For the GSA Data Repository
(Yu, McAndrews and Eicher: Mid-Holocene dry climate & atmospheric circulation)

Appendix 1.
Radiocarbon (^{14}C) dates from Crawford Lake.

Sample Depth (cm)	Material Dated	Carbon (mg)	Lab Number*	^{14}C Date (BP ± 1 SD)
Core DC				
92-97	Organic-rich marl (bulk date)	1059.4	BGS 1741	2130 ± 140
130-135	Organic-rich marl (bulk date)	1100.1	BGS 1742	3540 ± 150
345-347	*Larix* needles (AMS date)	0.39	CAMS 16062	9620 ± 60
355-357	*Larix* needles, wood fragments, charcoal fragments, Compositae seed (AMS date)	0.22	CAMS 16061	9670 ± 70
Core BC				
158-160	*Thuja* woody peat (bulk date)	1876.8	BGS 1744	1900 ± 130
195-203	Wood and twigs (bulk date)	-	WAT 2887	5660 ± 120

* BGS: Brock University - Radiocarbon Laboratory, Canada; CAMS: Center for Accelerator Mass Spectrometry, Lawrence Livermore National Laboratory, USA; WAT: University of Waterloo - Environmental Isotope Laboratory, Canada.

Appendix 2 (Yu et al., G13459)
Stable isotope measurements
from Crawford Lake core SC.

Depth (cm)	d18O (per mil V-PDB)	d13C	
0	-9.003	-6.037	
50	-9.573	-5.309	
60	-10.518	-5.214	
70	-11.248	-4.600	
80	-10.337	-6.906	
90	-11.132	-6.735	
100	-10.667	-7.835	
110	-11.773	-6.940	
120	-10.505	-5.780	
130	-10.119	-6.192	
140	-9.698	-4.893	
150	-11.207	-6.903	
160	-10.233	-6.355	
170	-11.199	-6.477	
180	-11.410	-5.403	
190	-11.188	-6.369	
200	-10.510	-6.712	
210	-9.703	-6.259	
220	-9.964	-6.625	
230	-9.927	-6.249	
240	-9.440	-6.683	
250	-9.000	-6.905	
260	-8.916	-6.660	
270	-9.245	-6.594	
280	-8.808	-5.688	
290	-9.019	-5.768	
300	-8.769	-4.686	
310	-8.646	-4.876	
320	-8.758	-4.188	
330	-8.639	-4.939	
340	-9.312	-4.313	
342	-9.566	-4.091	
344	-10.138	-4.514	
346	-9.554	-4.951	
348	-9.573	-5.665	
349	-9.599	-5.637	
350	-9.424	-5.841	
351	-10.519	-5.534	
352	-10.832	-5.197	
354	-10.715	-4.987	
358	-11.041	-4.332	
360	-10.445	-3.499	
362	-10.095	-3.729	
364	-10.861	-3.830	
366	-10.094	-4.278	
368	-10.018	-4.253	
370	-9.896	-4.447	
372	-9.414	-2.824	
375	-9.638	-3.352	
376	-9.347	-2.865	
378	-9.878	-1.768	
380	-5.897	+1.333	(detrital dolomite signal)