7.2	4.66	0.084	2.48	0.86	2.61			13.394	74.946	32.176		13.394	74.946	32.176		10.484	45.363	13.8		86.84	1.674	41.681	24.768	58.235	112.62			
36	See_B-2	31.61	0.3	7.2	5.3	0.065	1.91	1.23	2.42			13.412	73.767	22.702		13.412	73.767	22.702		10.481	38.017					717	2.503	79.19	22.378	57.663	99.187	
37	See_B-3	32.4	0.5	7.2	5.14	0.059	2.16	1.12	2.53			17.863	75.599	32.333		17.863	75.599	32.333		13.989	44.425					56	1.265	91.066	23.629	67.189	103.773	
39	See_B-4	30.47	0.3	7.2	6.78	0.049	1.8	1.27	2.37			6.426 ppm		6313	69.743	23.344			9.204	49.897			52.857	356.698	11.791	0.11	2.387	87.497	23.048	62.342	90.015	
40	See_B2-3	33.3	0.5	7.2	3.92	0.037	2.8	2.51	2.62	0.00		1.409 ppm		696.61	66.271	27.528			13.017	37.093			115.941	593.735	13.312	0.511	3.137	59.138	17.856	57.163	111.988	
41	SeeB2-7	33.98	0.3	7.2	3.15	0.023	1.61	2.0	2.05	0.00		3.396 ppm		740.2	49.991	24.908			9.945	32.556			61.981	734.018	11.727	0.364	2.622	103.818	12.927	56.086	100.219	
42	See_B2-8	38.21	0.0	7.2			1.69	1.83		0.045 %		4.134 ppm		757.64	68.358	29.763			9.776	29.913			65.286	542.122	12.117	0.102	1.985	112.689	13.699	66.153	126.052	
43	See_B2-9	39.21	0.5	7.2			1.21	1.34		0.07 %		2.853 ppm		739.605	74.351	25.141			11.366	34.4			48.51	430.657	11.263	0.24	1.713	55.046	15.991	46.484	151.992	
44	SeeB2-10	36.28	0.34	7.2			2.7	1.31	1.26	0.053 %		2.114 ppm		829.859	66.877	18.241			8.172	26.2			51.148	878.489	9.386	0.241	2.776	53.562	14.951	45.137	141.581	
45	See_T-1	31.54	0.45	6.62	4.29	0.089	2.61	2.61	2.04	2.66	0.071 %		3.062 ppm		538.003	10.322	64.354	29.884	3.402	13.502	51.34	13.688	72.199	364.554	17.007	0.257	97.045	2.12	85.607	23.496	70.161	128.121
46	See_T-4	31.2	0.29	5.51	4.27	0.084	2.61	4.23	1.3	2.58	0.11 %		4.328 ppm		410.816	10.23	64.808	24.567	2.02	9.945	33.315	17.004	37.272	417.406	17.009	0.322	58.126	1.574	57.833	24.786	56.838	104.158
47	See_T-6	34.48	0.4	7.61	10.23	0.055	1.63	1.51	1.22	2.52	0.037 %		24.073 ppm		625.557	53.563	88.072	26.271	4.574	9.449	57.775	109.599	43.159	748.841	14.396	0.029	60.004					

Seeberger A2-Series



Leading to...

- Chemical and physical analyses
 - Between identified groups within the Seeberger Collection
 - Eastern Iowa's natural resources
 - Compare to other archaeological findings
 - Experimental Archaeological findings
- Geologic and Geoarchaeological interpretations

Thank you😊 We are excited to see where these data...

