SUPPLEMENTAL MATERIALS

Supplemental Table 1. Radiocarbon data and sample metadata from the Lamoka Lake site. Samples with strong resemblance to a particular taxonomic group or sub-group, but which lacked sufficient criteria for secure identification are recorded with the prefix '*cf*'.

Project sample ID	NYSM Cat no.	Lab sample ID	Sample material	Technique	Year excavated	Context	14C age, years BP	±	δ13C ‰	Reference
	unknown; same sample as C-288 and M-26	C-367	charcoal	solid-carbon	1920s	Charcoal from earliest occupation level 5' below midden surface (referred to as Lamoka III)	5383	250		Arnold and Libby 1951: 114
	unknown; same sample as C-367 and M-26	C-288	charcoal	solid-carbon		Charcoal from hearth in subsoil under 5 feet of undisturbed refuse. Sample contaminated with rootlets	4395	350		Arnold and Libby 1951: 114
				solid-carbon			4344	350		
	unknown; same sample as C-367 and C-288	M-26	charcoal	gas-proportional counting	1920s	Charcoal lumps from under 5 ft of un-disturbed refuse, same sample as those from Chicago	3650	700		Crane 1956: 667
				gas-proportional counting			4300	700		
				gas-proportional counting			5830	700		
	unknown	M-195	charcoal	gas-proportional counting	1941	From a hearth situated in sand and gravel under 3 to 4 ft of refuse midden in the north field of the Lamoka Lake site. Collected by A. F. Barrott in 1941 and submitted by W. A. Ritchie	4530	400		Crane 1956:668

	A2008-23	M-911	charcoal	gas-proportional counting	1958	Undisturbed hearths from a portion of the north field where the mantle was thinnest and where much of the intrusive goods occurred; Wood charcoal, mostly carbonized bark, from hearth 1 in test trench 2. The hearth was found at base of a narrow subsoil pit, 8 in. wide and 8 in. deep	4480	300		Crane and Griffin 1961:117
	A2008-23	M-912	charcoal	gas-proportional counting	1958	Undisturbed hearths from a portion of the north field where the mantle was thinnest and where much of the intrusive goods occurred. Same sample as M-911*	4410	250		Crane and Griffin 1960: 38
	42388-A	Y-1279	charcoal	gas-proportional counting	1962	Charcoal from hearth ca. 38 cm diam. and 15 cm thick, enclosed in subsoil ca. 76 cm below present surface; base of occupational deposit	4500	80		Stuiver 1969: 608
	42388-B	Y-1280	charcoal	gas-proportional counting	1962	Charcoal from hearth ca. 38 cm diam, and 30 cm thick, enclosed in subsoil, ca. 76 cm below present surface; base of occupational deposit (Ritchie, 1965, p. 43).	4490	80		Stuiver 1969: 608
3-Lamoka11-RY1-5	42388-K	UGAMS-59361	Deciduous Quercus	AMS	1962	Square B4, "hearth along W wall of house, 9" into subsoil, 15x15"	4480	25	-26.1	This study
4-Lamoka11-RY22-26	42388-K	UGAMS-59362	Deciduous Quercus	AMS	1962	Square B4, "hearth along W wall of house, 9" into subsoil, 15x15"	4400	25	-27.16	This study
5-Lamoka15-RY1-5	42388-A	UGAMS-59363	Deciduous Quercus,	AMS	1962	Square D4, "hearth marked X on map"	4360	25	-28.06	This study

			cf. 'red oak' group							
5-Lamoka15-RY1-5	42388-A	UGAMS-59363r	Deciduous Quercus, cf. 'red oak' group	AMS	1962	Square D4, "hearth marked X on map"	4329	24		This study
6-Lamoka15-RY17-21	42388-A	UGAMS-59364	Deciduous Quercus, cf. 'red oak' group	AMS	1962	Square D4, "hearth marked X on map"	4450	30	-26.06	This study
6-Lamoka15-RY17-21	42388-A	UGAMS-59364r	Deciduous Quercus, cf. 'red oak' group	AMS	1962	Square D4, "hearth marked X on map"	4389	22		This study
Lamoka Lake_6	42388-A	UGAMS-60185	bark	AMS	1962	Square D4, "hearth marked X on map"	4400	25	-27.58	This study
Lamoka Lake_4	42388-B	UGAMS-60186	bark	AMS	1962	"hearth completely enclosed in subsoil"	4480	25	-26.22	This study
Lamoka Lake_9	42388-D	UGAMS-60187	Carya sp., nutshell	AMS	1962	House 1, "small hearth in wall line, 8 in diameter and 8 in deep, much gray ash and was covered in 2 in of soil"	4310	25	-22.94	This study
Lamoka Lake_8	42388-D	UGAMS-60188	Carya sp., pericarp of nutlet	AMS	1962	House 1, "small hearth in wall line, 8 in diameter and 8 in deep, much gray ash and was covered in 2 in of soil"	4320	25	-24.28	This study
Lamoka Lake_10	42388-D	UGAMS-60189	bark	AMS	1962	House 1, "small hearth in wall line, 8 in diameter and 8 in deep, much gray ash and was covered in 2 in of soil"	4410	25	-27.8	This study
Lamoka Lake_16	A2008-23	UGAMS-53051	Quercus sp., acorn	AMS	1958	Trench 2, Hearth 3	4374	23	-22.7	This study
Lamoka Lake_16b	A2008-23	UGAMS-60190	Quercus sp.	AMS	1958	Trench 2, Hearth 3	4360	25	-23.53	This study
Lamoka Lake_14	42008-20	UGAMS-60191	bark	AMS	1958	Trench 2, Hearth 2	4420	25	-26.99	This study

Lamoka Lake_17	A2008-22	UGAMS-53052	Quercus sp., acorn	AMS	1958	Test trench 2, depth 19-21"; "under ash and refuse deposit, in ash and charred material saved for dating. at base of refuse layer."	4352	23	-24.9	This study

Supplemental Table 2. Radiocarbon data from the Scaccia site.

Sample ID	NYSM Cat no.	Lab ID	Sample material	Technique	Year excavated	Context	14C age years, BP	±	δ13C	Reference
	unknown	Y-1654	charcoal	gas-proportional counting			2820	60	-25	Ritchie 1969
	41492	A-0541	residue	AMS			2905	35	-25.8	Hart and Brumbach 2005
	Cda17.3-1-F	A-2007	residue	AMS			2760	15	-25	Tache and Hart 2013
1-Scaccia5-RY1-5	none	UGAMS-59359	Fraxinus sp., charcoal; small friable fragment from indeterminate location on the stem	AMS	1965	Feature 44	2870	25	-24.61	this study
2-Scaccia5-RY31-35	none	UGAMS-59360	Fraxinus sp., charcoal; small friable fragment from indeterminate location on the stem	AMS	1965	Feature 44	2890	25	-25.31	this study
Scaccia_1	71494	UGAMS-60182	seed; indeterminate pericarp fragments	AMS	1965	Feature 11	2670	25	-24.28	this study
Scaccia_6	72637	UGAMS-60183	Ulmus sp., charcoal; small fragments from indeterminate location on the stem	AMS	1965	Feature 19	2720	25	-25.8	this study
Scaccia_7	72639	UGAMS-60184	Carya sp., charcoal; small fragments from indeterminate location on the stem	AMS	1965	Feature 17	2800	20	-25.81	this study

Supplemental Table 3. OxCal runfile for Lamoka Lake

```
Options()
 {
  Resolution=1;
  Curve="intcal20.14c";
  ConvergenceData=TRUE;
  kIterations=3000;
 };
 Plot()
 {
  Outlier_Model("Charcoal",Exp(1,-10,0),U(0,3),"t");
  Outlier_Model("SSimple",N(0,2),0,"s");
  Outlier_Model("General",T(5),U(0,4),"t");
  Label("pre-AMS data:");
  Sequence()
  {
   Boundary("Start Lamoka Lake pre-AMS dates");
   Phase("Previous Pre-AMS Lamoka Dates")
   {
    R_Date("C-367 SC charcoal",5383,250)
    {
     Outlier("Charcoal",1);
    };
    R_Date("C-288 SC charcoal",4369,200)
    {
     Outlier("Charcoal",1);
    };
    R_Date("M-26 GP charcoal",4440,400)
    {
     Outlier("Charcoal",1);
    };
    R_Date("M-195 GP charcoal",4530,400)
    {
     Outlier("Charcoal",1);
    };
    R_Date("M-911 GP charcoal",4480,300)
    {
     Outlier("Charcoal",1);
    };
    R_Date("M-912 GP charcoal",4410,250)
    {
     Outlier("Charcoal",1);
    };
    R_Date("Y-1279 GP charcoal",4500,80)
    {
     Outlier("Charcoal",1);
    };
    R_Date("Y-1280 GP charcoal",4490,80)
    {
     Outlier("Charcoal",1);
```

```
    };
    Date ("Date Estimate Lamoka Lake pre-AMS data");
    Interval("Interval Lamoka Lake pre-AMS data");
   };
   Boundary("End Lamoka Lake pre-AMS dates");
  };
  Line();
  Label("AMS Data:");
  D_Sequence("Lamoka11")
  {
   Outlier("General",0.05);
   R_Date("RY1001-1005 UGAMS-59361",4480,25)
   {
    Outlier("SSimple",0.05);
   };
   Gap(21);
   R_Date("RY1022-1026 UGAMS-59362",4400,25)
   {
    Outlier("SSimple",0.05);
   };
   Gap(2);
   Date("Lamoka11 Bark Use TPQ");
  };
  //Note Lamoka11 from plan is from intersection two structures (E &
G) and so, given it appears a little older, could be from an older of
the two structures by way of explanation
  D_Sequence("Lamoka15")
  {
   Outlier("General",0.05);
   R_Combine("RY1001-1005")
   {
    Outlier("SSimple",0.05);
    R_Date("RY1001-1005 UGAMS-59363",4360,25)
    {
     Outlier("SSimple",0.05);
    };
    R_Date("RY1001-1005 UGAMS-59363r",4329,24)
    {
     Outlier("SSimple",0.05);
    };
   };
   Gap(16);
   R_Combine("RY1017-1021")
   {
    Outlier("SSimple",0.05);
    R_Date("RY1017-1021 UGAMS-59364",4450,30)
    {
     Outlier("SSimple",0.05);
    };
    R_Date("RY1017-1021 UGAMS-59364r",4389,22)
    {
     Outlier("SSimple",0.05);
```

```
    };
   };
   Gap(2);
   Date("Lamoka15 Bark Use TPQ");
  };
  //Lamoka15 from the plan is not from a structure but in area of
hearths and pits and hence we might suspect was firewood or from other
(non-structure) timber use from during and perhaps even late in the
Lamoka settlement Phase - this could explain a relatively later date
for the use of this timber
  Sequence()
  {
   Boundary("Start Lamoka Lake AMS");
   Phase ("Lamoka Lake AMS")
   {
    After("WM Bark Lamoka11 as construction, perhaps early phase")
    {
     Date("=Lamoka11 Bark Use TPQ");
    };
    After("WM Bark Lamoka15 as likely use timber during settlement
Phase")
    {
     Date("=Lamoka15 Bark Use TPQ");
    };
    R_Date("UGAMS-60185, bark",4400,25)
    {
     Outlier("Charcoal",1);
    };
    //unknown if inner or outer bark dated and hence TPQ
    R_Date("UGAMS-60186, bark",4480,25)
    {
     Outlier("Charcoal",1);
    };
    //unknown if inner or outer bark dated and hence TPQ
    R_Date("UGAMS-60187, nutshell",4310,25)
    {
     Outlier("General",0.05);
    };
    R_Date("UGAMS-60188, nutshell",4320,25)
    {
     Outlier("General",0.05);
    };
    R_Date("UGAMS-60189, bark",4410,25)
    {
     Outlier("Charcoal",1);
    };
    //unknown if inner or outer bark dated and hence TPQ
    R_Date("UGAMS-60190, nutshell",4360,25)
    {
     Outlier("General",0.05);
    };
    R_Date("UGAMS-60191, bark",4420,25)
```

```
    {
     Outlier("Charcoal",1);
    };
    //unknown if inner or outer bark dated and hence TPQ
    R_Date("UGAMS-53051, acorn",4374,23)
    {
     Outlier("General",0.05);
    };
    R_Date("UGAMS-53052, acorn",4352,23)
    {
     Outlier("General",0.05);
    };
    Date("Date Estimate Lamoka Lake AMS");
    Interval("Interval Lamoka Lake AMS");
   };
   Boundary("End Lamoka Lake");
  };
 };
```

Supplemental Table 4. OxCal runfile for Scaccia

```
Options()
 {
  Resolution=1;
  Curve="intcal20.14c";
  ConvergenceData=TRUE;
  kIterations=3000;
 };
 Plot()
 {
  Outlier_Model("General",T(5),U(0,4),"t");
  Outlier_Model("Charcoal",Exp(1,-10,0),U(0,3),"t");
  Outlier_Model("SSimple",N(0,2),0,"s");
  Sequence()
  {
   Boundary("Start Scaccia");
   Phase ("Scaccia")
   {
    D_Sequence("Scaccia")
    {
     Outlier("General",0.05);
     R_Date("Scaccia5 RY1-5 UGAMS-59359",2870,25)
     {
      Outlier("SSimple",0.05);
     };
     Gap(30);
     R_Date("Scaccia5 RY31-35, UGAMS-59360",2890,25)
     {
      Outlier("SSimple",0.05);
     };
     Gap(2);
     Date("=Scaccia5 Bark");
    };
    R_Date("UGAMS-60183, charcoal",2720,25)
    {
     Outlier("Charcoal",1);
    };
    R_Date("UGAMS-60184, charcoal",2800,20)
    {
     Outlier("Charcoal",1);
    };
    R_Date("Y-1651, charcoal",2820,60)
    {
     Outlier("Charcoal",1);
    };
    R_Date("UGAMS-60182, seed",2670,25)
    {
     Outlier("General",0.05);
    };
    R_Date("ISGS-A0541, residue",2905,35)
```

```
    {
     Outlier("General",0.05);
    };
    R_Date("ISGS-A2007, residue",2760,15)
    {
     Outlier("General",0.05);
    };
    Interval("Interval Scaccia");
    Date("Date Estimate Scaccia");
   };
   Boundary("End Scaccia");
  };
 };
```