supplementary data (Holtvoeth et al., Biomarkers in Lake Ohrid)

all compounds quantified in total lipid extracts from sites Lz1120 and Co1202
given as percentages of the total of quantified lipids ($\%_{lipids}$)

core	**Lz1120**	**Lz1120**	**Lz1120**	**Lz1120**	**Lz1120**	**Lz1120**	**Co1202**	**Co1202**	**Co1202**
sample	**1**	**399**	**483**	**505**	**517**	**643**	**246**	**248**	**252**
age (cal. ka BP)	-0.050	5.330	7.530	8.167	8.526	18.900	7.723	7.797	7.945
TOC (%)	2.0	2.1	2.0	1.7	2.2	0.6	1.6	0.6	0.8
N_{tot} (%)	0.3	0.2	0.2	0.2	0.3	0.1	0.2	0.1	0.1
C_{org}/N_{tot}	9	12	10	8	10	6	9	6	7
S_{tot} (%)	0.09	0.09	0.07	0.07	0.07	0.05	0.15	0.13	0.13
C_{org}/S_{tot}	59	62	77	24	83	33	28	11	17
$CaCO_3$ (%)	5	61	59	35	48	0	39	1	9
total lipids ($\mu g/g_{Sed.}$)	6.6	6.4	4.0	2.1	4.6	0.3	1.4	0.6	1.0
lipid fractions ($\%_{lipids}$)									
n-alkanoic acids (FA)	30.1	39.9	32.6	22.6	41.4	24.6	63.4	26.7	62.4
hydroxy acids (OH-FA)	1.0	4.7	3.7	2.7	3.7	5.9	1.3	1.1	0.2
branched alkanoic acids	2.8	0.6	0.4	0.9	0.9	-	-	-	-
mono-unsaturated alkenoic acids	12.2	0.2	-	0.04	0.2	-	-	-	-
n-alkanols (OH)	18.0	31.6	22.8	44.8	28.2	43.2	25.9	56.0	28.3
n-alkanes	2.3	1.6	2.4	2.1	1.5	9.7	2.0	3.0	2.1
sterols	24.8	12.1	25.4	20.2	14.2	11.0	5.4	9.9	4.7
others	8.8	9.2	12.7	6.6	9.8	5.5	2.0	3.3	2.2
***n*-alkanoic acids ($\%_{lipids}$)**									
C_{13} FA	-	-	0.1	-	-	-	-	-	-
C_{14} FA	2.1	1.4	0.5	1.3	0.9	-	1.8	2.0	0.4
C_{15} FA	0.5	0.8	0.2	0.2	0.4	-	0.8	0.5	-
C_{16} FA	6.6	10.5	3.2	9.8	7.1	1.8	18.0	10.3	4.6
C_{17} FA	0.6	0.4	0.2	0.3	0.3	0.2	-	-	-
C_{18} FA	2.1	0.7	1.0	2.1	1.8	0.7	5.6	2.9	1.6
C_{19} FA	0.2	0.1	0.2	-	0.1	0.1	0.4	-	0.2
C_{20} FA	1.4	0.7	1.1	1.6	1.7	1.1	2.1	2.4	1.9
C_{21} FA	0.4	0.2	0.4	0.1	0.3	0.5	0.6	-	0.4
C_{22} FA	2.9	2.3	3.4	2.3	4.0	1.2	6.1	2.1	4.6
C_{23} FA	0.8	0.6	0.7	0.2	0.9	0.8	0.9	0.2	1.1
C_{24} FA	5.1	5.7	6.3	2.1	7.2	4.1	6.5	2.6	9.4

core	**Lz1120**	**Lz1120**	**Lz1120**	**Lz1120**	**Lz1120**	**Lz1120**	**Co1202**	**Co1202**	**Co1202**
sample	**1**	**399**	**483**	**505**	**517**	**643**	**246**	**248**	**252**
***n*-alkanoic acids (%$_{lipids}$), cont.**									
C_{25} FA	0.4	0.7	0.7	0.1	0.6	1.4	0.9	0.1	1.6
C_{26} FA	4.0	7.0	6.3	1.1	7.1	4.5	7.4	1.8	13.5
C_{27} FA	0.2	0.6	0.5	0.0	0.4	0.9	0.7	0.1	1.5
C_{28} FA	2.0	4.7	4.9	0.5	4.2	3.6	6.2	0.8	12.5
C_{29} FA	0.1	0.4	0.3	0.0	0.4	0.8	0.6	-	1.3
C_{30} FA	0.7	2.6	2.0	0.7	2.7	2.2	3.5	0.6	5.8
C_{31} FA	-	0.1	0.1	0.0	0.3	0.2	0.2	-	0.6
C_{32} FA	-	0.4	0.4	0.1	1.1	0.5	1.0	0.4	1.4
hydroxy acids (%$_{lipids}$)									
ω-C_{12} OH-FA	-	0.08	0.18	0.11	-	0.38	-	-	-
ω-C_{14} OH-FA	0.10	0.32	0.38	0.24	0.53	0.06	0.08	-	-
α-C_{16} OH-FA	-	-	-	0.31	0.09	-	0.04	-	-
ω-C_{16} OH-FA	0.31	0.83	0.82	0.40	0.97	0.49	0.21	0.30	0.10
unknown	-	-	0.09	-	0.03	-	-	-	-
α-C_{18} OH-FA	-	-	0.12	0.50	0.19	-	0.09	0.21	-
α-$C_{18:1}$ OH-FA	-	-	-	0.10	0.05	-	-	-	-
ω-C_{18} OH-FA	-	0.05	0.05	-	0.04	0.14	-	-	-
ω-C_{20} OH-FA	0.09	0.17	0.16	0.06	0.12	0.70	0.09	0.09	0.10
α-C_{22} OH-FA	-	-	-	0.21	-	-	-	-	-
ω-C_{22} OH-FA	0.49	1.07	0.78	0.20	0.48	1.42	0.17	0.15	0.04
α-C_{24} OH-FA	-	-	-	0.44	0.05	-	-	0.22	-
ω-C_{24} OH-FA	-	1.22	0.81	0.11	0.45	1.75	0.24	0.08	-
α-C_{24} OH-FA	-	-	-	0.09	-	-	-	-	-
ω-C_{26} OH-FA	-	0.60	0.36	-	0.38	0.72	0.17	-	-
ω-C_{28} OH-FA	-	0.41	-	-	0.35	0.27	0.18	-	-
branched alkanoic acids (%$_{lipids}$)									
iso-$C_{15:0}$	0.82	0.27	0.15	0.15	0.17	-	-	-	-
anteiso-$C_{15:0}$	0.89	0.35	0.23	0.68	0.69	-	-	-	-
iso-$C_{16:0}$	-	-	-	-	0.08	-	-	-	-
anteiso-$C_{16:0}$	0.30	-	-	-	-	-	-	-	-
iso-$C_{17:0}$	0.32	-	-	-	-	-	-	-	-
anteiso-$C_{17:0}$	0.33	-	-	-	-	-	-	-	-
i/a?-$C_{18:0}$	0.10	-	-	0.11	-	-	-	-	-

core	**Lz1120**	**Lz1120**	**Lz1120**	**Lz1120**	**Lz1120**	**Lz1120**	**Co1202**	**Co1202**	**Co1202**
sample	**1**	**399**	**483**	**505**	**517**	**643**	**246**	**248**	**252**
mono-unsaturated FA (%$_{lipids}$)									
$C_{16:1}$ FA	9.42	-	-	-	-	-	-	-	-
$C_{18:1}$ FA	2.81	0.23	-	0.04	0.18	-	-	-	-
***n*-alkanols (%$_{lipids}$)**									
C_{12} OH	0.15	-	0.08	0.31	0.16	-	0.47	0.57	0.05
C_{13} OH	0.05	-	0.03	0.12	0.03	-	0.13	0.28	0.03
C_{14} OH	0.87	0.07	0.05	0.32	0.18	-	0.69	1.24	0.30
C_{15} OH	0.66	-	-	-	-	-	0.30	-	-
C_{16} OH	1.27	0.08	0.11	-	0.28	0.40	1.33	1.97	0.43
C_{17} OH	0.26	-	0.05	-	0.08	0.14	-	-	-
C_{18} OH	0.46	0.14	0.14	0.52	0.26	0.55	0.61	1.47	0.34
C_{19} OH	0.15	-	0.05	0.12	0.07	0.12	0.15	0.17	0.09
C_{20} OH	0.91	0.57	0.47	1.06	0.61	0.85	0.64	1.46	0.55
C_{21} OH	0.34	0.11	0.14	0.23	0.10	0.53	0.17	0.23	0.17
C_{22} OH	4.36	5.82	3.24	4.16	2.44	11.34	3.36	7.56	3.92
C_{23} OH	0.52	0.61	0.39	0.74	0.42	1.23	0.46	0.97	0.51
C_{24} OH	2.10	6.63	5.41	9.15	5.36	8.25	4.96	9.76	5.31
C_{25} OH	0.20	0.75	0.50	1.00	0.54	1.11	0.81	1.71	0.80
C_{26} OH	2.32	6.28	5.09	9.41	5.83	8.41	4.39	10.60	5.90
C_{27} OH	0.19	0.46	0.37	0.83	0.32	0.67	0.47	1.15	0.64
C_{28} OH	1.58	6.20	4.29	10.23	7.28	4.78	4.12	8.86	4.78
C_{29} OH	0.24	0.27	0.29	0.67	0.42	0.95	0.42	1.05	0.53
C_{30} OH	1.34	2.26	1.40	4.51	3.15	2.09	1.75	5.00	2.90
C_{31} OH	-	0.27	0.18	0.30	0.12	0.51	0.18	0.46	0.26
C_{32} OH	-	1.03	0.52	1.10	0.55	1.27	0.51	1.48	0.74
***n*-alkanes (%$_{lipids}$)**									
n-C_{21}	0.46	0.13	0.36	0.13	-	0.46	0.06	-	0.06
n-C_{23}	0.34	0.06	0.18	0.11	0.08	0.68	0.17	0.31	0.13
n-C_{25}	0.16	0.12	0.04	0.18	0.14	1.09	0.29	0.41	0.20
n-C_{27}	0.34	0.41	0.47	0.35	0.25	2.05	0.39	0.56	0.36
n-C_{28}	-	-	-	-	-	-	-	-	0.08
n-C_{29}	0.55	0.50	0.73	0.75	0.51	2.96	0.54	0.89	0.64
n-C_{31}	0.50	0.35	0.62	0.61	0.47	2.50	0.55	0.87	0.62

core	**Lz1120**	**Lz1120**	**Lz1120**	**Lz1120**	**Lz1120**	**Lz1120**	**Co1202**	**Co1202**	**Co1202**
sample	**1**	**399**	**483**	**505**	**517**	**643**	**246**	**248**	**252**
sterols (%$_{lipids}$)									
coprostanol	0.75	-	-	-	0.11	-	-	-	-
epicholestanol	0.64	0.25	0.70	0.34	0.22	-	-	0.12	-
epicoprostanol	0.77	-	-	-	-	-	-	-	-
cholesterol	5.93	2.10	3.00	1.80	1.63	1.08	0.60	1.85	0.58
cholestanol	3.38	1.08	2.92	1.98	0.91	2.06	0.52	0.78	0.19
C28Δ0	-	-	-	0.84	-	-	-	-	-
stigmasterol	2.21	0.62	0.92	0.33	0.29	-	-	-	-
C29Δ22	-	-	-	0.41	0.27	-	-	-	-
sitosterol	4.65	2.55	5.43	2.07	2.14	4.48	0.85	1.80	1.58
stigmastanol	3.42	2.59	2.12	5.00	2.81	3.38	1.06	1.60	0.86
dinosterol	-	-	1.98	1.01	1.39	-	0.38	0.38	0.19
dinostanol	1.18	-	3.07	1.42	1.40	-	1.30	2.09	0.98
lanosterol	1.82	2.94	5.26	5.03	3.06	0.01	0.67	1.24	0.33
others (%$_{lipids}$)									
branched C_{15} OH *(iso)*	0.66	0.09	0.22	0.44	-	-	-	-	-
branched C_{15} OH *(anteiso)*	0.39	0.07	0.16	0.21	-	-	-	-	-
phytodiene	1.43	0.58	1.20	-	0.36	0.37	-	-	-
β-amyrin	0.20	0.42	0.73	0.93	0.57	0.59	0.24	0.92	-
tetrahymanol	1.87	0.64	1.17	1.26	0.69	0.18	0.08	0.13	0.04
branched C_{31} OH ?	-	-	-	-	1.14	-	-	-	0.32
17β(H),21β(H)-bishomohopanol	0.48	1.39	-	1.29	0.71	0.43	0.18	0.35	0.10
17β(H),21β(H)-bishomohopanoic acid	3.14	6.02	9.17	2.43	6.38	2.76	1.49	1.92	1.78
branched C_{16} OH	0.46	0.02	-	-	-	-	-	-	-
branched C_{17} OH *(iso)*	0.17	-	-	-	-	-	-	-	-
branched C_{17} OH *(anteiso)*	0.05	-	-	-	-	-	-	-	-
branched C_{22}OH	-	-	-	-	-	1.13	-	-	-