

Supplementary Material S3 – C/N Ratio

C/N ratios are classified as either autochthonous (C/N of 3-9), allochthonous (C/N of >20), or a mix of the two (C/N between 10 and 20) (Meyers and Lallier- Vergès, 1999). Table 35.1 Summarizes the C/N ratio results by lake. Figure S3.1 illustrates the lakes in the allochthonous and mixed classifications and figure S3.2 illustrates the lakes in the autochthonous classification.

Table S3.1. C/N ratio results by lake

Lake	1980-2010 (Modern) C/N Ratio	1830-1860 (Historic) C/N Ratio	Change b/w Historical and Modern	Lowest C/N Ratio	Highest C/N Ratio	Range of C/N Ratios	Classification	Classification Change
Dog	36	57	-37%	23	62	39	Allochthonous	
Katherine	7	9	-18%	7	9	2	Autochthonous	
Long	3	9	-69%	3	3	0	Autochthonous	
Clear	6	4	60%	3	8	5	Autochthonous	
Quamichan	8	9	-5%	8	9	1	Autochthonous	
Antler	7	7	-11%	6	9	3	Mixed	
Babine	9	9	7%	9	11	2	Mixed	Yes
Crandell	12	16	-23%	14	17	3	Mixed	
Kennedy	16	19	-14%	13	20	7	Mixed	
Little Tawayik	10	13	-22%	9	13	4	Mixed	Yes
Marion	9	13	-29%	8	15	7	Mixed	Yes
McPhee	17	7	155%	6	17	11	Mixed	Yes
Moon	9	12	-21%	7	12	5	Mixed	Yes
Muriel	15	9	58%	8	23	15	Mixed	Yes
Roe	12	11	5%	10	14	4	Mixed	
Shady	14	15	-6%	13	17	4	Mixed	
South	16	18	-13%	14	18	4	Mixed	
Stowell	13	12	10%	12	13	1	Mixed	

Figure S3.1. C/N ratios of lakes in the allochthonous and mixed classifications

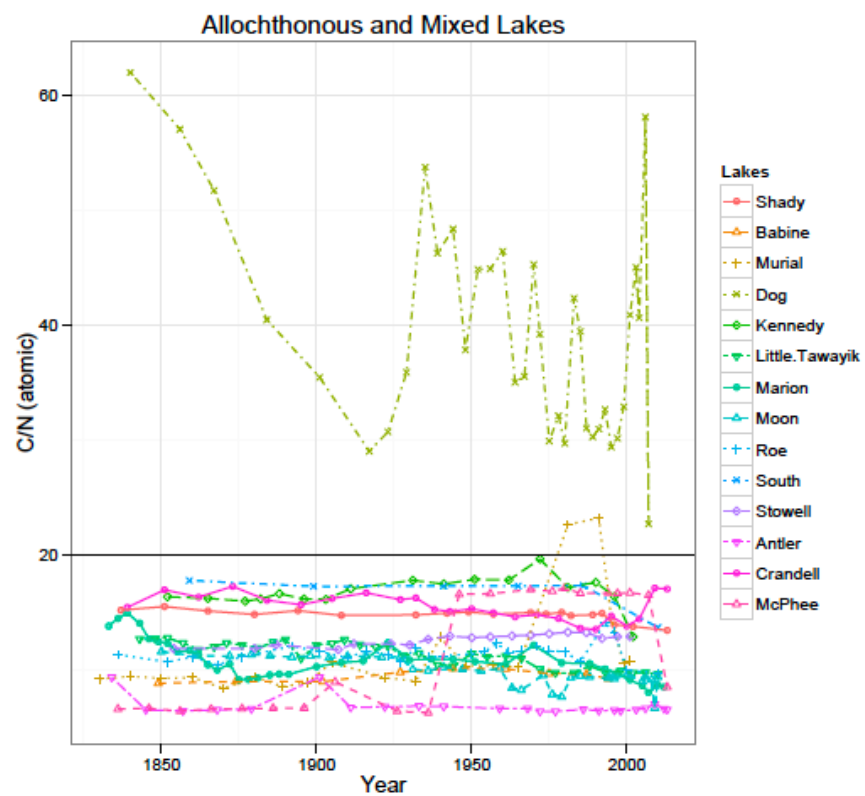
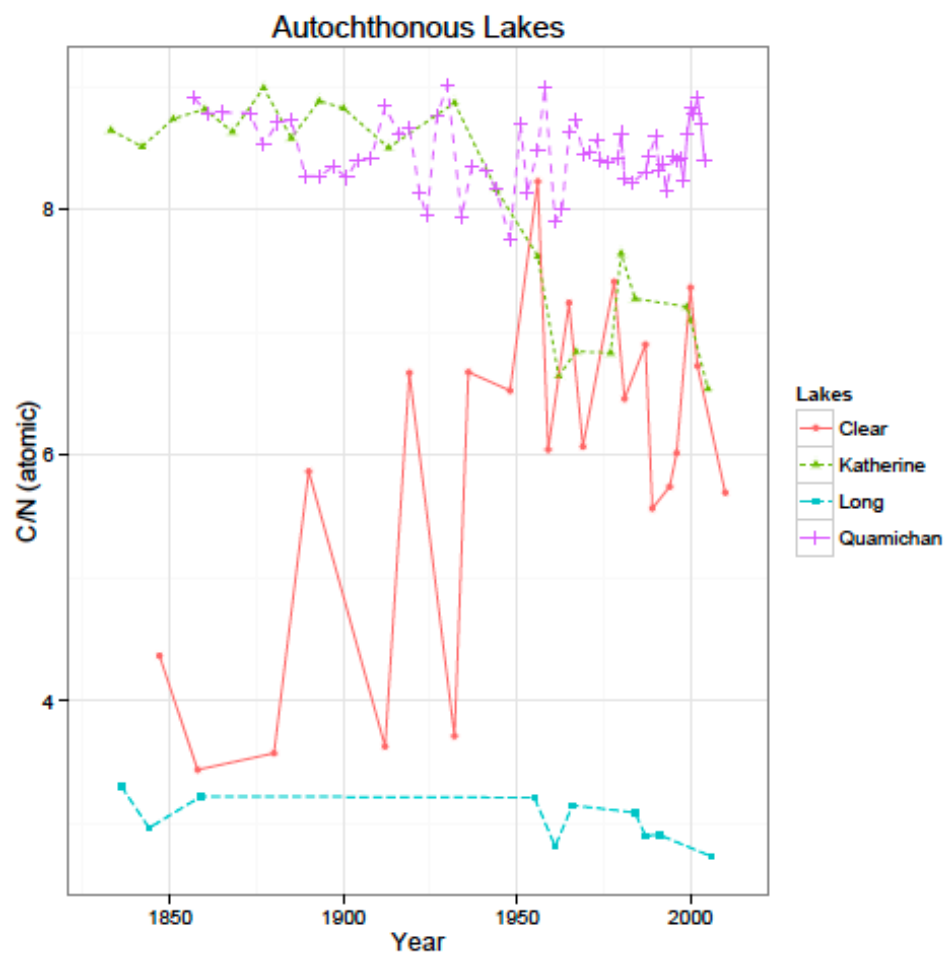


Figure S3.2. C/N ratios of lakes in the autochthonous classification



References

Meyers, P.A. and Lallier-Vergès, E. (1999) Lacustrine Sedimentary Organic Matter Records of Late Quaternary Paleoclimates. *Journal of Paleolimnology*, 21, 345-372.