

Table S4. Insect macrofossils identified at cm-depth intervals noted.

Sample FH1,	+90 to +94	+12 to +14	+10 to +12	+8 to +10	+4 to +6	0 to -1	-1 to -2	-2 to -3	-11 to -12	-12 to -13	-13 to -14	-19 to -20	-21 to -22	-22 to -23	-23* to -24	-26* to -27	-30* to -33	-37 to -39	-43* to -45	-55* to -57	-67* to -69	-101 to -121	
Stratigraphic Unit	C	C	C	C	B3	B2	B2	B2	B2	B2	B2	B2	B2	B2	B1	B1	B1	B1	B1	B1	A	A	A
Volume (ml)	<10	150	26	24	130	14	10	100	105	14	10	10	120	18	15	80	172	60	116	113	200	50	
Insect Fossils:																							
PORIFERA																							
Haplosclerina																							
Spongillidae																							
<i>Spongilla</i> sp.																	1m;1g	9m;2g	5g		3g		
ARTHROPODA																							
INSECTA																							
ORTHOPTERA																							
Acrididae....."grasshoppers"																			1nc				
HEMIPTERA "bugs"																							
Saldidae "shore bugs"																							
<i>Saldula</i> sp.																	0.5pr	1hd					
Cicadellidae "leafhoppers"																					1hd		
COLEOPTERA..... "beetles"																							
Carabidae "ground beetles"										1elfr													
<i>Dyschiriodes</i> sp.																	1el				1pr;1el		
<i>Pterostichus (Cryobius)</i> sp.										2prf													
Dytiscidae ... "predaceous diving beetles"																		0.5pr			1elfr		
Hydrophilidae .. "water scavenger beetles"															1hd								
<i>Helophorus</i> sp.																		1pr					
<i>Cercyon</i> sp.																		2el; 1hd					
Hydraenidae "minute moss beetles"																							
<i>Ochthebius</i> sp.										1el								2el			1el		
Staphylinidae "rove beetles"						0.5el		1el				1elfr											
Omalinae													1hd				1el						
<i>Eucnecosum tenue</i> (Lec.)										1pr													
<i>Olophrum consimile</i> Gyll.																		1pr;1el					
<i>Olophrum</i> sp.										1el				1el			0.5el						
<i>Stenus</i> sp.											1pr;2el									1hd			
<i>Quedius</i> sp.																				1hd;1pr			
Helodidae "marsh beetles"																							
<i>Cyphon</i> sp.										0.5el		1elfr		0.5el	1el		1el	0.5el					
Chrysomelidae "leaf beetles"																							
Donaciinae																							
<i>Donacia/Plateumaris</i> sp.					1elfr		2elfr	2elfr		1elfr	1elfr	1hd; 3elfr	0.5el		3elfr	7elfr; 1prf		2elfr					
<i>Plateumaris</i> sp.									1elfr							2elfr							
<i>Donacia</i> sp.										0.5el													

Table S4 (cont).

Sample FH1,	+90 to +94	+12 to +14	+10 to +12	+8 to +10	+4 to +6	0 to -1	-1 to -2	-2 to -3	-11 to -12	-12 to -13	-13 to -14	-19 to -20	-21 to -22	-22 to -23	-23* to -24	-26* to -27	-30* to -33	-37 to -39	-43* to -45	-55* to -57	-67* to -69	-101 to -121
Stratigraphic Unit	C	C	C	C	B3	B2	B2	B2	B2	B2	B2	B2	B2	B1	B1	B1	B1	B1	B1	A	A	A
Volume (ml)	<10	150	26	24	130	14	10	100	105	14	10	10	120	18	15	80	172	60	116	113	200	50
TRICHOPTERA "caddisflies"		1cfr											7cfr; 1.5h				1c; 1scl	1cfr; 5scl	5scl			
DIPTERA "flies"										2p		1cp	1.5p	1cp	1.5p		0.5p		0.5p	0.5p	3p	1cp
Tipulidae "crane flies"																						
<i>Tipula</i> sp.																		3hd	1hd			
Chironomidae "midges"													1lhc					24lhc	11lhc	2lhc		
HYMENOPTERA..... "wasps & ants"																						
Ichneumonoidea																		2th;1hd				
CRUSTACEA																						
Cladocera "water fleas"																						
<i>Daphnia</i> sp.																		7	1			
<i>Simocephalus</i> sp.																		6				
Ostracoda		7av ;9v	12v	15v	3v													8av; 3v	21av; 21v	3av; 9v	1av; 5v	
ARACHNIDA																						
Oribatida..... "oribatid mites"						2		22	12				1				1	1	1	2.5		
Hydrozetidae																						
<i>Hydrozetes</i> sp.																		3		1		
MOLLUSCA																						
Gastropoda "snails, limpets"																						
Horizontal (discoidal) type	1	36	34	29	53																	
Vertical (conical) type	4	133	134	107	259														1			
Pelecypoda "clams, mussels"																						
Sphaeriidae ... "fingernail and pea clams"		16v	3v	41v	43v																	
Other:																						
small mammal bone		4	1	2	1																	

Key: av=articulated valve; cfr=case fragment; cp=pupa caudal plate; efr=elytron fragment; el=elytron; fr=fragment; g=sponge gemmule; hd=head;

lhc=larva head capsule; m=sponge cell mat; nc=nymph case; pr=pronotum; prf=pronotum fragment; p=pupa; scl=larvae sclerite; sfr=shell fragment; th=thorax

*duplicate samples