

## Supplementary Content 2

AMS  $^{14}\text{C}$  datings from previously published datasets, and their calibrated ages using Calib6.01 (Reimer *et al.*, 2009).

For datings that show normal probability distributions, the mid-point of the  $2\sigma$  age range is used to calculate the most probable age. However, for datings that have a skewed probability distribution, the mid-point of the  $1\sigma$  age range is used, and these datings are denoted by \*. For all datings, the  $2\sigma$  error is shown in the table. In italics are datings which were rejected. For datings with approx denoted, only an approximate (not exact) radiocarbon age was given in the original publication.

AMS $^{14}\text{C}$ age (yrs BP)	1 $\sigma$ error (yrs)	Calibrated age (ka BP)	1 $\sigma$ range (ka BP)	2 $\sigma$ range (ka BP)
<i>Alm (1993)</i>				
10430	140	12.22	12.448-12.115(0.81) 12.532-12.451(0.19)	12.621-11.82
11640	230	13.52	13.735-13.295	14.001-13.086
12750	125	15.20	15.529-14.873	15.935-14.47(0.99) 14.347-14.247(0.01)
14100	220	17.20	17.458-16.934	17.764-16.788
14730	165	18.00	18.062-17.656(0.82) 18.446-18.332(0.18)	18.526-17.475
15260	130	18.40	18.675-18.485(0.71) 18.276-18.142(0.29)	18.772-18.427(0.61) 18.372-18.031(0.39)
16010	140	19.15	19.173-18.98(0.53) 19.384-19.21(0.47)	19.429-18.863
16210	140	19.24	19.479-19.249(0.69) 19.095-18.981(0.22) 19.54-19.492(0.09)	19.583-18.898(0.98) 19.777-19.734(0.02)
16820	250	19.98	20.26-19.797(0.80) 19.711-19.588(0.20)	20.533-19.42(1.00) 20.819-20.796(0.00)
17410	170	20.73	21.028-20.422	21.299-20.28
17490	150	20.81	21.099-20.515	21.329-20.363
17590	130	20.93	21.265-20.874(0.69)	21.392-20.47 20.728-20.549(0.31)
17740	270	21.11	21.479-20.864(0.81) 20.721-20.551(0.19)	21.888-20.338
17790	130	21.28	21.48-21.07	21.541-20.791(0.92) 20.722-20.55(0.08)
17800	260	21.21	21.531-20.882(0.86) 20.702-20.559(0.14)	21.988-20.423
18000	170	21.51	21.773-21.246	22.141-20.975
18060	180	21.61	21.888-21.332	22.206-21.123
18820	200	22.40	22.66-22.148(0.94) 22.894-22.828(0.06)	23.306-21.981(0.99) 21.919-21.877(0.01)
19650	180	23.55	23.812-23.284	23.954-22.898(0.96)

AMS <sup>14</sup> C age (yrs BP)	1 $\sigma$ error (yrs)	Calibrated age (ka BP)	1 $\sigma$ range (ka BP)	2 $\sigma$ range (ka BP)
<i>McCabe and Clark (1998)</i>				
13140	95	15.11	15.259-14.883(0.87) 15.461-15.339(0.13)	15.659-14.557(0.99) 15.823-15.777(0.01)
14185	115	16.89	16.999-16.773	17.164-16.655
14355	105	17.00	17.134-16.873	17.257-16.781(0.94) 17.416-17.286(0.06)
17150	160	19.91	20.133-19.799(0.73)	20.292-19.524(1.00) 19.71-19.588(0.27)
<i>Atkinson et al. (1987)</i>				
18370	334	21.90	22.264-21.526	22.675-21.059(0.99) 22.932-22.786(0.01)
14470	330	17.57	17.975-17.166	18.175-16.914(0.90) 18.502-18.23(0.10)
13490	375	16.17	16.942-15.841(0.92) 15.774-15.648(0.08)	17.26-15.083(0.99) 17.411-17.285(0.01)
13405	170	16.47	16.819-16.118	16.907-15.493
12940	250	15.65	16.219-15.088	16.687-14.545
12560	170	14.65	15.083-14.467(0.88) 14.347-14.243(0.12)	15.258-14.032(0.98) 15.464-15.339(0.02)
12556	230	14.66	15.09-14.222	15.658-13.889(0.99) 15.843-15.764(0.01)
12165	160	14.30	14.243-13.784(0.92) 14.467-14.421(0.05) 14.386-14.347(0.04)	14.905-13.704
11700	200	13.56	13.753-13.367	13.956-13.176
18370	334	21.90	22.264-21.526	22.675-21.059(0.99) 22.932-22.786(0.01)
14470	330	17.57	17.975-17.166	18.175-16.914(0.90) 18.502-18.23(0.10)
13490	375	16.17	16.942-15.841(0.92) 15.774-15.648(0.08)	17.26-15.083(0.99) 17.411-17.285(0.01)
13405	170	16.47	16.819-16.118	16.907-15.493
12940	250	15.65	16.219-15.088	16.687-14.545
12560	170	14.65	15.083-14.467(0.88) 14.347-14.243(0.12)	15.258-14.032(0.98) 15.464-15.339(0.02)
12556	230	14.66	15.09-14.222	15.658-13.889(0.99) 15.843-15.764(0.01)
12165	160	14.30	14.243-13.784(0.92) 14.467-14.421(0.05) 14.386-14.347(0.04)	14.905-13.704
11700	200	13.56	13.753-13.367	13.956-13.176
<i>Bowen et al. (2002)</i>				
16760	130	19.91	20.136-19.819(0.76) 19.697-19.596(0.24)	20.269-19.554

AMS <sup>14</sup> C age (yrs BP)	1 $\sigma$ error (yrs)	Calibrated age (ka BP)	1 $\sigma$ range (ka BP)	2 $\sigma$ range (ka BP)
<i>Marks (2002)</i>				
18400 (approx)		21.93		
15200 (approx)		18.38		
14060	220	17.24	17.417-16.902	17.727-16.756
13800	270	16.78	17.229-16.57	17.651-15.902
<i>Ivy Ochs et al. (2006)</i>				
15400	470	18.50	18.965-18.012(0.95) 19.222-19.152(0.05)	19.475-17.515(1.00) 19.525-19.513(0.00)
13980	240	17.18	17.257-16.826(0.86) 17.401-17.299(0.14)	17.73-16.63
13250	210	16.00	16.651-15.831(0.88)	16.788-15.218
<i>Giraudi and Frezzotti (1997)</i>				
17940	170	21.40	21.655-21.149	22.071-20.877(0.98) 20.673-20.577(0.02)
17840	200	21.19	21.549-20.969(0.96) 20.642-20.602(0.04)	21.875-20.497
15960	160	19.12	19.322-18.939(0.99) 19.361-19.357(0.01)	19.43-18.815
14580	800	17.75	18.616-16.875	19.415-15.442(1.00) 15.333-15.275(0.00)
14180	260	17.27	17.574-16.975	17.904-16.806
12850	200	15.50	15.953-14.93(1.00) 16.024-16.018(0.00)	16.492-14.509(0.99) 14.311-14.266(0.01)
11760	160	13.60	13.763-13.439	13.927-13.295
13000 (approx.)		15.66	16.145-15.179	16.635-14.968
<i>Benson (1996)</i>				
13600	100	16.76	16.879-16.643	16.984-16.431
<i>Dyke et al. (2002)</i>				
<i>Northwestern Laurentide</i>				
16200	150	19.24	19.476-19.238(0.68) 19.124-18.971(0.29) 19.528-19.51(0.03)	19.583-18.889(0.98) 19.78-19.731(0.02)
14440	180	17.52	17.824-17.368(0.86) 17.335-17.245(0.14)	18.009-17.035
13000 (approx)		15.66		
<i>Southwestern Laurentide</i>				
16500 (approx)		19.65		
14000(approx)		17.18		

AMS <sup>14</sup> C age (yrs BP)	1 $\sigma$ error (yrs)	Calibrated age (ka BP)	1 $\sigma$ range (ka BP)	2 $\sigma$ range (ka BP)
<i>Southern Laurentide</i>				
18500 (approx)		22.05		
17500 (approx)		20.83		
16000 (approx)		19.18		
15500 (approx)		18.72		
14000 (approx)		17.18		
<i>Southeastern-Appalachian margin</i>				
18300 (approx)		21.83		
17050	155	20.23	20.445-20.012	20.564-19.806(0.91) 20.951-20.694(0.07) 19.692-19.594(0.03)
14010	90	17.04	17.178-16.905	17.435-16.824
15600 (approx)		18.76		