Appendix G - Percentages of planktonic foraminifera in Core T89-40

Please note that *G. crassaformis* cf. viola is included in *G. crassaformis* s.l.

depth (cmbs)	age (ky)	*B. bilobata*	*G. bulloides*	*G. calida*	*G. cavernula*	*G. conglobatus*	*G. crassaformis* s.l.	*G. crassaformis* cf. *viola*	*G. digitata*	*G. falconensis*	*G. glutinata*	*G. hexagona*	*G. hirsuta*
5	11.3	0.6	10.7	0.0	0.2	0.0	0.4		0.0	1.4	6.3	0.0	0.0
10	12.7	0.2	14.2	0.0	0.0	0.0	0.2		0.0	2.3	4.1	0.0	0.0
20	15.5	0.0	16.7	0.0	0.1	0.0	0.1		0.0	1.0	7.0	0.0	0.0
30	18.3	0.0	19.7	0.0	0.0	0.0	0.2		0.2	2.2	7.5	0.0	0.0
40	21.1	0.0	20.9	0.3	0.0	0.0	0.0		0.0	0.6	7.5	0.0	0.0
50	23.9	0.4	18.6	0.0	0.0	0.0	0.4		0.0	0.4	9.5	0.0	0.8
55	25.3	0.1	18.6	0.0	0.0	0.1	0.4		0.0	0.1	7.4	0.0	0.1
60	26.7	0.0	18.3	0.0	0.0	0.6	0.0		0.0	0.3	5.1	0.0	0.0
65	28.1	0.1	18.5	0.0	0.0	0.0	0.1		0.0	0.0	7.8	0.0	0.1
70	29.5	0.0	19.7	0.5	0.0	0.0	0.0		0.1	0.6	5.5	0.0	0.3
83	44.5	0.0	15.9	0.0	0.0	0.0	0.2		0.0	0.6	5.4	0.0	0.0
92	54.8	0.0	14.5	0.0	0.0	0.0	0.0		0.9	0.6	6.3	0.0	0.0
97	65.2	0.4	17.7	0.0	0.0	0.0	1.0		0.2	0.6	3.0	0.0	0.2
107	69.8	0.0	16.5	0.0	0.0	0.0	0.4		0.0	0.5	4.9	0.0	0.4
112	72.1	0.4	14.4	0.0	0.0	0.0	0.0		0.0	0.0	4.4	0.0	0.0
117	74.4	0.2	13.7	0.2	0.0	0.0	0.0		0.0	0.0	5.8	0.0	0.0
122	76.7	0.0	17.9	0.2	0.0	0.0	0.0		0.0	0.2	4.5	0.2	0.0
127	79.0	0.2	15.8	0.2	0.0	0.0	0.0		0.4	0.9	5.1	0.0	0.0
132	81.3	0.5	13.2	0.2	0.5	0.0	0.0		0.2	0.7	7.7	0.0	0.2
137	83.5	0.0	10.3	0.0	0.0	0.0	0.0		0.0	0.9	7.6	0.3	0.3
147	88.0	0.0	18.1	0.0	0.0	0.0	0.0		0.0	0.8	7.8	0.2	0.0
157	91.5	0.0	14.5	0.0	0.0	0.0	0.0		0.3	0.4	5.5	0.0	0.1
162	93.3	0.5	16.0	0.0	0.3	0.0	0.0		0.3	0.3	6.3	0.0	0.0
167	95.0	0.2	14.4	0.0	0.2	0.0	0.0		0.0	0.2	4.3	0.0	0.0
179	99.2	0.0	19.4	0.0	0.0	0.0	0.2		0.6	0.4	7.6	0.0	0.2
192	103.8	0.0	18.8	0.2	0.0	0.0	0.0		0.0	0.2	4.9	0.0	0.0
202	112.9	0.1	18.8	0.0	0.0	0.0	0.0		0.2	0.1	4.8	0.0	0.6
207	114.4	0.0	16.1	0.3	0.0	0.0	0.0		0.3	0.0	6.8	0.0	0.9
217	117.5	0.0	16.0	0.0	0.0	0.0	0.0		0.3	0.7	4.9	0.0	0.3
222	119.1	0.3	14.0	0.0	0.0	0.3	0.0		0.0	0.8	9.3	0.0	0.5
227	120.6	0.0	10.7	0.2	0.0	0.0	0.0		0.0	0.7	6.5	0.2	1.0
232	122.2	0.0	13.4	0.0	0.0	0.5	0.0		0.3	1.1	5.2	0.0	0.3
242	126.6	0.1	12.1	0.0	0.0	0.1	0.0		0.0	0.6	6.2	0.0	0.6
247	128.8	0.0	13.8	0.3	0.0	0.0	0.3		0.3	1.6	4.6	0.3	1.1
252	131.0	0.0	9.3	0.0	0.3	0.0	0.5		0.3	1.8	5.3	0.3	0.0
262	135.4	0.0	14.8	0.0	0.0	0.0	0.5		0.0	0.2	6.7	0.0	0.0
272	142.5	0.0	26.2	0.0	0.0	0.0	0.0		0.6	1.1	4.1	0.0	0.0
282	149.5	0.0	25.7	0.0	0.0	0.0	0.0		0.6	0.2	5.4	0.0	0.0
287	153.0	0.0	21.5	0.0	0.0	0.0	0.0		0.5	0.7	4.8	0.0	0.0
297	168.9	0.0	14.3	0.5	0.0	0.0	0.0		0.5	0.5	6.2	0.5	0.0
311	184.7	0.0	11.7	0.3	0.0	0.0	0.5		0.0	0.0	5.6	0.0	0.0
316	186.6	0.0	13.0	0.3	0.0	0.0	0.0		0.3	0.8	5.0	0.0	0.3
326	190.3	0.0	13.7	0.0	0.0	0.0	0.3		0.0	0.0	4.9	0.0	0.0
336	194.0	0.2	13.8	0.2	0.0	0.0	0.2		0.2	0.0	7.0	0.0	0.5
346	204.0	0.2	14.2	0.0	0.0	0.0	1.1		0.2	0.2	7.9	0.2	0.0
356	214.0	0.2	12.2	0.0	0.0	0.0	0.6		0.2	0.8	6.9	0.2	0.0
361	217.6	0.2	11.5	0.0	0.0	0.0	0.6		0.0	0.4	7.0	0.0	0.0
366	221.3	0.0	10.8	0.0	0.0	0.0	1.4		0.0	0.3	5.9	0.3	0.0
371	224.9	0.2	15.7	0.0	0.0	0.0	0.6		0.0	0.0	5.7	0.0	0.0
381	228.7	0.0	15.2	0.0	0.0	0.0	0.3		0.3	0.3	2.8	0.0	0.0
386	230.6	0.2	17.9	0.0	0.0	0.0	0.0		0.2	0.2	5.8	0.0	0.0
391	232.5	0.0	15.3	0.0	0.0	0.0	0.5		0.0	0.0	5.6	0.0	0.0
401	236.3	0.0	9.0	0.0	0.0	0.0	0.4		0.0	0.0	10.0	0.0	0.2
406	241.0	0.0	10.2	0.0	0.0	0.0	1.3		0.0	0.5	9.9	0.0	0.0
411	245.7	0.0	14.1	0.4	0.0	0.0	0.0		0.4	0.1	7.7	0.0	0.0
428	261.8	0.0	17.0	0.0	0.0	0.0	0.3		0.3	0.0	6.1	0.0	0.0
433	266.5	0.0	13.7	0.2	0.0	0.0	0.2		0.6	0.2	4.4	0.0	0.0
443	280.2	0.0	17.7	0.3	0.0	0.0	0.3		0.3	0.0	5.9	0.0	0.0
448	287.0	0.0	19.8	0.6	0.0	0.0	0.3		0.3	0.0	5.2	0.0	0.0
463	298.0	0.0	26.2	0.0	0.0	0.0	0.0		0.2	0.2	7.2	0.0	0.0
468	301.5	0.2	24.6	0.0	0.0	0.0	0.0		0.4	0.2	3.7	0.0	0.0
473	305.0	0.0	16.7	0.0	0.0	0.0	0.5		0.0	0.2	5.7	0.0	0.0
483	312.0	0.0	16.0	0.0	0.0	0.0	0.0		0.6	0.0	6.5	0.0	0.0
493	320.0	0.0	14.7	0.2	0.0	0.0	0.0		0.2	0.0	3.8	0.0	0.2
498	321.8	0.0	10.2	0.0	0.0	0.0	0.0		0.0	0.0	5.1	0.0	0.0
503	323.7	0.0	7.6	0.0	0.0	0.0	0.0		0.3	0.3	3.7	0.0	0.0
513	327.3	0.0	9.4	0.0	0.0	0.0	0.9		0.0	0.2	4.6	0.0	0.0
523	331.0	0.0	8.3	0.9	0.0	0.0	0.0		0.5	0.0	5.3	0.2	0.0
528	333.3	0.0	9.1	0.0	0.0	0.0	0.4		0.0	0.4	4.0	0.0	0.0
538	337.9	0.3	6.9	0.0	0.0	0.0	0.3		0.0	0.6	9.7	0.0	0.0
548	342.5	0.0	15.9	0.0	0.0	0.0	0.0		0.2	0.4	9.1	0.0	0.0

Appendix G
(continued)

depth (cmbs)	age (ky)	*G. inflata*	*G. menardii*	*G. ruber* pink	*G. ruber* white	*G. rubescens*	*G. sacculifer*	*G. scitula*	*G. siphonifera*	*G. tenellus*	*G. theyeri*	*G. truncatulinoides* left	*G. truncatulinoides* right
5	11.3	18.0	2.6	1.0	6.7	0.0	3.4	1.2	4.4	4.2	0.0	1.2	5.7
10	12.7	23.5	0.0	0.9	6.1	0.0	2.0	1.1	3.2	1.1	0.0	1.4	8.4
20	15.5	22.1	0.0	0.2	5.6	0.1	1.5	1.0	5.2	0.0	0.0	1.0	4.6
30	18.3	15.5	0.0	0.2	5.8	0.4	1.3	0.2	3.3	1.5	0.9	0.2	1.5
40	21.1	20.6	0.3	0.6	6.9	0.3	0.3	0.0	1.3	0.6	0.3	0.9	0.3
50	23.9	13.4	0.2	0.4	5.7	0.2	0.0	0.8	0.2	0.8	0.0	2.4	0.8
55	25.3	11.8	0.0	0.4	3.5	0.0	0.0	0.4	2.6	0.9	0.0	3.0	0.4
60	26.7	14.5	0.3	0.6	4.8	0.0	0.3	0.6	2.6	2.3	0.3	2.9	0.6
65	28.1	13.6	0.0	0.1	5.7	0.0	0.0	1.0	2.6	1.3	0.0	8.2	0.3
70	29.5	12.7	0.0	0.3	6.2	0.0	0.1	1.0	2.4	1.7	0.0	6.1	0.4
83	44.5	8.8	0.0	0.0	5.0	0.2	1.2	0.8	2.2	3.8	0.0	5.0	0.2
92	54.8	8.8	0.0	0.0	5.0	0.0	0.3	1.6	3.5	0.6	0.0	8.2	0.0
97	65.2	13.1	0.0	0.0	4.8	0.4	0.2	0.8	4.6	1.4	0.0	8.6	0.0
107	69.8	17.0	0.0	0.0	7.7	0.2	0.4	0.2	1.9	0.2	0.0	8.8	0.7
112	72.1	20.5	0.0	0.0	4.1	0.2	0.2	0.4	2.6	0.9	0.0	8.5	1.3
117	74.4	22.9	0.0	0.0	3.2	0.5	0.0	0.7	1.9	1.9	0.0	6.9	0.7
122	76.7	23.6	0.0	0.2	1.9	0.5	0.2	0.5	1.4	2.1	0.0	6.4	0.9
127	79.0	24.8	0.0	0.0	2.1	0.9	0.0	1.3	4.1	3.2	0.0	4.3	1.7
132	81.3	26.9	0.0	0.7	3.7	0.0	0.2	0.5	1.5	3.2	0.0	5.0	4.2
137	83.5	31.9	0.0	0.0	3.0	0.0	0.0	0.3	3.0	1.5	0.0	3.0	4.0
147	88.0	29.4	0.0	0.3	2.5	0.2	0.2	0.2	2.1	2.6	0.0	3.9	2.9
157	91.5	26.3	0.0	0.0	3.6	0.1	0.0	0.1	1.5	2.1	0.0	1.1	5.0
162	93.3	26.1	0.0	0.0	2.5	0.0	0.0	0.0	1.8	3.0	0.0	0.8	5.8
167	95.0	24.5	0.0	0.0	4.3	0.2	0.0	0.2	2.9	2.2	0.0	0.5	6.0
179	99.2	20.6	0.0	0.6	7.6	0.0	1.0	0.4	5.1	1.8	0.0	0.4	4.7
192	103.8	24.2	0.0	0.5	8.1	0.0	0.2	0.3	3.7	1.4	0.0	1.4	3.7
202	112.9	17.2	0.0	0.0	4.4	0.1	1.0	0.4	3.9	2.2	0.0	2.0	5.0
207	114.4	12.5	0.0	0.0	5.4	0.3	0.3	0.3	2.4	2.1	0.0	1.5	3.3
217	117.5	13.9	0.9	0.0	5.5	0.4	0.7	0.6	2.4	2.2	0.0	0.4	4.5
222	119.1	11.3	0.5	0.0	6.8	0.0	1.8	0.0	4.3	2.3	0.0	1.5	2.0
227	120.6	15.5	1.0	0.2	5.7	0.2	2.5	0.5	4.0	6.0	0.0	0.7	3.2
232	122.2	21.9	1.4	0.5	7.7	0.5	5.2	0.3	4.9	3.8	0.0	0.8	1.6
242	126.6	17.8	1.9	0.4	7.5	0.3	3.7	0.0	5.6	6.9	0.0	0.9	3.2
247	128.8	10.8	0.8	0.3	6.0	0.3	3.8	0.5	7.3	7.9	0.0	0.5	1.9
252	131.0	15.6	1.3	0.5	11.3	0.8	4.5	0.5	4.0	3.0	0.0	1.0	4.0
262	135.4	12.3	0.0	0.0	4.4	0.2	1.0	0.2	1.7	6.4	0.0	1.5	4.4
272	142.5	13.7	0.0	0.2	3.5	0.2	0.4	0.9	0.9	2.6	0.0	1.1	4.4
282	149.5	10.4	0.0	0.0	2.7	0.3	0.5	1.0	1.1	2.7	0.0	2.4	1.0
287	153.0	13.9	0.0	0.0	2.6	0.7	0.1	1.6	2.5	3.4	0.0	2.1	0.8
297	168.9	14.6	0.0	0.7	2.0	0.2	0.0	1.2	1.2	4.4	0.0	2.7	0.5
311	184.7	23.5	0.0	0.3	6.7	0.0	0.0	0.6	1.1	3.4	0.0	4.6	0.5
316	186.6	10.9	0.3	0.0	4.5	0.0	0.3	0.3	3.2	3.7	0.0	2.9	0.0
326	190.3	14.7	0.0	0.0	2.8	0.0	0.3	0.8	3.4	2.6	0.0	3.4	0.3
336	194.0	20.2	0.0	1.1	6.7	0.2	2.3	1.4	3.2	5.3	0.0	3.8	1.4
346	204.0	20.0	1.1	0.2	4.0	0.0	1.8	1.3	3.6	5.6	0.0	3.6	0.4
356	214.0	21.8	1.2	0.0	4.1	0.2	2.0	1.2	5.3	3.7	0.0	2.0	2.2
361	217.6	19.0	0.0	1.6	4.3	0.0	0.8	1.2	5.8	6.0	0.0	2.7	1.4
366	221.3	18.4	0.0	1.1	5.4	0.0	1.6	1.4	5.4	4.9	0.0	1.9	2.2
371	224.9	12.9	0.0	0.8	5.1	0.0	1.8	0.6	6.1	3.5	0.0	3.1	2.3
381	228.7	22.1	0.0	0.0	2.3	0.0	0.3	0.0	4.3	3.0	0.0	4.8	0.8
386	230.6	12.1	0.0	0.0	4.4	0.0	0.7	1.5	3.1	3.9	0.0	2.7	1.0
391	232.5	16.8	0.0	0.7	4.4	0.0	1.2	1.2	5.4	3.2	0.0	2.9	0.5
401	236.3	9.0	0.0	0.2	8.5	0.4	1.3	0.6	5.3	5.8	0.0	3.4	1.1
406	241.0	11.3	0.0	0.3	9.4	0.0	3.8	0.8	3.5	4.6	0.0	3.2	0.5
411	245.7	11.4	0.5	0.1	4.5	0.1	1.1	0.5	2.3	4.1	0.0	5.4	0.1
428	261.8	22.8	0.2	0.0	5.0	0.0	0.0	0.0	2.6	0.6	0.0	3.5	0.0
433	266.5	13.3	0.0	0.0	3.7	0.2	0.0	1.3	1.7	0.7	0.0	2.0	0.2
443	280.2	13.9	0.0	0.0	1.9	0.3	0.3	1.3	1.1	1.6	0.0	3.8	0.3
448	287.0	23.1	0.0	0.0	2.1	0.0	0.9	0.6	3.6	2.4	0.0	5.5	0.3
463	298.0	18.8	0.0	0.0	3.5	0.0	0.0	1.2	0.7	0.5	0.0	5.6	0.0
468	301.5	11.8	0.0	0.0	3.6	0.0	0.0	1.6	2.3	0.5	0.0	5.2	0.0
473	305.0	14.6	0.0	0.0	3.1	0.2	0.0	1.4	0.9	2.1	0.0	6.6	0.5
483	312.0	16.0	0.0	0.0	2.8	0.0	0.0	1.1	2.0	2.2	0.0	6.7	0.3
493	320.0	15.0	0.9	0.2	3.3	0.3	0.2	1.6	5.5	2.9	0.0	5.3	2.1
498	321.8	21.7	0.6	0.0	2.2	0.0	0.0	1.6	3.5	0.3	0.0	6.1	1.6
503	323.7	26.9	0.0	0.0	2.9	0.0	0.8	0.8	3.9	1.6	0.0	1.3	3.7
513	327.3	21.1	1.8	0.0	2.5	0.0	0.0	0.2	4.1	3.7	0.2	2.5	4.2
523	331.0	27.6	2.8	0.2	6.5	0.2	0.9	0.5	1.8	4.1	0.0	2.8	1.6
528	333.3	30.5	1.8	1.1	7.1	0.0	0.4	0.2	5.8	1.5	0.0	1.5	3.1
538	337.9	27.2	0.6	2.2	10.0	0.6	1.1	1.1	4.4	3.3	0.0	1.1	4.4
548	342.5	13.5	0.0	0.0	4.3	1.0	0.4	0.4	1.7	1.2	0.0	2.7	0.2

Appendix G
(continued)

depth (cmbs)	age (ky)	*G. tumida*	*G. uvula*	*N. dutertrei*	*N. pachyderma* left	*N. pachyderma* right	*O. universa*	*P. obliquiloculata*	*S. dehiscens*	*T. quinqueloba*	rest
5	11.3	1.8	0.0	0.0	1.2	23.6	0.8	0.8	0.0	0.0	4.1
10	12.7	1.1	0.0	0.0	1.8	25.7	2.0	0.0	0.0	0.0	0.7
20	15.5	0.1	0.0	0.5	1.5	28.5	2.0	0.5	0.0	0.1	0.6
30	18.3	0.0	0.0	0.0	3.1	30.1	1.3	0.0	0.0	3.5	1.1
40	21.1	0.0	0.0	0.0	3.8	26.6	1.6	0.0	0.0	4.1	2.2
50	23.9	0.0	0.0	0.0	3.0	34.6	1.6	0.0	0.0	4.7	1.0
55	25.3	0.0	0.1	0.0	2.7	40.4	2.9	0.0	0.0	3.2	0.6
60	26.7	0.0	0.0	0.0	3.2	32.2	4.2	0.0	0.0	4.8	1.3
65	28.1	0.3	0.4	0.0	3.7	28.7	3.7	0.0	0.0	2.7	0.7
70	29.5	0.0	0.6	0.0	8.0	27.2	3.6	0.0	0.0	2.3	0.8
83	44.5	0.0	0.2	0.0	15.9	30.5	1.8	0.0	0.0	2.0	0.2
92	54.8	0.0	0.3	0.0	16.0	28.6	2.8	0.0	0.0	0.6	1.3
97	65.2	0.0	0.2	0.2	9.6	28.1	3.2	0.0	0.0	0.4	1.2
107	69.8	0.0	0.0	0.2	1.4	34.5	3.3	0.0	0.0	0.9	0.2
112	72.1	0.0	0.2	0.0	0.2	36.7	3.9	0.2	0.0	0.7	0.0
117	74.4	0.0	0.5	0.0	1.2	35.0	2.1	0.2	0.0	1.4	1.2
122	76.7	0.5	0.5	0.0	1.2	34.0	2.1	0.0	0.0	0.9	0.0
127	79.0	0.0	0.0	0.6	0.6	32.3	1.3	0.0	0.0	0.0	0.2
132	81.3	0.0	0.0	0.2	1.0	28.4	0.2	0.0	0.0	0.2	0.5
137	83.5	0.0	0.0	0.0	0.9	30.1	1.8	0.0	0.0	0.6	0.3
147	88.0	0.0	1.0	0.0	2.5	22.5	2.0	0.2	0.0	0.0	0.7
157	91.5	0.0	0.0	0.3	7.5	27.7	3.0	0.8	0.0	0.0	0.1
162	93.3	0.0	0.0	0.0	8.4	22.6	3.6	1.0	0.0	0.3	0.5
167	95.0	0.0	0.0	0.2	17.3	16.3	4.6	0.7	0.0	0.2	0.5
179	99.2	0.0	0.2	0.0	5.9	19.6	0.4	2.7	0.0	0.0	0.6
192	103.8	0.0	0.3	0.0	2.7	25.7	1.0	1.4	0.0	0.0	1.5
202	112.9	0.0	0.1	0.0	8.2	28.5	1.5	0.4	0.0	0.1	0.4
207	114.4	0.0	0.3	0.0	11.6	31.5	3.0	0.3	0.0	0.0	0.9
217	117.5	0.0	0.4	0.3	10.5	30.7	2.7	0.7	0.0	0.0	0.4
222	119.1	0.8	0.3	0.3	2.8	36.8	1.5	1.3	0.0	0.0	1.0
227	120.6	0.0	0.2	0.0	5.0	31.4	2.0	0.7	0.0	0.2	1.2
232	122.2	0.0	0.3	0.5	3.0	23.8	0.5	1.9	0.0	0.0	0.3
242	126.6	0.0	0.1	0.0	6.5	21.4	1.7	1.0	0.0	0.7	0.9
247	128.8	0.0	0.0	0.8	7.9	24.9	2.4	0.3	0.0	0.5	0.8
252	131.0	0.0	0.5	0.8	4.3	25.9	2.5	0.3	0.0	0.8	1.0
262	135.4	0.0	0.0	0.0	3.9	36.9	1.2	0.0	0.0	2.5	1.0
272	142.5	0.0	0.4	0.0	2.4	30.9	2.4	0.0	0.0	3.3	0.7
282	149.5	0.0	0.3	0.0	0.8	39.9	2.2	0.0	0.0	2.2	0.5
287	153.0	0.0	0.0	0.0	2.3	37.7	2.5	0.0	0.0	2.1	0.1
297	168.9	0.0	0.0	0.0	1.2	42.0	2.5	0.0	0.0	4.0	0.2
311	184.7	0.2	0.0	0.5	0.5	34.3	2.9	0.0	0.0	2.6	0.3
316	186.6	0.0	0.0	0.0	1.6	48.3	2.4	0.0	0.0	1.1	1.1
326	190.3	0.0	0.0	0.0	1.8	47.2	1.3	0.0	0.0	2.3	0.5
336	194.0	0.0	0.0	0.2	0.6	29.9	1.4	0.0	0.0	0.8	0.0
346	204.0	0.0	0.4	0.2	0.4	30.1	2.5	0.2	0.0	0.0	0.2
356	214.0	0.0	0.0	0.0	1.0	32.0	1.2	0.0	0.0	0.0	0.8
361	217.6	0.0	0.2	0.0	1.4	33.4	1.0	0.2	0.0	0.6	0.4
366	221.3	0.0	0.3	0.5	0.3	35.4	1.9	0.0	0.0	0.8	0.0
371	224.9	0.0	0.4	0.0	0.8	36.2	2.2	0.0	0.0	1.2	1.0
381	228.7	0.0	0.0	0.0	1.8	35.5	4.6	0.3	0.0	0.5	1.0
386	230.6	0.0	0.0	0.2	0.7	40.2	3.9	0.0	0.0	0.7	0.5
391	232.5	0.0	1.0	0.2	1.0	33.8	3.6	1.0	0.0	0.5	1.2
401	236.3	0.2	0.9	0.0	0.9	38.2	2.8	0.0	0.0	0.6	1.1
406	241.0	0.0	0.5	0.3	0.5	35.9	1.6	0.0	0.0	0.8	1.1
411	245.7	0.0	0.4	0.0	1.9	40.8	1.2	0.0	0.3	1.8	0.5
428	261.8	0.0	0.0	0.5	1.6	36.0	0.6	0.0	0.0	2.9	0.0
433	266.5	0.0	0.0	0.0	2.0	51.9	1.1	0.0	0.0	1.9	0.7
443	280.2	0.0	1.1	0.0	1.1	46.6	1.3	0.0	0.0	0.8	0.3
448	287.0	0.0	0.6	0.3	0.3	32.2	0.3	0.0	0.0	0.6	0.9
463	298.0	0.0	0.0	0.0	1.9	31.3	0.7	0.0	0.0	1.4	0.9
468	301.5	0.0	0.0	0.5	0.9	40.6	1.1	0.0	0.0	1.1	1.8
473	305.0	0.5	0.0	0.7	2.6	40.3	2.4	0.0	0.0	0.7	0.2
483	312.0	0.0	0.3	0.0	4.8	36.5	2.8	0.0	0.0	0.8	0.6
493	320.0	0.2	0.9	0.0	18.3	21.0	2.9	0.0	0.0	0.2	0.3
498	321.8	0.0	0.0	0.0	33.5	11.5	1.9	0.0	0.0	0.0	0.0
503	323.7	0.8	0.3	0.0	35.2	6.3	2.9	0.0	0.0	0.0	1.0
513	327.3	0.0	0.4	0.2	37.2	4.4	2.7	0.0	0.0	0.0	0.0
523	331.0	0.0	0.0	0.0	30.6	3.7	0.7	0.0	0.0	0.0	0.7
528	333.3	0.0	0.0	0.0	23.7	5.5	2.4	0.0	0.0	0.7	0.7
538	337.9	0.0	1.4	0.3	12.5	10.0	1.4	0.0	0.0	0.6	0.0
548	342.5	0.0	0.2	0.0	9.7	32.1	0.8	0.0	0.0	5.2	0.8

Appendix G
(continued)

depth (cmbs)	age (ky)	*B. bilobata*	*G. bulloides*	*G. calida*	*G. cavernula*	*G. conglobatus*	*G. crassaformis* s.l.	*G. crassaformis* cf. *viola*	*G. digitata*	*G. falconensis*	*G. glutinata*	*G. hexagona*	*G. hirsuta*
553	345.3	0.0	20.1	0.0	0.0	0.0	0.0		0.0	0.0	9.8	0.0	0.0
563	351.0	0.0	12.0	0.0	0.0	0.0	0.4		0.6	0.0	8.3	0.0	0.2
573	356.7	0.0	13.9	0.0	0.0	0.0	0.0		0.3	0.3	10.3	0.0	0.0
583	362.3	0.0	2.9	0.0	0.0	0.0	0.3		0.0	0.3	4.7	0.0	0.0
593	368.0	0.0	10.9	0.0	0.0	0.0	0.6		0.2	0.0	8.5	0.0	0.0
603	371.7	0.0	11.8	0.0	0.0	0.0	0.0		0.0	0.0	9.9	0.0	0.0
608	373.5	0.0	14.2	0.0	0.0	0.0	0.9		0.0	0.0	9.2	0.3	0.0
613	375.4	0.3	17.4	0.0	0.0	0.0	1.0		0.0	0.1	6.7	0.1	0.0
623	385.3	0.0	14.3	0.0	0.0	0.0	1.5		0.0	0.0	6.1	0.0	0.6
633	395.1	0.2	11.6	0.0	0.0	0.0	0.9		0.4	0.0	6.3	0.2	0.0
638	400.1	0.0	11.0	0.0	0.0	0.0	0.0		0.0	0.0	6.0	0.0	0.0
643	405.0	0.2	8.9	0.0	0.0	0.0	0.4		0.6	0.0	4.5	0.0	0.0
648	407.2	0.0	6.3	0.0	0.3	0.0	0.5		0.0	0.0	8.7	0.0	0.3
653	409.4	0.0	6.0	0.0	0.0	0.0	1.7		0.6	0.3	10.6	0.0	0.9
663	413.9	0.0	11.7	0.0	0.2	0.0	2.1		0.0	0.2	5.4	0.2	0.4
673	418.3	0.0	9.7	0.0	0.0	0.2	0.4		0.5	0.4	3.4	0.0	0.2
683	422.8	0.0	9.6	0.0	0.0	0.2	0.7		0.3	0.2	7.2	0.0	0.2
693	427.2	0.0	9.3	0.0	0.0	0.0	0.0		0.3	0.3	5.1	0.0	0.3
698	429.4	0.0	6.5	0.0	0.0	0.0	0.0		0.0	0.0	6.5	0.0	0.0
703	431.7	0.0	13.7	0.0	0.0	0.0	0.0		0.0	0.0	6.5	0.0	0.0
713	436.1	0.0	15.5	0.0	0.0	0.0	0.0		0.0	0.0	4.6	0.0	0.0
723	448.0	0.0	13.4	0.0	0.0	0.0	0.0		0.8	0.0	9.2	0.0	0.3
728	454.0	0.0	13.3	0.0	0.0	0.0	0.0		1.5	0.0	10.3	0.0	0.0
738	466.0	0.0	5.9	0.0	0.0	0.0	0.5		0.3	0.0	4.3	0.0	0.0
748	477.9	0.0	8.4	0.0	0.0	0.0	0.3		0.0	0.0	2.3	0.0	0.0
758	489.8	0.0	1.0	0.0	0.0	0.3	0.6		0.0	0.0	6.1	0.0	0.0
763	490.9	0.0	8.2	0.0	0.0	0.0	0.3		0.0	0.0	2.0	0.0	0.0
768	492.0	0.0	10.5	0.0	0.0	0.0	1.4	1.1	0.0	0.0	4.1	0.0	0.0
773	493.0	0.0	8.2	0.0	0.0	0.0	1.9	1.3	0.0	0.0	12.0	0.0	0.0
783	494.2	0.0	14.4	0.0	0.0	0.4	0.6	0.2	0.0	0.2	6.9	0.0	0.0
788	494.7	0.0	15.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	3.8	0.0	0.0
793	495.3	0.0	11.9	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
803	506.4	0.0	11.3	0.0	0.0	0.0	1.1	0.3	0.0	0.0	6.9	0.0	0.0
813	517.5	0.0	16.2	0.0	0.0	0.0	0.3	0.3	0.0	0.0	7.1	0.0	0.0
823	523.9	0.0	10.5	0.0	0.0	0.0	2.4	0.6	0.0	0.0	6.2	0.0	0.0
833	530.3	0.0	12.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	6.1	0.0	0.0
843	542.1	0.0	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.9	0.0	0.0
853	553.8	0.0	13.0	0.0	0.0	0.0	0.4	0.0	0.4	0.0	7.4	0.0	0.0
863	564.4	0.0	11.8	0.0	0.0	0.0	0.7	0.4	0.0	0.0	8.5	0.0	0.0
872	574.0	0.0	14.9	0.0	0.0	0.0	0.5	0.0	0.0	0.0	7.1	0.0	0.0
877	580.1	0.0	16.8	0.0	0.0	0.0	1.0	0.5	0.0	0.2	4.0	0.0	0.0
887	592.4	0.0	17.6	0.0	0.0	0.0	3.3	0.8	0.0	0.0	8.3	0.0	0.0
897	604.7	0.0	21.3	0.0	0.0	0.0	2.5	0.3	0.0	0.0	7.4	0.0	0.0
907	617.0	0.0	17.4	0.0	0.0	0.0	2.1	0.9	0.3	0.0	8.5	0.0	0.0
917	624.5	0.2	17.5	0.2	0.0	0.0	1.4	1.0	0.2	0.2	6.4	0.0	0.0
927	632.0	0.0	16.6	0.0	0.0	0.0	0.9	0.4	0.0	0.0	5.5	0.0	0.0
937	674.0	0.0	15.0	0.0	0.0	0.0	0.2	0.0	0.2	0.0	6.0	0.0	0.0
947	684.0	0.0	15.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	9.8	0.0	0.0
957	694.0	0.0	8.1	0.0	0.0	0.0	0.8	0.0	0.2	0.0	7.5	0.0	0.0
967	699.2	0.0	9.0	0.0	0.0	0.3	3.0	1.5	0.3	0.6	6.3	0.0	0.0
977	704.5	0.0	9.4	0.0	0.0	0.2	1.4	0.4	0.0	0.0	8.6	0.2	0.0
983	707.7	0.0	14.8	0.0	0.0	0.0	2.3	1.4	0.0	0.3	5.7	0.0	0.0
997	715.0	0.0	10.4	0.0	0.0	0.0	1.7	0.7	0.0	0.0	8.0	0.0	0.0
1002	736.0	0.0	15.8	0.0	0.0	0.0	0.2	0.0	0.1	0.0	11.2	0.0	0.0
1012	757.6	0.0	14.2	0.0	0.0	0.0	0.9	0.0	0.0	0.0	2.4	0.0	0.0
1021	765.8	0.0	12.4	0.0	0.0	0.0	0.5	0.0	0.0	0.0	5.7	0.0	0.0
1031	774.9	0.0	12.5	0.0	0.0	0.0	1.9	0.1	0.0	0.0	6.8	0.0	0.0
1041	784.0	0.0	6.8	0.0	0.0	0.0	2.3	0.6	0.0	0.0	7.1	0.0	0.0
1046	785.3	0.0	8.8	0.0	0.0	0.0	0.8	0.8	0.0	0.3	8.8	0.0	0.5
1056	787.8	0.0	9.3	0.0	0.2	0.0	1.4	0.0	0.0	0.0	5.0	0.0	0.0
1066	790.4	0.0	13.8	0.0	0.0	0.0	2.3	1.1	0.0	0.0	5.0	0.0	0.0
1076	793.0	0.0	13.8	0.0	0.0	0.0	4.8	1.9	0.0	0.0	5.6	0.0	0.0
1081	796.2	0.0	12.4	0.0	0.0	0.0	3.8	1.2	1.0	0.0	4.3	0.0	0.0
1092	803.3	0.0	13.4	0.0	0.0	0.0	2.9	0.7	0.0	0.0	7.5	0.0	0.0
1096	805.9	0.6	7.8	0.0	0.0	0.0	2.5	0.3	0.0	0.0	6.6	0.0	0.0
1106	812.3	0.0	13.5	0.0	0.0	0.0	3.3	0.7	0.0	0.0	6.1	0.0	0.2
1111	815.5	0.0	12.3	0.0	0.0	0.0	2.9	1.2	0.0	0.0	7.1	0.0	0.2
1121	822.0	0.3	14.2	0.0	0.0	0.0	2.5	0.8	0.0	0.0	7.1	0.0	0.0
1131	830.4	0.0	12.1	0.0	0.2	0.0	4.1	1.1	0.0	0.2	4.1	0.0	0.0
1141	838.9	0.0	8.2	0.0	0.0	0.0	3.9	0.4	0.0	0.2	5.4	0.0	0.4
1151	847.3	0.0	6.3	0.0	0.0	0.0	1.4	0.5	0.2	0.0	4.4	0.0	0.2

Appendix G
(continued)

depth (cmbs)	age (ky)	*G. inflata*	*G. menardii*	*G. ruber* pink	*G. ruber* white	*G. rubescens*	*G. sacculifer*	*G. scitula*	*G. siphonifera*	*G. tenellus*	*G. theyeri*	*G. truncatulinoides* left	*G. truncatulinoides* right
553	345.3	13.8	0.0	0.0	2.8	0.2	0.7	0.9	1.2	1.4	0.0	1.6	0.0
563	351.0	12.2	0.0	0.2	3.5	0.2	0.0	0.7	1.3	0.2	0.0	4.3	0.0
573	356.7	10.6	0.8	0.0	3.5	0.0	0.0	0.3	1.3	0.0	0.0	1.8	0.5
583	362.3	19.8	1.2	0.0	4.4	0.0	0.0	0.0	1.2	0.3	0.0	2.0	0.0
593	368.0	16.4	4.7	0.0	3.8	0.0	0.2	0.4	1.9	1.7	0.0	2.1	0.0
603	371.7	13.4	7.7	0.0	4.5	0.0	1.6	0.6	1.0	2.2	0.0	2.6	0.3
608	373.5	18.5	8.3	0.0	3.1	0.6	0.9	0.3	1.5	4.6	0.0	2.5	0.0
613	375.4	20.6	6.3	0.0	5.4	0.1	0.3	1.0	2.3	4.2	0.0	1.8	0.6
623	385.3	28.4	4.7	0.0	3.5	0.0	0.6	1.2	1.2	1.5	0.0	2.0	1.2
633	395.1	10.3	4.4	0.0	4.5	0.0	0.4	0.4	3.8	2.5	0.0	1.6	0.5
638	400.1	9.2	8.4	0.5	11.5	0.5	2.1	0.8	3.1	3.4	0.0	1.3	0.3
643	405.0	10.2	4.7	0.2	7.1	0.2	1.6	0.6	4.3	3.0	0.0	2.2	0.4
648	407.2	7.1	6.3	0.0	14.1	0.3	1.9	0.0	4.1	6.5	0.0	1.9	1.4
653	409.4	4.0	10.0	0.3	13.7	0.0	1.4	0.6	3.4	9.1	0.0	2.9	0.9
663	413.9	4.0	2.9	0.0	10.3	0.0	0.2	0.8	6.7	9.2	0.0	1.5	3.8
673	418.3	8.7	1.8	0.0	8.8	0.0	0.9	0.9	6.5	7.4	0.0	0.7	5.8
683	422.8	13.1	0.3	0.5	6.7	0.2	1.4	0.5	2.9	3.4	0.0	0.3	7.0
693	427.2	7.8	0.0	0.0	0.9	0.0	0.3	0.6	0.9	0.3	0.0	1.5	1.8
698	429.4	11.5	0.0	0.0	2.2	0.0	0.0	0.0	1.2	0.3	0.0	3.7	0.6
703	431.7	14.9	0.0	0.0	2.0	0.0	0.2	0.7	0.7	0.7	0.0	6.7	0.2
713	436.1	9.4	0.0	0.0	2.2	0.0	0.4	0.4	1.1	0.7	0.0	6.5	0.0
723	448.0	12.6	0.0	0.0	2.5	0.0	0.0	0.6	1.7	0.3	0.0	3.6	0.0
728	454.0	18.6	0.0	0.0	1.2	0.0	0.0	0.6	0.0	0.9	0.0	1.8	0.6
738	466.0	11.0	0.0	0.0	0.5	0.0	0.0	0.2	0.0	0.2	0.0	0.5	0.0
748	477.9	20.7	0.0	0.0	1.0	0.0	0.3	0.0	0.6	0.3	0.0	0.6	1.3
758	489.8	17.6	0.3	0.0	1.9	0.0	0.6	1.3	0.3	1.3	0.0	12.8	0.0
763	490.9	10.4	0.0	0.0	1.4	0.0	0.0	0.3	0.6	0.0	0.0	4.8	0.6
768	492.0	17.4	0.0	0.0	2.5	0.0	0.6	0.6	0.8	1.7	0.0	1.1	0.6
773	493.0	24.7	0.0	0.0	3.6	0.0	1.5	0.8	1.3	2.3	0.0	2.1	0.8
783	494.2	20.8	0.0	0.4	7.1	0.0	0.4	0.2	1.1	3.2	0.0	3.2	0.2
788	494.7	17.5	0.0	0.0	4.2	0.0	0.0	0.6	3.2	2.5	0.0	5.5	1.5
793	495.3	19.1	0.0	0.2	4.0	0.0	0.0	0.2	2.5	3.2	0.0	1.5	1.7
803	506.4	13.3	0.0	0.0	0.6	0.0	0.0	0.6	1.4	3.9	0.0	2.5	0.0
813	517.5	14.3	0.0	0.3	2.9	0.0	0.0	0.0	1.3	7.1	0.0	8.8	0.0
823	523.9	18.7	0.0	0.4	2.4	0.0	0.2	0.2	1.3	4.3	0.0	2.6	0.0
833	530.3	19.1	0.0	0.0	1.2	0.0	0.0	0.6	1.8	5.2	0.0	1.8	0.3
843	542.1	14.9	0.0	0.0	2.2	0.0	0.0	0.0	0.4	4.4	0.0	1.8	0.0
853	553.8	15.1	0.0	0.0	4.6	0.0	0.0	0.7	0.4	0.7	0.0	3.2	0.7
863	564.4	29.2	0.0	0.0	4.8	0.0	0.4	1.1	1.5	1.5	0.0	2.2	0.7
872	574.0	18.8	0.0	0.2	10.8	0.0	1.4	0.7	3.0	3.9	0.0	0.7	3.4
877	580.1	20.0	0.0	0.0	8.4	0.2	1.7	1.2	3.2	3.2	0.0	0.5	1.2
887	592.4	20.9	0.0	0.0	6.3	0.0	0.0	0.3	0.8	3.3	0.0	2.5	1.1
897	604.7	20.6	0.0	0.0	3.8	0.0	0.5	1.0	0.8	2.3	0.0	2.8	1.0
907	617.0	23.2	0.3	0.3	8.2	0.0	0.6	1.2	1.5	5.9	0.0	0.3	1.5
917	624.5	17.7	0.0	0.0	8.5	0.2	0.2	1.6	3.3	6.0	0.0	0.4	3.1
927	632.0	22.5	0.0	0.0	5.1	0.0	0.0	0.6	0.9	2.8	0.0	0.8	1.5
937	674.0	15.8	0.0	0.0	3.2	0.0	0.0	1.0	0.8	0.4	0.0	0.4	0.6
947	684.0	19.9	0.3	0.0	2.9	0.0	0.3	0.3	0.0	0.0	0.0	0.0	1.6
957	694.0	31.4	1.6	0.0	4.7	0.0	0.2	0.8	1.6	1.2	0.0	0.6	4.3
967	699.2	27.3	0.6	0.0	12.0	0.3	0.6	1.2	1.8	1.8	0.0	0.0	4.5
977	704.5	31.1	0.0	0.0	12.0	0.0	1.0	0.2	2.2	1.6	0.0	0.2	5.0
983	707.7	27.8	0.3	0.0	8.0	0.0	1.7	0.3	1.1	2.6	0.0	0.3	2.3
997	715.0	28.1	0.0	0.0	6.6	0.0	0.0	0.2	0.5	0.7	0.0	0.5	2.1
1002	736.0	23.6	0.0	0.0	7.6	0.0	0.6	0.1	0.8	0.7	0.0	0.1	2.0
1012	757.6	27.0	0.0	0.0	5.2	0.0	0.6	0.0	0.0	0.6	0.0	0.0	0.3
1021	765.8	33.0	0.0	0.0	5.7	0.0	0.3	0.3	0.3	0.3	0.0	0.5	1.4
1031	774.9	27.5	0.0	0.0	7.3	0.1	0.2	0.3	1.3	1.1	0.0	0.4	1.4
1041	784.0	17.5	0.0	0.3	10.5	0.0	0.6	0.0	1.4	3.4	0.0	0.3	2.8
1046	785.3	17.3	0.8	0.0	8.2	0.3	0.5	0.3	1.0	4.1	0.0	0.0	3.6
1056	787.8	24.5	0.4	1.8	12.3	0.4	1.0	0.4	2.4	4.8	0.0	0.2	2.6
1066	790.4	15.2	0.0	0.0	10.2	0.0	0.7	0.5	3.6	2.5	0.0	0.2	2.5
1076	793.0	16.0	0.0	0.0	6.3	0.0	0.0	0.4	0.0	1.1	0.0	0.0	0.7
1081	796.2	23.6	0.0	0.0	2.4	0.0	0.0	0.0	1.4	1.4	0.0	2.4	0.7
1092	803.3	25.4	0.0	0.0	6.2	0.0	0.0	0.7	1.0	1.0	0.0	3.3	1.6
1096	805.9	24.5	0.0	0.0	6.9	0.0	0.6	0.9	0.6	0.6	0.0	3.8	1.3
1106	812.3	23.2	0.7	0.4	7.6	0.0	0.0	0.6	0.9	0.9	0.0	0.2	3.9
1111	815.5	18.7	0.0	0.2	10.1	0.0	0.2	0.7	2.0	1.2	0.0	0.2	1.2
1121	822.0	13.2	0.0	0.0	3.4	0.0	0.3	0.3	1.2	1.2	0.0	0.0	1.2
1131	830.4	22.9	0.4	0.0	5.6	0.0	0.4	0.6	1.7	0.9	0.0	0.2	7.6
1141	838.9	13.6	0.2	0.2	8.2	0.0	0.7	0.4	2.8	1.3	0.0	0.2	3.7
1151	847.3	11.4	0.2	0.0	10.7	0.2	0.7	0.0	1.4	1.9	0.0	0.0	3.3

Appendix G
(continued)

depth (cmbs)	age (ky)	*G. tumida*	*G. uvula*	*N. dutertrei*	*N. pachyderma* left	*N. pachyderma* right	*O. universa*	*P. obliquiloculata*	*S. dehiscens*	*T. quinqueloba*	rest
553	345.3	0.0	0.0	0.5	7.0	30.6	0.9	0.0	0.0	7.7	0.7
563	351.0	0.0	0.0	0.0	5.2	46.9	1.3	0.0	0.0	1.9	0.7
573	356.7	0.0	0.0	0.5	4.3	47.6	1.8	0.0	0.0	2.3	0.2
583	362.3	0.0	0.0	0.3	7.9	52.2	2.3	0.0	0.0	0.3	0.0
593	368.0	0.0	0.0	0.9	3.8	40.6	1.3	0.0	0.0	1.5	0.4
603	371.7	0.0	0.0	0.3	4.8	35.1	1.3	0.0	0.0	2.2	0.6
608	373.5	0.0	0.0	0.0	2.2	30.5	0.9	0.0	0.0	1.2	0.3
613	375.4	0.0	0.0	0.1	5.3	24.0	1.5	0.0	0.0	0.1	0.4
623	385.3	0.0	0.0	0.6	11.4	18.7	1.2	0.0	0.0	1.2	0.3
633	395.1	0.0	0.2	3.3	36.6	9.1	1.8	0.0	0.0	0.7	0.4
638	400.1	0.0	0.0	3.1	30.9	5.8	1.6	0.0	0.0	0.3	0.3
643	405.0	0.0	0.0	5.5	38.2	5.7	1.4	0.0	0.0	0.0	0.0
648	407.2	0.0	0.3	3.8	16.6	17.9	0.3	0.0	0.0	0.8	0.8
653	409.4	0.0	0.6	3.7	7.4	21.4	0.6	0.0	0.0	0.0	0.0
663	413.9	0.0	0.0	1.0	0.8	35.8	1.0	0.0	0.0	0.0	1.7
673	418.3	0.0	0.2	0.2	1.6	38.1	2.3	0.0	0.0	0.0	1.3
683	422.8	0.0	0.2	0.3	1.9	41.1	0.3	0.5	0.2	0.7	0.0
693	427.2	0.0	0.9	0.0	1.2	66.8	0.9	0.0	0.0	0.0	0.9
698	429.4	0.0	0.0	0.0	2.8	60.1	0.3	0.0	0.0	2.8	1.2
703	431.7	0.0	0.0	0.2	3.0	50.0	0.0	0.0	0.0	0.0	0.2
713	436.1	0.0	0.4	0.0	6.5	48.4	0.4	0.0	0.0	3.5	0.0
723	448.0	0.0	0.0	0.0	17.4	34.2	0.0	0.0	0.0	3.4	0.0
728	454.0	0.0	0.0	0.0	17.1	30.4	1.8	0.0	0.0	1.5	0.6
738	466.0	0.0	0.0	0.0	15.8	59.7	0.3	0.0	0.0	0.5	0.2
748	477.9	0.0	0.0	0.3	1.6	60.5	0.6	0.0	0.0	0.0	1.0
758	489.8	0.0	0.0	0.0	1.9	51.8	1.6	0.0	0.0	0.6	0.0
763	490.9	0.0	0.0	0.6	0.6	68.7	0.3	0.0	0.0	0.8	0.6
768	492.0	0.0	0.0	0.3	0.8	57.3	0.3	0.0	0.0	0.3	0.0
773	493.0	0.0	0.0	0.2	1.1	38.0	0.0	0.0	0.0	0.0	1.5
783	494.2	0.0	0.4	0.2	0.2	38.6	0.2	0.0	0.0	0.4	0.6
788	494.7	0.0	0.2	0.2	0.6	42.8	0.6	0.0	0.0	0.4	0.8
793	495.3	0.0	0.0	0.0	0.4	54.1	0.8	0.0	0.0	0.0	0.0
803	506.4	0.0	0.0	0.0	0.8	55.8	0.3	0.0	0.0	1.1	0.6
813	517.5	0.0	0.3	0.0	1.9	37.7	0.0	0.0	0.0	0.6	1.0
823	523.9	0.0	0.0	0.4	0.6	48.7	0.0	0.0	0.0	0.6	0.4
833	530.3	0.0	0.0	0.0	1.2	48.0	0.3	0.0	0.0	0.9	0.9
843	542.1	0.0	0.0	0.0	3.1	53.1	1.3	0.0	0.0	0.9	0.4
853	553.8	0.0	0.0	0.0	2.5	49.6	1.4	0.0	0.0	0.0	0.0
863	564.4	0.0	0.0	0.0	0.4	34.3	2.2	0.0	0.0	0.0	0.7
872	574.0	0.0	0.2	0.2	0.5	32.0	1.6	0.0	0.0	0.2	0.0
877	580.1	0.0	0.0	0.0	0.5	35.6	1.7	0.0	0.0	0.5	0.0
887	592.4	0.0	0.3	0.0	0.8	33.6	0.3	0.0	0.0	0.0	0.6
897	604.7	0.0	0.3	0.0	1.0	33.0	1.5	0.0	0.0	0.3	0.0
907	617.0	0.0	0.9	0.6	0.6	25.9	0.0	0.0	0.0	0.3	0.6
917	624.5	0.0	0.0	0.0	1.4	29.3	1.9	0.0	0.0	0.0	0.2
927	632.0	0.0	0.0	0.4	4.7	33.6	1.9	0.0	0.0	1.1	0.9
937	674.0	0.0	0.0	0.0	10.8	43.5	1.0	0.0	0.0	1.0	0.0
947	684.0	0.7	0.0	0.0	7.8	37.5	2.0	0.0	0.0	1.3	0.0
957	694.0	0.0	0.6	0.2	2.2	33.3	0.2	0.0	0.0	0.0	0.4
967	699.2	0.0	0.0	0.0	1.5	27.9	0.6	0.0	0.0	0.0	0.3
977	704.5	0.0	0.0	0.0	0.6	24.3	1.0	0.0	0.0	0.6	0.6
983	707.7	0.0	0.0	0.0	2.3	27.8	1.1	0.3	0.0	0.6	0.6
997	715.0	0.0	0.2	0.0	7.1	32.5	1.0	0.0	0.0	0.0	0.3
1002	736.0	0.0	0.0	0.0	4.4	29.9	2.0	0.0	0.0	0.2	0.6
1012	757.6	0.0	0.0	0.0	5.5	40.0	1.8	0.0	0.0	0.3	1.2
1021	765.8	0.0	0.0	0.0	4.3	32.7	1.6	0.0	0.3	0.3	0.5
1031	774.9	0.0	0.0	0.0	5.5	32.1	0.9	0.0	0.1	0.2	0.2
1041	784.0	0.6	0.0	0.0	3.1	42.9	0.3	0.0	0.3	0.0	0.0
1046	785.3	0.3	0.3	0.0	3.9	38.7	1.0	0.0	0.0	0.0	0.8
1056	787.8	0.0	0.0	0.6	1.4	28.6	1.2	0.2	0.0	0.0	1.2
1066	790.4	0.0	0.0	0.7	2.0	37.8	1.1	0.0	0.0	0.2	1.8
1076	793.0	0.0	0.0	0.0	10.4	34.9	0.7	0.0	0.0	3.7	1.5
1081	796.2	0.0	1.0	0.0	6.7	37.0	0.2	0.0	0.0	0.7	1.0
1092	803.3	0.0	0.0	0.0	3.3	31.9	1.0	0.0	0.0	0.0	1.0
1096	805.9	0.0	0.9	0.0	3.8	35.1	2.8	0.0	0.0	0.0	0.6
1106	812.3	0.0	0.0	0.0	1.7	33.9	2.0	0.4	0.0	0.0	0.6
1111	815.5	0.0	1.0	0.0	2.9	36.1	2.0	0.0	0.0	0.2	0.5
1121	822.0	0.0	0.3	0.0	3.2	47.6	2.9	0.2	0.0	0.2	0.5
1131	830.4	0.0	0.4	0.0	3.2	31.3	1.9	0.0	0.0	0.9	1.1
1141	838.9	0.9	0.2	0.2	1.7	44.0	1.9	0.4	0.0	0.4	0.9
1151	847.3	0.0	0.0	0.0	1.9	51.6	2.3	0.5	0.0	0.5	0.9

Appendix G
(continued)

depth (cmbs)	age (ky)	*B. bilobata*	*G. bulloides*	*G. calida*	*G. cavernula*	*G. conglobatus*	*G. crassaformis* s.l.	*G. crassaformis* cf. *viola*	*G. digitata*	*G. falconensis*	*G. glutinata*	*G. hexagona*	*G. hirsuta*
1161	855.8	0.0	7.6	0.0	0.0	0.1	3.0	1.6	0.1	0.0	4.4	0.0	0.1
1166	860.0	0.0	8.7	0.0	0.2	0.0	1.7	0.7	0.2	0.0	3.6	0.0	0.2
1176	866.8	0.0	5.8	0.0	0.3	0.0	0.6	0.0	0.0	0.6	3.9	0.0	0.0
1186	873.6	0.0	5.2	0.0	0.0	0.0	0.6	0.0	0.3	0.3	5.2	0.0	0.0
1191	877.0	0.0	9.0	0.0	0.0	0.0	2.0	1.0	0.3	0.0	6.6	0.0	0.0
1201	883.8	0.0	11.5	0.0	0.0	0.3	1.1	0.3	0.0	0.0	6.6	0.0	0.0
1211	888.1	0.0	10.7	0.0	0.0	0.0	3.2	3.0	0.4	0.0	2.6	0.0	0.0
1216	890.2	0.0	8.9	0.0	0.0	0.0	1.4	0.4	0.7	0.0	2.8	0.0	0.0
1226	894.5	0.0	8.7	0.0	0.0	0.0	1.1	0.6	0.1	0.0	2.1	0.0	0.0
1236	898.7	0.0	10.4	0.0	0.0	0.0	0.6	0.4	0.4	0.0	3.8	0.0	0.0
1246	903.0	0.0	7.8	0.0	0.0	0.0	1.3	0.4	0.0	0.0	6.5	0.0	0.0
1251	905.2	0.0	11.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	2.4	0.0	0.0
1265	911.3	0.0	10.0	0.0	0.0	0.0	1.0	0.2	0.0	0.0	5.1	0.0	0.0
1275	916.0	0.0	12.5	0.0	0.0	0.0	0.6	0.3	0.0	0.0	4.2	0.0	0.0
1285	929.3	0.0	15.8	0.0	0.0	0.0	0.8	0.0	0.8	0.0	4.4	0.0	0.0
1290	936.0	0.0	18.1	0.0	0.0	0.0	0.5	0.0	0.3	0.0	3.2	0.0	0.0
1300	939.8	0.0	14.2	0.0	0.0	0.0	0.2	0.0	1.0	0.0	5.2	0.0	0.0
1310	943.5	0.3	16.3	0.0	0.0	0.0	1.1	1.1	1.1	0.0	2.9	0.0	0.0
1320	947.3	0.0	11.8	0.0	0.0	0.0	2.7	0.3	0.3	0.0	6.9	0.0	0.0
1335	953.0	0.0	9.1	0.0	0.0	0.0	2.3	1.4	0.6	0.2	5.4	0.0	0.0
1340	954.7	0.0	8.3	0.0	0.0	0.0	1.8	1.2	0.0	0.3	8.3	0.0	0.0
1350	958.1	0.0	11.3	0.0	0.0	0.0	1.4	0.2	0.2	1.4	4.9	0.0	0.0
1360	961.5	0.0	14.6	0.0	0.0	0.0	1.6	0.4	0.4	0.4	4.0	0.0	0.0
1370	967.6	0.0	16.8	0.0	0.0	0.0	3.9	1.3	0.3	0.3	7.0	0.0	0.0
1384	976.0	0.0	10.8	0.0	0.0	0.0	2.4	1.3	0.0	0.0	5.9	0.0	0.0
1389	977.8	0.0	16.3	0.0	0.0	0.0	0.9	0.6	0.0	0.0	3.8	0.0	0.0
1399	981.5	0.0	7.4	0.0	0.0	0.0	1.0	0.3	0.0	0.0	3.2	0.0	0.0
1409	985.1	0.0	9.8	0.0	0.0	0.0	1.5	0.4	0.4	0.0	5.1	0.0	0.0
1424	990.6	0.0	13.9	0.0	0.0	0.0	1.2	0.2	0.2	0.0	8.1	0.0	0.0
1434	994.3	0.0	17.4	0.0	0.0	0.0	1.9	1.0	0.0	0.0	5.8	0.0	0.3
1444	997.9	0.0	13.0	0.0	0.0	0.0	1.7	0.3	0.0	0.0	4.9	0.0	0.0
1454	1001.6	0.0	17.0	0.0	0.0	0.0	1.6	0.5	0.0	0.3	5.8	0.0	0.0
1464	1005.2	0.0	21.3	0.0	0.0	0.0	3.3	0.8	0.0	0.0	5.2	0.0	0.0
1474	1008.9	0.0	20.1	0.0	0.0	0.0	2.2	0.6	0.0	0.0	3.3	0.0	0.0
1484	1012.5	0.0	22.8	0.0	0.0	0.0	2.4	0.3	0.0	0.0	4.7	0.0	0.0
1489	1014.3	0.0	20.1	0.0	0.0	0.0	1.6	0.7	0.0	0.0	6.2	0.0	0.2
1499	1018.0	0.0	14.2	0.0	0.0	0.0	2.4	0.9	0.0	0.0	5.2	0.0	0.0
1504	1020.7	0.0	14.9	0.0	0.0	0.0	2.2	0.7	0.2	0.2	5.5	0.0	0.5
1514	1026.0	0.0	14.1	0.0	0.0	0.0	2.8	0.8	0.3	0.0	4.8	0.0	0.3
1524	1028.3	0.0	13.1	0.0	0.0	0.0	2.6	0.5	0.0	0.2	6.3	0.0	0.0
1539	1031.7	0.0	13.4	0.0	0.0	0.0	1.4	0.4	0.7	0.0	9.0	0.0	0.0
1544	1033.7	0.0	14.7	0.0	0.0	0.0	1.3	0.6	0.0	0.0	4.1	0.0	0.2
1554	1037.7	0.0	16.1	0.0	0.0	0.0	0.8	0.2	0.2	0.4	5.6	0.0	0.0
1559	1039.7	0.0	19.4	0.0	0.0	0.0	0.7	0.2	0.0	0.0	7.7	0.0	0.0
1569	1043.6	0.0	17.0	0.0	0.0	0.0	2.2	0.7	0.0	0.0	5.1	0.0	0.0
1579	1047.6	0.0	19.4	0.0	0.0	0.0	0.0	0.0	0.0	0.3	5.9	0.0	0.0
1589	1054.4	0.0	16.1	0.0	0.0	0.0	1.6	0.0	0.3	0.0	4.1	0.0	0.0
1599	1061.2	0.0	10.7	0.0	0.0	0.0	1.5	0.6	0.4	0.2	5.4	0.0	0.0
1609	1068.0	0.0	7.0	0.0	0.0	0.0	0.8	0.4	0.2	0.0	4.8	0.0	0.0
1617	1073.4	0.0	6.3	0.0	0.0	0.0	0.8	0.2	0.0	0.4	5.5	0.0	0.0
1623	1077.5	0.0	6.5	0.0	0.0	0.0	0.7	0.5	0.2	0.0	2.8	0.0	0.0

Appendix G
(continued)

depth (cmbs)	age (ky)	*G. inflata*	*G. menardii*	*G. ruber* pink	*G. ruber* white	*G. rubescens*	*G. sacculifer*	*G. scitula*	*G. siphonifera*	*G. tenellus*	*G. theyeri*	*G. truncatulinoides* left	*G. truncatulinoides* right
1161	855.8	8.3	0.2	0.5	8.5	0.0	1.3	0.2	2.7	2.6	0.0	0.0	1.6
1166	860.0	8.2	0.0	0.0	10.4	0.0	1.5	0.5	4.1	2.9	0.0	0.2	3.1
1176	866.8	7.8	0.0	2.8	14.4	0.0	1.7	0.3	4.2	3.0	0.0	0.6	3.6
1186	873.6	10.5	0.0	0.6	17.4	0.3	4.1	0.6	1.9	2.8	0.0	3.3	0.6
1191	877.0	14.0	0.0	0.0	9.0	0.0	2.3	0.3	1.0	0.0	0.0	3.3	0.3
1201	883.8	13.7	0.0	0.0	6.0	0.0	1.1	0.0	1.1	0.5	0.0	3.0	1.4
1211	888.1	19.1	0.0	0.0	9.9	0.0	0.0	0.0	1.5	0.4	0.0	0.6	5.8
1216	890.2	18.1	0.0	0.0	8.5	0.0	0.0	0.0	1.4	0.7	0.0	1.1	5.0
1226	894.5	12.6	0.0	0.0	6.2	0.0	0.7	0.3	1.6	0.6	0.0	0.1	2.1
1236	898.7	6.9	0.0	0.0	3.3	0.0	0.0	0.0	1.7	1.3	0.0	0.6	1.0
1246	903.0	6.5	0.0	0.0	9.1	0.0	0.0	0.0	0.9	0.9	0.0	0.4	0.2
1251	905.2	7.5	0.0	0.0	7.8	0.0	0.0	0.6	0.9	1.1	0.0	2.4	0.9
1265	911.3	22.6	0.0	0.0	8.3	0.0	0.2	0.5	2.9	0.2	0.0	0.7	6.1
1275	916.0	16.7	0.0	0.0	4.2	0.0	0.0	0.3	4.8	0.6	0.0	0.0	2.1
1285	929.3	19.2	0.0	0.0	2.3	0.0	0.0	2.1	1.3	0.0	0.0	1.0	1.6
1290	936.0	15.4	0.0	0.0	5.1	0.0	0.0	0.8	1.1	0.8	0.0	1.9	3.8
1300	939.8	16.4	0.0	0.0	3.7	0.0	0.0	0.5	0.7	0.2	0.0	0.2	1.5
1310	943.5	20.3	0.0	0.0	5.3	0.0	0.0	0.5	2.1	0.5	0.0	0.0	1.1
1320	947.3	25.1	0.0	0.0	7.9	0.0	0.0	0.0	2.4	1.2	0.3	0.0	3.6
1335	953.0	11.4	0.0	1.0	7.0	0.0	1.9	0.6	3.5	1.6	0.0	0.0	0.6
1340	954.7	8.0	0.0	1.5	5.6	0.0	0.9	0.9	4.7	0.9	0.0	0.0	1.8
1350	958.1	11.8	0.0	1.7	10.3	0.0	0.4	0.4	6.8	1.7	0.0	0.0	2.3
1360	961.5	28.9	0.0	0.0	5.1	0.0	0.0	0.0	2.0	0.0	0.0	5.9	2.0
1370	967.6	25.3	0.0	0.3	4.1	0.0	0.0	0.5	1.3	0.5	0.0	5.7	1.0
1384	976.0	21.7	0.0	0.2	1.7	0.0	0.4	0.4	2.4	0.7	0.0	5.6	2.0
1389	977.8	24.4	0.0	0.3	2.8	0.0	0.3	0.6	1.9	0.0	0.0	5.0	2.5
1399	981.5	12.3	0.0	0.0	3.5	0.0	0.0	0.3	6.5	0.0	0.0	2.6	6.1
1409	985.1	25.1	0.0	0.4	8.1	0.0	0.0	0.2	3.8	0.4	0.0	2.3	7.9
1424	990.6	16.9	0.0	0.0	4.6	0.0	0.5	0.5	3.5	0.2	0.0	6.3	0.2
1434	994.3	19.6	0.0	0.0	7.7	0.0	0.0	0.0	0.3	0.3	0.0	6.1	0.6
1444	997.9	27.5	0.0	0.3	13.6	0.0	0.3	0.3	2.3	0.6	0.0	4.6	0.0
1454	1001.6	23.1	0.0	0.0	9.6	0.0	0.0	0.5	2.5	1.4	0.0	4.4	0.3
1464	1005.2	27.3	0.0	0.3	10.2	0.0	0.0	0.0	2.5	0.8	0.0	2.5	0.8
1474	1008.9	24.8	0.0	0.0	11.4	0.0	0.0	0.6	1.4	4.1	0.0	1.4	1.0
1484	1012.5	18.1	0.0	0.0	13.1	0.0	0.0	0.3	0.5	0.5	0.0	2.6	0.3
1489	1014.3	20.3	0.0	0.0	8.8	0.0	0.0	0.0	1.4	0.5	0.0	2.8	0.0
1499	1018.0	15.2	0.0	0.0	10.6	0.0	0.0	0.3	1.8	0.6	0.0	6.4	0.6
1504	1020.7	17.8	0.0	0.0	12.3	0.0	0.0	0.5	1.7	1.2	0.0	4.3	0.2
1514	1026.0	14.4	0.0	0.0	13.0	0.0	0.3	0.3	2.3	1.7	0.0	7.3	0.3
1524	1028.3	9.9	0.0	0.2	16.0	0.0	0.0	0.2	3.9	1.5	0.0	6.6	1.2
1539	1031.7	15.5	0.0	0.0	8.3	0.0	0.4	0.7	4.3	3.2	0.0	4.7	0.4
1544	1033.7	15.2	0.0	0.4	10.0	0.0	0.2	0.6	5.8	1.3	0.0	4.8	0.7
1554	1037.7	19.7	0.0	0.4	7.3	0.0	0.2	0.6	2.7	1.3	0.0	3.3	1.5
1559	1039.7	14.0	0.0	0.0	4.4	0.0	0.0	0.0	1.0	0.7	0.0	3.1	0.0
1569	1043.6	12.8	0.0	0.2	6.4	0.0	0.2	0.4	1.8	0.7	0.0	5.3	0.0
1579	1047.6	26.7	0.0	0.0	7.3	0.0	0.3	0.3	0.3	0.3	0.0	0.8	0.0
1589	1054.4	25.4	0.3	0.0	7.1	0.0	0.3	0.8	2.7	0.3	0.0	1.4	0.0
1599	1061.2	16.5	1.3	0.2	8.8	0.0	0.9	0.2	1.3	1.5	0.0	1.9	0.0
1609	1068.0	12.2	3.0	3.8	8.6	0.0	3.8	0.8	5.2	0.6	0.0	4.2	0.4
1617	1073.4	22.6	3.4	0.6	7.5	0.0	2.3	0.0	4.4	1.0	0.0	1.7	0.6
1623	1077.5	14.9	4.7	0.2	13.1	0.0	2.6	0.5	5.4	1.9	0.0	3.0	2.8

Appendix G
(continued)

depth (cmbs)	age (ky)	*G. tumida*	*G. uvula*	*N. dutertrei*	*N. pachyderma* left	*N. pachyderma* right	*O. universa*	*P. obliquiloculata*	*S. dehiscens*	*T. quinqueloba*	rest
1161	855.8	0.0	0.0	0.0	2.7	52.3	2.9	0.1	0.1	0.0	0.6
1166	860.0	0.0	0.0	0.0	1.7	50.1	1.9	0.5	0.0	0.0	0.0
1176	866.8	0.3	0.0	0.0	1.9	45.4	2.2	0.0	0.0	0.0	0.8
1186	873.6	0.0	0.0	0.0	2.8	40.5	1.1	0.6	0.0	0.6	1.1
1191	877.0	0.0	0.0	0.0	4.3	44.2	0.7	0.0	0.0	1.0	1.7
1201	883.8	0.0	0.0	0.0	5.5	43.4	1.6	0.0	0.0	1.6	1.4
1211	888.1	0.0	0.0	0.0	3.7	40.6	0.2	0.0	0.0	0.4	1.1
1216	890.2	0.0	0.4	0.0	4.3	41.6	1.8	0.0	0.0	1.8	1.4
1226	894.5	0.0	0.4	0.0	3.7	57.7	1.0	0.0	0.0	0.7	0.0
1236	898.7	0.0	0.2	0.0	9.8	58.1	0.0	0.2	0.0	0.8	0.8
1246	903.0	0.0	0.2	0.0	10.2	51.6	2.0	0.2	0.0	1.1	1.1
1251	905.2	0.0	0.0	0.0	7.3	53.0	1.5	0.2	0.0	0.6	1.9
1265	911.3	0.0	0.0	0.0	4.4	35.2	1.7	0.2	0.0	0.2	0.7
1275	916.0	0.0	0.9	0.0	15.2	32.2	1.5	0.3	0.0	2.7	1.2
1285	929.3	0.0	0.0	0.0	14.0	32.6	1.6	0.0	0.0	1.6	1.0
1290	936.0	0.0	0.0	0.0	12.4	32.6	1.6	0.0	0.0	1.1	1.3
1300	939.8	0.0	0.0	0.0	7.0	43.8	3.5	0.0	0.0	0.7	1.0
1310	943.5	0.0	0.0	0.0	3.7	40.4	2.9	0.3	0.0	0.0	1.1
1320	947.3	0.0	0.9	0.0	2.1	32.0	1.2	0.3	0.0	0.6	0.6
1335	953.0	0.0	0.4	0.0	2.7	48.6	0.8	0.0	0.2	0.8	1.4
1340	954.7	0.0	0.9	0.0	1.5	49.9	1.5	0.6	0.0	1.2	1.5
1350	958.1	0.0	0.4	0.2	1.2	40.2	1.6	0.6	0.4	0.0	1.0
1360	961.5	0.0	0.0	0.4	4.7	26.9	1.2	0.0	0.0	0.0	2.0
1370	967.6	0.0	0.3	0.0	3.1	28.9	0.5	0.0	0.0	0.0	0.5
1384	976.0	0.0	0.2	0.0	1.7	42.5	0.7	0.0	0.0	0.2	0.4
1389	977.8	0.0	0.6	0.0	1.6	37.2	0.0	0.0	0.0	0.9	0.9
1399	981.5	0.0	0.3	0.0	0.0	54.2	0.6	0.0	0.0	0.0	1.9
1409	985.1	0.0	0.0	0.2	3.6	28.9	1.1	0.2	0.0	0.0	0.9
1424	990.6	0.0	0.7	0.0	6.0	34.5	0.9	0.5	0.0	0.5	0.9
1434	994.3	0.0	0.6	0.0	4.5	32.2	1.0	0.6	0.0	0.3	0.6
1444	997.9	0.0	0.3	0.0	2.0	24.6	0.6	1.7	0.0	1.2	0.6
1454	1001.6	0.0	0.5	0.0	4.4	27.2	0.8	0.0	0.3	0.0	0.3
1464	1005.2	0.0	0.0	0.0	2.2	21.5	0.3	1.4	0.0	0.3	0.0
1474	1008.9	0.0	0.2	0.0	0.6	27.6	0.0	0.8	0.0	0.2	0.2
1484	1012.5	0.0	0.3	0.0	2.6	29.7	0.3	1.0	0.0	0.5	0.3
1489	1014.3	0.0	0.0	0.0	2.8	32.8	1.2	0.7	0.0	0.2	0.5
1499	1018.0	0.0	0.6	0.0	2.1	37.0	0.6	0.6	0.0	0.3	1.5
1504	1020.7	0.0	0.5	0.0	1.7	34.1	0.7	0.0	0.0	0.2	1.2
1514	1026.0	0.0	0.0	0.0	2.5	33.8	1.1	0.6	0.0	0.0	0.3
1524	1028.3	0.0	0.3	0.0	1.7	33.0	1.5	0.7	0.0	0.5	0.5
1539	1031.7	0.0	0.0	0.0	0.7	32.9	1.1	0.0	0.0	0.7	2.5
1544	1033.7	0.0	0.4	0.0	0.9	34.7	2.0	0.4	0.0	0.4	2.0
1554	1037.7	0.0	0.6	0.0	1.0	34.3	1.5	0.4	0.0	0.4	1.9
1559	1039.7	0.0	1.0	0.0	1.7	43.1	0.5	0.0	0.0	0.7	1.9
1569	1043.6	0.0	0.7	0.2	5.7	36.3	1.1	0.2	0.0	1.5	2.2
1579	1047.6	0.0	0.0	0.0	1.7	32.6	1.7	0.3	0.0	1.4	0.8
1589	1054.4	0.0	0.3	0.0	3.3	30.1	4.1	0.0	0.0	0.3	1.6
1599	1061.2	0.0	0.0	0.6	3.0	41.3	1.5	0.9	0.0	0.4	1.5
1609	1068.0	3.4	0.0	0.4	5.6	31.5	2.2	1.4	0.0	0.0	0.4
1617	1073.4	3.1	0.0	0.2	20.8	14.9	1.7	0.0	0.0	0.2	2.1
1623	1077.5	0.0	0.0	0.0	13.3	24.9	0.7	0.2	0.0	0.0	1.6

Appendix H - Stable isotopes of *G. ruber* white in Core T89-40

note: *c.* 20 specimen (250 - 350 µm) were used for measurements.

age (ky)	$\delta^{13}C$ rw	$\delta^{18}O$ rw	age (ky)	$\delta^{13}C$ rw	$\delta^{18}O$ rw	age (ky)	$\delta^{13}C$ rw	$\delta^{18}O$ rw
11.3	1.26	-0.40	431.7	0.58	0.51	992.6	1.04	0.31
12.7	0.38	-0.35	436.1	1.04	1.30	995.3	1.32	0.47
15.5	0.04	1.36	448.0	0.93	1.10	998.1	1.17	0.38
18.3	0.50	1.52	454.0	0.88	0.87	1000.9	0.58	0.33
21.1	0.98	1.27	466.0	0.99	0.82	1003.6	0.55	0.55
23.9	0.90	0.92	477.9	1.94	0.42	1005.0	0.93	0.66
25.3	0.33	0.73	489.8	1.69	0.04	1018.0	0.88	0.18
26.7	0.46	0.44	492.0	1.70	0.05	1023.3	0.85	0.25
28.1	0.28	0.35	493.0	2.04	0.43	1026.0	0.88	0.10
29.5	0.69	0.28	494.2	1.78	0.39	1028.3	1.11	0.30
44.5	0.72	0.43	495.3	1.57	0.18	1031.7	0.73	0.23
54.8	1.15	0.28	506.4	1.35	0.50	1033.7	0.68	0.27
65.2	0.99	0.86	517.5	1.52	0.54	1037.7	0.97	0.48
69.8	0.73	0.80	523.9	1.27	0.43	1041.6	0.80	0.53
72.1	0.61	0.31	530.3	0.77	0.33	1043.6	0.57	0.60
74.4	0.90	0.16	542.1	0.49	0.75	1047.6	1.07	0.88
76.7	1.03	0.35	553.8	0.60	0.85	1054.4	1.30	0.52
79.0	1.09	0.11	564.4	1.05	0.27	1061.2	1.10	0.13
81.3	1.27	0.14	574.0	0.72	-0.36	1068.0	0.93	-0.17
83.5	1.11	0.19	580.1	0.75	0.01	1075.5	0.76	-0.11
88.0	0.77	0.33	592.4	0.66	0.22			
91.5	1.14	0.20	604.7	0.68	0.49			
93.3	1.25	0.00	617.0	1.06	0.68			
95.0	0.40	-0.06	624.5	0.36	0.35			
99.2	0.64	-0.25	632.0	0.58	1.11			
103.8	0.89	-0.28	674.0	0.58	1.16			
112.9	0.83	0.25	684.0	0.84	0.33			
114.4	0.78	0.07	694.0	1.01	0.12			
117.5	0.82	-0.02	699.3	0.91	0.22			
119.1	0.85	-0.56	704.5	0.88	0.52			
122.2	0.49	-0.74	707.7	0.62	0.66			
126.6	0.54	-0.48	715.0	0.53	0.76			
128.8	0.67	0.21	736.0	0.54	0.51			
131.0	0.21	0.45	757.6	0.45	0.86			
135.4	0.59	0.90	765.8	0.83	0.72			
142.5	0.12	0.65	774.9	1.04	0.37			
149.5	0.51	0.76	784.0	1.29	0.10			
153.0	0.51	0.91	785.3	1.33	0.25			
168.9	0.51	0.68	787.8	0.57	0.81			
184.7	0.20	0.71	790.4	-0.20	0.69			
186.6	0.33	0.42	793.0	0.81	1.27			
190.3	0.87	0.14	796.2	0.90	1.17			
194.0	1.02	-0.12	803.3	1.12	0.79			
204.0	1.26	0.07	805.9	1.03	0.72			
214.0	1.32	-0.44	812.3	0.67	0.43			
221.3	0.34	0.00	815.5	0.76	0.30			
224.9	0.20	0.60	822.0	0.44	0.23			
228.7	0.50	0.47	830.4	0.80	0.34			
232.5	0.85	0.07	838.9	0.96	0.25			
236.3	0.59	-0.36	847.3	0.53	-0.09			
245.7	0.63	0.43	855.8	0.70	-0.02			
261.8	0.42	0.74	860.0	0.48	-0.16			
266.5	0.37	1.31	866.8	0.29	0.28			
280.2	0.95	0.90	873.6	0.34	0.40			
287.0	0.98	0.43	877.0	0.48	0.97			
298.0	1.31	0.82	883.8	0.22	1.16			
305.0	1.54	0.33	885.9	0.15	1.15			
312.0	1.18	0.26	890.2	0.26	0.68			
320.0	1.36	0.56	894.5	0.17	1.03			
323.7	1.25	0.34	898.7	0.31	0.58			
327.3	1.25	0.21	903.0	0.04	0.39			
331.0	1.22	-0.05	905.2	-0.14	0.37			
333.3	0.80	0.06	909.0	-0.06	0.29			
337.9	0.63	0.89	916.0	0.29	0.94			
342.5	0.46	1.26	929.3	0.14	0.47			
345.3	0.67	1.24	936.0	0.41	0.37			
351.0	0.86	0.90	939.8	0.60	0.49			
356.7	1.34	1.09	943.5	0.53	0.30			
362.3	1.17	1.15	947.3	1.00	0.13			
368.0	1.13	0.50	953.0	0.85	-0.02			
371.7	1.32	0.63	954.7	0.65	0.28			
375.4	1.28	0.75	958.1	0.65	0.52			
385.3	1.50	0.47	961.5	0.48	0.60			
395.1	1.51	-0.17	967.6	1.24	0.42			
405.0	1.67	-0.31	976.0	1.07	0.07			
409.4	1.60	-0.14	977.4	1.25	0.50			
413.9	1.21	0.03	980.1	0.89	0.85			
418.3	1.05	0.34	982.9	1.09	0.34			
422.8	0.79	0.96	987.0	1.30	0.79			
427.2	0.63	1.02	989.8	1.21	0.76			

Appendix I - Stable isotopes of *G. truncatulinoides* in Core T89-40

note: tests of *c.* 20 specimen (300 - 400 µm) were crushed and *c.* 30 mg was measured.
abbrevations: tr - *G. truncatulinoides* right; tl - *G. truncatulinoides* left; com - compressed morphotype.

age (ky)	$\delta^{13}C_{tr}$	$\delta^{18}O_{tr}$	$\delta^{13}C_{tl}$	$\delta^{18}O_{tl}$	$\delta^{13}C_{tr\ com}$	$\delta^{18}O_{tr\ com}$	$\delta^{13}C_{tl\ com}$	$\delta^{18}O_{tl\ com}$
11.3	0.76	0.45	0.67	0.73	1.03	1.40	0.81	2.03
18.3	0.62	0.95	0.18	1.55	1.07	2.93	0.64	2.51
25.3	0.72	1.67	0.39	1.21	1.04	2.44	0.85	2.10
28.1	0.64	1.48	0.76	1.72			0.79	1.94
44.5	0.77	1.69	0.44	1.55	0.79	2.31	0.93	2.63
54.8	0.54	1.50	0.39	1.29	0.79	2.27	0.90	2.49
69.8	0.71	1.34	0.50	1.68			1.14	2.76
74.4	0.91	1.24	0.73	1.26	0.83	1.73	0.96	1.97
79.0	0.91	1.34	1.05	1.52	0.80	1.34	1.26	2.08
88.0	0.50	0.90	0.52	0.93	0.83	1.59	0.78	1.48
91.5	0.88	1.21	0.65	0.82	0.95	1.52	0.95	1.53
103.8	0.79	0.89	0.37	0.75	0.87	1.29	0.88	1.51
112.9	0.53	0.83	0.43	1.00	0.86	1.29	0.39	1.89
117.5	0.59	0.78	0.48	0.94	0.60	1.23	0.69	1.28
122.2	0.73	0.76	0.65	0.70	0.61	0.75		
126.6	0.53	0.80	0.39	1.30	0.63	1.14		
128.8	0.29	1.04	0.20	0.91	0.57	1.62	0.54	2.05
135.4	0.41	1.49	0.10	1.72	0.62	2.25	0.54	2.71
142.5	0.43	1.65	0.28	1.62	0.79	2.48	0.52	2.01
153.0	0.45	1.97	0.26	1.48	0.55	2.22	0.43	2.11
168.9	0.54	1.57	0.35	1.32	0.74	2.26		
184.7	0.65	1.60	0.35	1.51	0.85	2.20	0.60	2.06
194.0	0.83	0.63	0.50	0.59				
214.0	0.73	1.07	0.47	0.84				
221.3	0.57	0.73	0.44	1.21				
228.7	0.91	1.55	0.37	1.22				
236.3	0.56	1.06	0.26	1.06				
245.7	0.34	1.25	0.49	1.59				
266.5	0.64	1.97	0.28	1.84				
287.0	1.32	1.55	0.93	1.18				
298.0	1.28	1.89	0.91	1.33	1.20	2.11	1.00	1.92
312.0	1.07	1.29	1.04	1.25				
320.0	1.09	1.42	1.03	1.14				
327.3	1.19	1.02	1.10	1.17				
331.0	0.86	0.65	0.85	0.79				
337.9	0.60	1.37	0.49	1.11				
342.5	0.50	1.84	0.50	2.16	0.93	2.63	0.85	2.48
351.0	1.07	2.46	0.76	2.02				
362.3	1.20	1.88	1.12	1.73				
371.7	1.29	1.71	1.15	1.54				
385.3	1.39	1.55	1.10	1.27	1.36	1.62		
395.1	1.20	0.99	1.10	0.96				
409.4	1.33	0.83	1.12	0.89				
427.2	0.78	2.12	0.89	2.67				
431.7	1.01	1.73	1.13	2.59				
436.1	1.04	2.00	0.96	2.15				
448.0	1.03	2.14	0.89	2.07				
466.0	1.61	1.87	1.11	1.80				

Appendix I
(continued)

age (ky)	$\delta^{13}C_{tr}$	$\delta^{18}O_{tr}$	$\delta^{13}C_{tl}$	$\delta^{18}O_{tl}$	$\delta^{13}C_{tr\ com}$	$\delta^{18}O_{tr\ com}$	$\delta^{13}C_{tl\ com}$	$\delta^{18}O_{tl\ com}$
466.0	1.61	1.87	1.11	1.80				
489.8	1.86	1.57	1.56	1.12				
495.3	1.48	1.66	1.28	1.27				
517.5	1.43	1.67	1.27	1.51				
530.3	0.87	1.62	0.88	1.49				
564.4	0.91	0.80	0.95	1.12				
580.1	0.84	1.19	0.94	1.42				
604.7	0.88	1.32	0.97	1.21				
624.5	0.46	1.42	0.46	1.85				
674.0	0.50	1.94	0.72	2.23				
684.0	0.88	1.65	0.80	1.55				
704.5	0.81	1.60	0.58	1.62				
715.0	0.91	1.76	0.84	1.91				
736.0	0.59	1.57	0.95	1.57				
757.6	0.66	2.00	0.89	1.64				
774.9	1.11	1.61	0.96	1.55				
784.0	1.11	1.31	1.08	1.51				
790.4	0.63	2.02	0.83	2.12				
803.3	0.91	1.56	1.07	2.07				
815.5	0.70	1.36	0.91	1.61				
830.4	0.57	1.07	0.64	1.45				
847.3	0.60	0.94	0.71	1.17	0.78	1.46		
855.8	0.66	1.11	0.52	1.86				
866.8	0.62	1.19	0.41	1.68				
877.0	0.59	2.13	0.50	2.05				
883.8	0.62	2.25	0.77	2.56				
888.1	0.15	1.51	0.51	2.08				
894.5					0.44	2.16	0.43	2.08
905.2	0.36	1.31	0.46	1.29				
916.0	0.15	1.59	0.41	2.02	0.40	1.97		
936.0	0.61	1.63	1.04	2.13				
953.0	1.05	1.12	1.03	1.10				
961.5	0.88	1.80	1.05	1.98				
967.6	1.20	1.65	1.19	1.64				
976.0	0.96	1.22	1.20	1.60				
981.5	0.95	1.35	1.01	1.49				
990.6	1.21	1.59	1.11	1.29				
997.9	0.93	1.30	1.30	1.52				
1005.2	0.88	1.34	1.23	1.61				
1012.5	0.91	1.36	0.86	1.40				
1018.0	0.93	1.22	1.13	1.58				
1026.0	0.99	1.29	1.15	1.55				
1028.3	1.07	1.08	1.06	1.23				
1031.7	1.41	1.41	0.48	0.67				
1037.7	0.74	1.52	0.74	1.56				
1043.6	0.96	1.37	0.61	1.40				
1068.0	1.20	0.94	1.07	1.03				
1077.5	1.08	1.16	1.00	1.05				

Appendix *J* - Scores of principal components in Core T89-40

age (ky)	PC 1	PC 2	PC 3	PC 4	age (ky)	PC 1	PC 2	PC 3	PC 4	age (ky)	PC 1	PC 2	PC 3	PC 4
11.3	2.851	-0.594	0.106	0.580	385.3	-1.019	0.303	-1.341	1.470	939.8	-1.061	-0.964	0.171	-0.370
12.7	1.614	-1.745	1.127	1.247	395.1	-0.822	-0.678	-4.626	0.227	943.5	-0.552	-0.199	0.457	0.213
15.5	1.082	-1.004	0.635	1.181	400.1	0.564	-0.042	-5.051	-0.016	947.3	-0.492	1.228	0.368	0.802
18.3	1.175	-2.709	0.874	0.218	405.0	-0.177	-0.245	-6.036	-0.162	953.0	0.768	0.774	0.432	-1.613
21.1	-0.019	-1.738	0.331	0.569	407.2	0.898	1.346	-4.392	-1.093	954.7	1.380	0.077	0.728	-1.470
23.9	-0.357	-1.698	0.463	-0.058	409.4	1.463	2.043	-4.310	-1.264	958.1	2.499	-0.218	0.867	-0.661
25.3	-0.211	-1.587	0.448	-0.505	413.9	1.304	1.332	-0.773	-1.163	961.5	-0.782	0.551	0.077	1.230
26.7	0.228	-2.471	0.343	-0.228	418.3	1.232	-0.039	-0.064	-1.027	967.6	-0.739	1.665	0.560	1.337
28.1	-0.116	-1.279	0.161	0.434	422.8	0.760	0.276	0.335	-0.642	976.0	-0.733	1.052	0.508	-0.125
29.5	0.202	-1.777	0.196	0.451	427.2	-0.833	-0.454	0.726	-2.355	977.8	-0.747	0.302	0.639	0.409
44.5	0.172	-1.365	-0.427	-0.425	429.4	-1.068	-0.611	0.244	-2.333	981.5	-0.216	0.308	0.620	-1.511
54.8	0.033	-1.273	-0.359	0.144	431.7	-0.907	0.260	0.307	-0.846	985.1	-0.171	0.866	0.263	0.918
65.2	0.247	-0.904	-0.068	0.384	436.1	-0.781	-1.158	0.166	-1.482	990.6	-0.082	0.403	0.090	0.247
69.8	0.012	-0.653	0.362	0.225	448.0	-1.156	-1.180	-0.680	-0.467	994.3	-0.353	0.974	0.310	0.791
72.1	-0.238	-0.756	0.467	0.323	454.0	-1.521	-1.044	-0.640	0.402	997.9	1.148	1.445	0.456	1.546
74.4	-0.536	-0.432	0.401	0.400	466.0	-1.687	-0.280	-0.418	-2.226	1001.6	-0.228	1.000	0.248	1.068
76.7	-0.512	-0.670	0.481	0.554	477.9	-1.335	0.126	0.371	-1.616	1005.2	0.653	1.806	0.656	2.201
79.0	0.000	-0.564	0.468	0.854	489.8	-0.834	0.646	0.222	-1.315	1008.9	0.333	1.717	0.683	1.393
81.3	0.024	-0.161	0.549	1.003	490.9	-1.147	0.013	0.357	-2.685	1012.5	0.374	1.413	0.608	1.210
83.5	-0.443	-0.685	0.598	1.201	492.0	-0.931	0.707	0.488	-1.409	1014.3	-0.085	0.780	0.443	0.910
88.0	-0.102	-0.741	0.580	1.815	493.0	-0.586	1.479	0.201	0.212	1018.0	0.133	1.554	0.411	0.111
91.5	-0.275	-0.849	0.162	1.420	494.2	-0.118	0.697	0.356	-0.138	1020.7	-0.096	1.430	0.380	0.269
93.3	-0.132	-1.256	0.210	1.854	494.7	-0.365	0.203	0.416	-0.416	1026.0	0.509	1.901	0.294	0.196
95.0	-0.283	-1.579	-0.556	1.868	495.3	-0.503	0.223	0.619	-1.304	1028.3	1.197	1.574	0.311	-0.015
99.2	2.531	-0.200	0.708	2.155	506.4	-0.837	0.300	0.528	-1.545	1031.7	0.253	0.899	0.226	0.033
103.8	1.034	-0.006	0.665	1.575	517.5	-0.133	0.523	0.212	-0.522	1033.7	0.856	0.581	0.411	-0.014
112.9	0.172	-0.689	0.158	0.705	523.9	-0.576	1.279	0.280	-1.012	1037.7	0.335	0.080	0.647	0.484
114.4	-0.266	-0.808	-0.232	0.225	530.3	-0.735	0.150	0.435	-0.855	1039.7	-0.769	0.107	0.427	-0.365
117.5	0.532	-1.229	-0.077	0.512	542.1	-0.911	-0.165	0.173	-1.481	1043.6	-0.247	0.440	0.121	-0.198
119.1	1.689	-0.618	0.126	-0.136	553.8	-0.907	0.181	0.445	-0.683	1047.6	-0.530	-0.525	0.534	0.988
120.6	1.661	-0.653	0.086	-0.161	564.4	-0.775	0.488	0.469	0.971	1054.4	-0.490	0.047	0.276	1.034
122.2	3.569	-0.394	0.086	0.654	574.0	0.545	0.526	0.271	0.266	1061.2	0.477	0.725	-0.181	-0.463
126.6	2.535	-0.584	-0.363	0.229	580.1	0.486	0.216	0.622	0.212	1068.0	4.058	0.427	-0.932	-1.008
128.8	2.803	-1.550	-0.415	-0.476	592.4	-0.659	1.842	0.514	0.735	1073.4	0.453	-0.057	-2.463	0.355
131.0	2.637	-1.099	-0.162	-0.212	604.7	-0.629	0.803	0.709	1.029	1077.5	1.174	0.878	-1.531	-0.454
135.4	0.028	-0.744	0.263	-0.637	617.0	0.023	1.596	0.145	1.049					
142.5	0.132	-2.593	1.055	0.635	624.5	0.322	0.573	0.601	0.855					
149.5	-0.271	-1.499	0.787	-0.145	632.0	-0.842	-0.064	0.080	0.500					
153.0	0.008	-1.689	0.838	0.129	674.0	-1.170	-0.559	0.023	-0.382					
168.9	0.006	-1.782	0.700	-0.779	684.0	-1.252	-0.568	-0.118	0.252					
184.7	-0.395	-0.319	0.074	0.073	694.0	-1.060	0.969	-0.025	0.878					
186.6	0.260	-1.072	0.459	-1.306	699.2	-0.043	1.772	0.513	1.207					
190.3	-0.375	-0.653	0.425	-1.054	704.5	-0.236	1.274	0.229	1.309					
194.0	1.154	0.212	0.365	0.130	707.7	0.036	0.926	0.395	1.090					
204.0	0.810	0.261	0.172	0.502	715.0	-1.226	1.030	-0.012	0.852					
214.0	0.857	-0.209	0.367	0.364	736.0	-0.681	0.040	0.083	0.977					
217.6	1.593	0.044	0.614	-0.114	757.6	-1.137	0.139	0.206	0.142					
221.3	1.243	0.254	0.341	-0.323	765.8	-1.251	0.316	0.204	1.044					
224.9	1.159	-0.479	0.432	-0.576	774.9	-0.905	1.072	0.121	0.825					
228.7	0.044	-1.099	0.384	0.249	784.0	-0.174	1.798	0.052	-0.772					
230.6	0.275	-1.124	0.515	-0.234	785.3	-0.271	0.651	-0.041	-0.348					
232.5	1.479	-0.527	0.504	0.300	787.8	1.229	1.479	-0.011	0.184					
236.3	1.053	0.167	0.001	-1.044	790.4	0.127	1.188	-0.001	-0.315					
241.0	1.650	0.419	0.145	-0.870	793.0	-1.191	0.865	-0.019	-0.141					
245.7	0.189	-0.443	0.156	-0.937	796.2	-1.246	1.446	0.155	0.174					
261.8	-0.706	-0.471	0.039	0.058	803.3	-0.941	1.563	0.368	1.017					
266.5	-0.658	-0.655	0.644	-1.128	805.9	-0.765	0.988	0.230	0.536					
280.2	-0.694	-0.362	0.692	-0.478	812.3	-0.398	1.393	0.536	0.930					
287.0	-0.217	0.076	0.348	0.548	815.5	-0.251	1.370	0.340	0.229					
298.0	-0.649	-0.682	0.729	1.092	822.0	-0.661	0.247	0.471	-0.536					
301.5	-0.302	-0.783	0.604	0.007	830.4	-0.724	1.018	0.588	0.922					
305.0	-0.533	-0.398	0.147	-0.072	838.9	0.221	1.449	0.274	-0.650					
312.0	-0.558	-0.663	0.242	0.116	847.3	0.119	0.638	0.295	-1.486					
320.0	-0.087	-0.935	-0.819	0.698	855.8	0.465	1.046	0.301	-1.779					
321.8	-1.257	-0.862	-1.761	1.550	860.0	0.895	0.810	0.417	-1.509					
323.7	-1.013	-1.330	-1.995	1.715	866.8	2.587	0.266	0.501	-2.006					
327.3	-1.044	-0.941	-2.466	1.520	873.6	2.212	1.009	0.070	-1.512					
331.0	-0.774	0.071	-2.341	1.580	877.0	-0.066	0.994	0.072	-1.101					
333.3	0.244	-0.746	-1.430	1.764	883.8	-0.519	-0.121	0.048	-0.926					
337.9	1.456	-0.013	-0.507	1.445	888.1	-0.755	1.654	0.417	-0.166					
342.5	-0.506	-1.933	-0.145	-0.378	890.2	-0.767	0.131	0.231	-0.601					
345.3	-0.708	-2.551	-0.179	-0.274	894.5	-0.624	0.286	0.385	-1.881					
351.0	-0.776	-0.470	0.197	-0.975	898.7	-0.804	-0.127	-0.009	-2.193					
356.7	-0.754	-1.126	-0.139	-1.065	903.0	-0.540	0.157	-0.258	-1.800					
371.7	-0.215	-0.414	-1.597	-0.754	905.2	-0.484	0.117	0.174	-1.643					
373.5	-0.270	0.401	-1.391	-0.071	911.3	-0.393	0.386	0.318	0.472					
375.4	-0.180	0.383	-1.055	0.904	916.0	-0.496	-1.149	-0.471	-0.179					

Appendix K - Dissolution indices in Core T89-40

Sample size = total number of specimen per split; p/p+b = ratio of planktonic (p) and benthic (b); foraminifera; fragmentation index; PGS = total number of planktonic foraminifera per gram sediment; % sand = relative weight of the size fraction larger than 63 µm.

section	depth (cmbs)	age (ky)	sample size	p/(p+b)	Fragmentation Index	PGS	depth (cmbs)	age (ky)	% sand
14-75	5	11.3	488	99.4		23992	5	11.3	43.2
14-70	10	12.7	443	98.9		21803	10	12.7	36.6
14-60	20	15.5	870	98.9		24147	20	15.5	34.9
14-50	30	18.3	452	99.3		40654	30	18.3	53.8
14-40	40	21.1	320	99.1		31714	40	21.1	45.7
14-30	50	23.9	494	99.0		25457	50	23.9	42.8
14-25	55	25.3	693	99.6		35671	55	25.3	41.7
14-20	60	26.7	311	99.7		26123	60	26.7	44.1
14-15	65	28.1	696	99.6		32236	65	28.1	44.3
14-10	70	29.5	787	99.3	18.9	27341	70	29.5	39.4
13-94	83	44.5	498	99.2	20.1	27152	83	44.5	33.5
13-85	92	54.8	318	99.4	18.7	21057	92	54.8	38.9
13-80	97	65.2	498	98.4	21.5	19066	97	65.2	40.1
13-70	107	69.8	571	98.3	34.1	18477	107	69.8	36.4
13-65	112	72.1	458	98.9	31.4	16298	112	72.1	35.9
13-60	117	74.4	432	98.9	18.8	29296	117	74.4	40.0
13-55	122	76.7	424	99.8	17.0	23900	122	76.7	42.2
13-50	127	79.0	468	100.0	19.6	31564	127	79.0	46.0
13-45	132	81.3	402	99.8	10.5	27647	132	81.3	49.0
13-40	137	83.5	329	100.0	16.1	24683	137	83.5	48.2
13-30	147	88.0	612	99.0	13.9	23817	147	88.0	38.0
13-20	157	91.5	745	99.6	18.0	28112	157	91.5	41.4
13-15	162	93.3	394	99.7	17.2	31322	162	93.3	45.5
13-10	167	95.0	417	99.5	18.7	30049	167	95.0	45.3
12-5	179	99.2	490	99.6	17.5	27229	179	99.2	39.8
11-110	192	103.8	592	100.0	15.2	29855	192	103.8	39.0
11-100	202	112.9	818	99.5	17.7	34179	202	112.9	40.3
11-95	207	114.4	336	99.1	2.3	23836	207	114.4	37.5
11-85	217	117.5	667	99.3	17.7	26335	217	117.5	39.3
11-80	222	119.1	399	99.3	15.3	28797	222	119.1	42.9
11-75	227	120.6	401	99.3	18.3	27204	227	120.6	40.8
11-70	232	122.2	365	99.7	7.8	26649	232	122.2	42.1
11-60	242	126.6	697	100.0	6.7	23686	242	126.6	40.4
11-55	247	128.8	369	99.7	10.9	24890	247	128.8	39.4
11-50	252	131.0	398	99.7	10.4	25447	252	131.0	45.3
11-40	262	135.4	406	99.3	13.6	29830	262	135.4	47.4
11-30	272	142.5	541	99.6	8.5	22049	272	142.5	38.5
11-20	282	149.5	626	99.1	9.7	22655	282	149.5	38.5
11-15	287	153.0	729	99.5	10.1	17565	287	153.0	35.0
11-5	297	168.9	405	99.8	9.2	35629	297	168.9	43.6
10-105	311	184.7	626	98.6	13.9	40406	311	184.7	55.6
10-100	316	186.6	377	98.7	15.7	28569	316	186.6	41.9
10-90	326	190.3	388	99.5	15.5	30344	326	190.3	42.3
10-80	336	194.0	659	99.2	16.6	26355	336	194.0	39.4
10-70	346	204.0	445	99.3	17.6	31996	346	204.0	37.8
10-60	356	214.0	491	98.6	19.1	15423	356	214.0	32.5
10-55	361	217.6	485	99.6	14.9	14693	361	217.6	27.8
10-50	366	221.3	370	99.5	15.7	22137	366	221.3	34.2
10-45	371	224.9	511	98.8	16.2	17865	371	224.9	13.1
10-35	381	228.7	394	99.0	19.4	22150	381	228.7	32.6
10-30	386	230.6	413	99.0	17.7	23210	386	230.6	39.0
10-25	391	232.5	411	99.8	14.2	25066	391	232.5	55.0
10-15	401	236.3	468	99.4	14.6	27554	401	236.3	37.4
10-10	406	241.0	373	98.7	16.2	21778	406	241.0	39.1
10-5	411	245.7	736	99.5	13.4	23039	411	245.7	35.2
09-140	428	261.8	623	98.3	22.0	10676	428	261.8	23.4
09-135	433	266.5	540	97.7	33.9	10918	433	266.5	21.2
09-125	443	280.2	373	99.7	21.3	14231	443	280.2	21.6
09-120	448	287.0	329	98.5	23.1	11232	448	287.0	19.6
09-105	463	298.0	432	97.3	31.9	7429	463	298.0	17.2
09-100	468	301.5	561	97.4	30.7	9110	468	301.5	15.9
09-095	473	305.0	424	99.3	31.6	6985	473	305.0	17.8
09-085	483	312.0	356	98.9	30.7	10483	483	312.0	18.2
09-075	493	320.0	580	98.8	22.9	9948	493	320.0	19.4
09-070	498	321.8	313	98.4	20.2	10404	498	321.8	18.7
09-065	503	323.7	383	99.2	21.8	11082	503	323.7	18.9
09-055	513	327.3	565	99.5	22.3	16504	513	327.3	25.2
09-045	523	331.0	434	99.6	21.2	11445	523	331.0	21.0
09-040	528	333.3	452	98.7	17.7	13282	528	333.3	24.1
09-030	538	337.9	360	99.2	16.7	20368	538	337.9	28.8
09-020	548	342.5	483	98.9	28.0	13567	548	342.5	22.4
09-015	553	345.3	428	98.4	27.7	13474	553	345.3	22.0
09-005	563	351.0	540	98.5	30.6	8001	563	351.0	22.7
08-145	573	356.7	397	97.1	27.4	11895	573	356.7	17.2
08-115	603	371.7	313	98.4	19.3	8653	603	371.7	15.0
08-110	608	373.5	325	99.4	15.6	11235	608	373.5	20.1
08-105	613	375.4	683	98.6	18.1	11514	613	375.4	17.0

Appendix K
(continued)

section	depth (cmbs)	age (ky)	sample size	p/(p+b)	Fragmentation Index	PGS	depth (cmbs)	age (ky)	% sand
08-095	623	385.3	342	97.2	36.8	9683	623	385.3	16.0
08-085	633	395.1	552	99.8	20.8	15610	633	395.1	24.0
08-080	638	400.1	382	99.5	31.4	9621	638	400.1	20.0
08-075	643	405.0	492	99.8	24.2	14588	643	405.0	22.9
08-070	648	407.2	368	99.7	23.5	10262	648	407.2	16.8
08-065	653	409.4	350	99.7	26.6	11796	653	409.4	17.6
08-055	663	413.9	478	99.8	19.7	11631	663	413.9	18.8
08-045	673	418.3	554	99.7	16.6	12740	673	418.3	25.4
08-035	683	422.8	582	99.0	19.7	15564	683	422.8	22.0
08-025	693	427.2	334	95.4	31.0	4353	693	427.2	8.5
08-020	698	429.4	321	95.4	38.0	4579	698	429.4	9.9
08-015	703	431.7	402	96.3	36.1	6983	703	431.7	12.1
08-005	713	436.1	459	96.8	33.9	5763	713	436.1	11.9
07-145	723	448.0	357	98.8	30.9	8568	723	448.0	11.8
07-140	728	454.0	339	97.5	22.2	13510	728	454.0	17.2
07-130	738	466.0	581	97.8	29.5	4666	738	466.0	9.9
07-120	748	477.9	309	98.4	35.4	5568	748	477.9	10.1
07-110	758	489.8	313	93.1	60.4	1819	758	489.8	7.4
07-105	763	490.9	355	97.5	50.4	3444	763	490.9	10.6
07-100	768	492.0	363	98.9	27.4	7625	768	492.0	13.7
07-095	773	493.0	474	99.6	27.7	11226	773	493.0	16.6
07-085	783	494.2	466	98.7	22.5	11759	783	494.2	23.1
07-080	788	494.7	474	98.5	21.3	8994	788	494.7	22.7
07-075	793	495.3	471	99.6	18.2	16099	793	495.3	24.8
07-065	803	506.4	362	100.0	29.2	11696	798	500.9	19.2
07-055	813	517.5	308	99.7	34.5	9858	803	506.4	19.2
07-045	823	523.9	466	99.1	18.8	15345	813	517.5	20.0
07-035	833	530.3	329	98.8	15.0	18542	818	520.7	23.9
07-025	843	542.1	228	98.3	38.9	13408	823	523.9	29.1
07-015	853	553.8	284	98.6	36.9	14862	833	530.3	30.4
07-005	863	564.4	271	99.3	31.2	14653	838	536.2	26.4
06-145	872	574.0	437	99.8	11.5	30632	843	542.1	24.0
06-140	877	580.1	405	99.5	17.7	27827	853	553.8	24.4
06-130	887	592.4	363	98.4	25.2	17394	863	564.4	30.5
06-120	897	604.7	394	99.2	28.8	25446	872	574.0	32.0
06-110	907	617.0	340	100.0	12.8	35570	877	580.1	25.6
06-100	917	624.5	485	99.2	7.6	28412	887	592.4	20.3
06-090	927	632.0	529	98.8	28.7	35945	892	604.7	41.0
06-080	937	674.0	499	98.4	42.8	20677	897	617.0	36.5
06-070	947	684.0	307	96.2	46.9	13662	907	620.8	44.6
06-060	957	694.0	493	98.4	33.2	20775	912	622.6	48.0
06-050	967	699.2	333	99.4	9.3	30167	917	624.5	38.1
06-040	977	704.5	502	99.4	10.8	25423	927	632.0	37.1
06-035	983	707.7	352	98.6	22.1	20047	932	653.0	33.4
06-020	997	715.0	576	98.1	24.1	17536	937	674.0	35.9
06-015	1002	736.0	850	99.8	21.7	23781	947	684.0	26.2
06-005	1012	757.6	330	96.2	44.5	10444	957	694.0	36.7
05-115	1021	765.8	370	97.4	33.5	17770	967	699.2	45.4
05-105	1031	774.9	903	100.0	20.1	20420	972	701.9	44.9
05-095	1041	784.0	354	99.7	15.9	28128	977	704.5	54.3
05-090	1046	785.3	388	99.7	12.8	29221	983	707.7	41.8
05-080	1056	787.8	497	100.0	10.9	10326	997	715.0	41.1
05-070	1066	790.4	442	99.8	12.1	18964	1002	736.0	41.1
05-060	1076	793.0	269	97.8	32.1	5916	1012	757.6	25.3
05-055	1081	796.2	419	98.4	39.5	4665	1021	765.8	39.2
05-044	1092	803.3	307	97.8	32.8	6618	1031	774.9	37.3
05-040	1096	805.9	319	96.7	29.1	14088	1041	784.0	41.9
05-030	1106	812.3	542	97.7	19.9	22625	1046	785.3	39.4
05-025	1111	815.5	407	99.3	17.4	29284	1056	787.8	17.4
05-015	1121	822.0	590	98.3	18.6	22140	1066	790.4	27.7
05-005	1131	830.4	463	98.9	18.2	19267	1071	791.7	10.9
04-115	1141	838.9	536	99.3	9.6	20109	1076	793.0	11.6
04-105	1151	847.3	430	99.3	7.1	19816	1081	796.2	10.2
04-095	1161	855.8	821	99.6	7.5	48497	1092	803.3	12.2
04-090	1166	860.0	413	100.0	7.8	30401	1096	805.9	26.7
04-080	1176	866.8	361	100.0	5.7	23511	1106	812.3	36.0
04-070	1186	873.6	363	99.7	14.6	21963	1111	815.5	32.9
04-065	1191	877.0	301	99.3	19.7	29582	1121	822.0	34.9
04-055	1201	883.8	364	98.9	23.2	22066	1131	830.4	31.7
04-045	1211	888.1	535	99.4	16.9	21514	1141	838.9	38.4
04-040	1216	890.2	281	99.6	17.8	18474	1151	847.3	34.2
04-030	1226	894.5	698	99.1	13.1	24920	1161	855.8	37.1
04-020	1236	898.7	480	98.2	12.9	33217	1166	860.0	37.2
04-010	1246	903.0	461	99.6	11.7	26180	1176	866.8	32.9
04-005	1251	905.2	464	99.1	9.4	29829	1186	873.6	33.8
03-110	1265	911.3	412	99.0	14.5	13001	1191	877.0	29.9
03-100	1275	916.0	335	98.5	32.9	11542	1201	883.8	30.7

Appendix K
(continued)

section	depth (cmbs)	age (ky)	sample size	p/(p+b)	Fragmentation Index	PGS
03-075	1300	939.8	402	98.5	33.7	15292
03-065	1310	943.5	187	97.1	37.0	19540
03-055	1320	947.3	331	98.2	43.1	13097
03-040	1335	953.0	516	99.6	23.3	19984
03-035	1340	954.7	337	98.8	25.3	25986
03-025	1350	958.1	515	99.0	23.7	45228
03-015	1360	961.5	253	94.4	52.5	9084
03-005	1370	967.6	388	96.8	37.8	7240
02-110	1384	976.0	461	98.5	30.6	8847
02-105	1389	977.8	320	99.4	34.6	11571
02-095	1399	981.5	310	99.7	25.3	10539
02-085	1409	985.1	470	99.4	27.2	14172
02-070	1424	990.6	432	99.9	33.8	12860
02-060	1434	994.3	311	99.4	32.2	11539
02-050	1444	997.9	346	98.9	25.6	11255
02-040	1454	1001.6	364	99.2	27.3	14183
02-030	1464	1005.2	362	98.1	27.9	10285
02-020	1474	1008.9	492	96.7	26.8	15646
02-010	1484	1012.5	381	97.4	28.4	12585
02-005	1489	1014.3	433	98.2	31.2	12023
01-115	1499	1018.0	330	98.8	27.8	11478
01-110	1504	1020.7	416	97.9	26.6	12088
01-100	1514	1026.0	355	99.2	29.3	12782
01-090	1524	1028.3	587	99.7	19.7	17293
01-075	1539	1031.7	277	99.6	18.0	14789
01-070	1544	1033.7	539	97.1	27.9	13306
01-060	1554	1037.7	522	98.5	29.3	9790
01-055	1559	1039.7	413	98.1	34.0	11631
01-045	1569	1043.6	454	97.0	25.8	12069
01-035	1579	1047.6	356	98.1	30.3	11196
01-025	1589	1054.4	366	97.9	29.2	8329
01-015	1599	1061.2	467	98.7	30.8	12453
01-005	1609	1068.0	502	98.8	21.1	14440
00-009	1617	1073.4	523	99.6	18.4	15696
00-003	1623	1077.5	429	99.5	15.9	14189

depth (cmbs)	age (ky)	% sand
1216	890.2	35.2
1226	894.5	28.2
1236	898.7	37.0
1246	903.0	28.5
1251	905.2	46.6
1260	909.1	29.5
1265	911.3	28.5
1275	916.0	27.1
1280	922.7	19.1
1285	929.3	20.4
1290	936.0	23.8
1300	939.8	23.2
1304	941.3	26.5
1310	943.5	32.6
1315	945.4	21.0
1320	947.3	25.5
1335	953.0	31.6
1340	954.7	36.6
1350	958.1	34.0
1360	961.5	13.3
1370	967.6	17.6
1384	976.0	16.5
1389	977.8	21.1
1394	979.7	19.8
1399	981.5	16.1
1409	985.1	15.3
1424	990.6	21.6
1434	994.3	20.9
1444	997.9	22.6
1449	999.8	26.0
1454	1001.6	20.1
1464	1005.2	16.8
1474	1008.9	25.7
1479	1010.7	18.8
1484	1012.5	19.2
1489	1014.3	21.6
1499	1018.0	13.9
1504	1020.7	22.7
1509	1023.4	23.9
1514	1026.0	21.0
1521	1027.6	23.5
1524	1028.3	27.0
1539	1031.7	24.6
1544	1033.7	28.0
1554	1037.7	20.8
1559	1039.7	23.3
1564	1041.7	24.3
1569	1043.6	18.3
1579	1047.6	19.5
1589	1054.4	18.7
1599	1061.2	25.8
1609	1068.0	22.5
1617	1073.4	27.1
1620	1075.5	22.1
1623	1077.5	26.9