

Appendix 2A — Counts Of Foraminifera In Grab Samples Collected From Halifax Harbour During October 2007.

Station –Oct.07	HC	PC	AYC	BRB	D1	D2	D3	EE1	EE2	EE3	DYC	BYC	BST
Diversity	12	11	10	12	12	11	10	7	9	6	7	5	6
Abundance	600	138	190	878	489	820	414	193	622	119	90	11	38
Inner linings (%)	25	9	13	7	27	25	26	6	6	10	90	92.8	90.5
Deformities (%)	6	18	17	13	17	13	11	8	9	12	12	13.5	11
<i>Ammotium cassis</i>	7	3	2.5	3.2	5	6.2	4.3	7	9	7.5	12.3	11.5	10
<i>Buccella frigida</i>	2.7	0	0	1.2	2.4	0	1.7	2.3	0	1.3	0	0	0
<i>Cribrostomoides crassimargo</i>	3.2	0	2.5	3	3.8	2.6	3.2	0	2.1	0	22.5	23	22
<i>Eggerella advena</i>	27.7	22	25	42.5	25.6	34.1	33.7	40.2	41.6	45	27	24	21
<i>Elphidium clavatum</i>	0	3.5	0	0	1.1	0.6	0	0	0	0	0	0	0
<i>E. excavatum</i>	3.7	13	8.5	7.5	4	0	0	0	0	0	0	0	0
<i>E. incertum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>E. williamsoni</i>	3	0	0	0	0	0	1.4	0.	0	0	0	0	0
<i>Fursenkoina fusiformis</i>	2.5	0	0	0	0	0	0	0	0.9	0	0	0	0
<i>Haynesnia orbiculare</i>	0	2.1	0	0	0	2.1	1.2	1.6	1.8	0	0	0	0
<i>Miliammina fusca</i>	13.7	15	12	13.6	9.5	13.5	12.6	7.5	5.7	9	6	15.5	21
<i>Reophax arctica</i>	0	1	0	2.3	3	0	0	0	1.1	0	0	0	0
<i>R. fusiformis</i>	0	1.5	0	1.7	0	0	2.6	0	0	0	0	0	0
<i>R. scottii</i>	30	25	24.5	26	23.5	25.4	30	32	31.5	26	24.5	25	22.5
<i>Saccammina atlantica</i>	3.8	0	5	0	2	7.8	0	0	0	0	0	0	0
<i>Spiroplectammina bififormis</i>	5	10	8.5	8.5	9	7.1	13	9	7	9	3	0	11
<i>Trochammina inflata</i>	0	1.5	0	0	0	1.9	0	0	0	0	0	0	0
<i>T.lobata</i>	0	1.7	0	2.1	0	0	0	0	0	0	0	0	0
<i>T.ochracea</i>	4.1	2.3	1.5	0	3	2.5	0	0	0	0	2	0	0

Appendix 2B — Counts Of Foraminifera In Grab Samples Collected From Halifax Harbour During March 2008.

Station –Mar.08	HC	HP1	HP2	HP3	PC	RNSYS	AYC	BRB	D2	D3	EE1	EE2	EE3	TC	DYC	BST
Diversity	13	27	27	29	13	9	7	23	20	18	14	10	11	6	7	5
Abundance	987	3850	4550	5450	835	175	215	2250	2075	1970	1150	765	734	35	124	81
Inner linings (%)	22.5	0.5	0	0	20.7	28.3	33.5	11.2	22.5	26	7.9	7.5	10	83	81.5	87.5
Deformities (%)	13.3	1.3	0.5	1	13.2	17	20	10.7	13	10.5	12.1	9	14	15	15.3	17
<i>A. cassis</i>	7	3	4.2	2.2	1.3	2.5	2.3	4	6.9	4.1	7	7.6	9	13.1	11.3	7.6
<i>B. frigida</i>	0	1.9	2.3	5.1	0.9	0	0	1.2	0	1.7	2.3	0	1.3	0	0	0
<i>C. reniforme</i>	0	3.1	2.2	1.5	4	3.2	0	3	2.6	3.2	0	2.1	0	2.3	0	0
<i>C. lobatulus</i>	0	8.3	11.9	15.7	0	0	0	2.7	1.1	2.2	1.8	0	0	0	0	0
<i>C. crassimargo</i>	5.9	3.1	2.5	0	2.3	4.3	5.2	2.5	1.6	2.5	0	1.3	0	0	7.5	14.7
<i>E. advena</i>	32	6	33.8	38	34.5	32.5	34.5	36.3	32.5	28	37.5	38.1	37.9	37	31	34
<i>Elphidium clavatum</i>	2.5	21.2	22	25	2	0	0	22.3	14	17.4	7.2	1.9	3.5	0	0	0
<i>E. excavatum</i>	3.8	3	5.5	7.5	0	0	0	7.5	2.1	1.2	1.6	1.8	1.6	0	9	0
<i>E. incertatum</i>	0	3	4.1	10.6	7.8	2.4	0	14.6	14.3	12	7.5	5	9.5	11	3.5	0
<i>E. williamsoni</i>	0	2	7.3	7.3	3.2	1.8	0	4.3	3.1	1.1	0	1.1	0	0	2.5	0
<i>F. eburnean</i>	0	2.1	4.3	7.3	0	0	0	3	2.5	0	0	0	0	0	0	0
<i>Fursenkoina fusiformis</i>	3.2	2	2.9	0.9	0	0	0	2.9	2	0	0	0	0	0	0	0
<i>H. orbiculare</i>	0	1.5	3	3	2.2	0	0	3	7.8	0	0	0	0	0	0	0
<i>L. apiopleura</i>	0	1.4	3	4.1	0	0	0	0.9	0	0	0	0	0	0	0	0
<i>L. mollis</i>	0	4.2	4.2	6.3	0	0	0	2.3	3	2.5	0	0	0	0	0	0
<i>L. lacteal</i>	0	0	0	1.5	0	0	0	1.3	3.1	2	1.2	0	0	0	0	0
<i>M. fusca</i>	5.1	3.4	3	3.1	4.2	5	5.5	3.1	2.5	0	0	0	0	0	0	0
<i>N. labradorica</i>	0	4.5	4.8	4.9	0	0	0	1.5	3.2	1.2	0	0	0	0	0	0
<i>O. borealis</i>	0	2.4	2.6	3	0	0	0	1.1	0.6	0	0	0	0	0	0	0
<i>O. melo</i>	0	3.1	3	2	0	0	0	0	0	0	0	0	0	0	0	0
<i>Q. arctica</i>	0	4	4.2	2.5	0	0	0	1.2	0	0	0	0	0	0	0	0
<i>Q. stalkerii</i>	0	3.2	3	1.8	0	0	0	0	0	0	0	0	0	0	0	0
<i>R. arctica</i>	0	0	1.2	1.8	0	1.1	0	1.2	0	1.7	2.3	0	1.3	0	0	0
<i>R. fusiformis</i>	3.2	3.1	2.7	3	0	3.2	0	3	2.6	3.2	0	2.1	0	2.3	0	0
<i>R. nodulosa</i>	0	00	1.1	0	0	0	0	0	1.6	0	0	0	0	0	0	0
<i>R. scottii</i>	39.5	11	11.5	24.6	34.3	37	42.3	24.9	27	21	23.5	30.4	36	32.6	24.2	28
<i>Rosalina bulloides morphotype columbiensis</i>	5.1	3.2	3.2	3.2	0	0	0	3.2	1.5	0	0	0	0	0	0	0
<i>S. atlantica</i>	4.6	2.5	2.5	2.5	0	0	2.4	2.5	0	1.4	0.9	0	0	0	9.4	13
<i>S. bififormis</i>	5.5	1.6	3.1	2.4	2.1	0	7.8	4	0	02.1	0	0.9	0.5	0	0	0
<i>T. earlandi</i>	0	0	0.9	0	0	0	0	0	2.1	1.2	1.6	1.8	1.6	0	0	0
<i>T. oblonga</i>	0	0.9	2.6	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Trochammina inflata</i>	2.4	0	1.7	0.7	0	0	0	1.7	0	2.6	0	0	0	0	0	0
<i>T. lobata</i>	0.8	2.1	2	1.7	3.1	3.5	0	2.7	0	0	0	0	0	0	0	0
<i>T. ochracea</i>	7.8	0.8	0	1.1	0	3.1	12	0	7.8	0	0	0	0	21	0	0

Appendix 2D- Counts Of Foraminifera In Grab Samples Collected From Halifax Harbour in October 2008.

Station –Oct. 08	HC	PC	RNSYS	AYC	BRB	D1	D2	D3	EE2	EE3	DC	TC	DYC	BYC
Number of species/10cc	11	12	9	7	23	19	18	19	10	11	6	7	5	9
Number of individuals/10cc	825	720	125	93	2350	1950	2125	1850	630	750	450	17	75	94
Organic inner linings (%)	24.5	20	26.7	33.7	11.5	29.3	26	25	6.5	11.5	92.3	90.7	82.5	92.5
Deformities (%)	13.3	12.2	17	21	11	16.5	13.1	11.2	9.4	12	21	14.5	15.5	11.4
<i>Ammotium cassis</i>	6	4.3	5.1	0	3.2	5	7.2	3	6	7.5	8	9	11	31
<i>Buccella frigida</i>	0	0	0	0	1.2	1.4	0.5	0	0	1.3	0	0	0	0
<i>Cassidulina reniforme</i>	0	0	0	0	3	2.8	2.6	3	2.1	0	0	2	0	0
<i>Cibicides lobatulus</i>	0	0	0	0	2.7	1.2	0	0	0	0	0	0	0	0
<i>Cribrostomoides crassimargo</i>	3.2	3	2	3.2	1.5	0	1.6	1.8	0	0	0	0	13	10
<i>Eggerella advena</i>	32	34	39.2	40.5	27	20.5	21.5	20	38	37.2	34	30	31	25
<i>Elphidium clavatum</i>	2.5	2.7	0	0	18	19.5	10	8.5	1.9	3.5	0	0	2.5	0
<i>E. excavatum</i>	3.1	0	0	0	7.5	5	2.1	1.2	1.8	1.6	0	0	0	0
<i>E. incertum</i>	0	8.5	2.4	0	11.6	15	10.5	9.6	5.7	9	0	0	3	0
<i>E. williamsoni</i>	0	3.2	0	0	2.3	3	0	2.1	1.1	0	0	0	0	0
<i>Fissurina eburnean</i>	0	0	0	0	3.3	2.3	2	3	0	0	0	0	0	0
<i>Fursenkoina fusiformis</i>	3.2	0	0	0	1.9	0	0	0	0	0	0	0	0	0
<i>Haynesia orbiculare</i>	0	2.2	0	0	3	6	5	2.6	0	0	0	0	0	0
<i>Miliammina fusca</i>	6.1	4.2	1.5	2.5	3.1	3	1.5	0	0	2.3	0	2	0	0
<i>Nonionellina labradorica</i>	0	0	0	0	2.5	1.5	0	1.2	0	0	0	0	0	0
<i>Reophax arctica</i>	0	0	0	0	1.2	0	0	1.7	0	1.3	0	0	0	0
<i>R. fusiformis</i>	0	0	0	0	3	3.8	2.6	3.2	2.1	0	21.5	20	0	0
<i>R. nodulosa</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	4.2
<i>R. scottii</i>	33.5	35.3	39.4	33.3	17.6	13	20.5	30.1	30.1	35.7	30	32.6	36	27
<i>Rosalina bulloides</i> morphotype <i>columbiensis</i>	5.1	0	0	0	3.2	0	1.5	0	0	0	0	0	0	2.1
<i>Saccammina atlantica</i>	4.6	0	0	2.4	2.5	0	0	1.4	0	0	0	0	9	8
<i>Spiroplectammina bififormis</i>	5	2.1	2.8	7.8	2	0	0	0.5	0	0.5	0	0	0	1.5
<i>Textularina earlandi</i>	0	0	0	0	0	0	2.1	1.2	1.8	1.6	0	0	0	0
<i>Trochammina inflata</i>	0	0	0	0	1.7	1.5	0	2.6	0	0	0	0	0	0
<i>T. lobata</i>	0	3	3.6	0	2.7	1.9	1	0	0	0	0	0	0	0
<i>T. macrescens</i>	0	1.2	0	0	0	0	2.4	2	0	0	0	0	0	0
<i>T. ochracea</i>	3.8	0	3.3	3.7	0	6	7.8	1.5	0	0	2	2.3	0	1.8

Appendix 2E—Counts Of Foraminifera In Grab Samples Collected From Halifax Harbour in April 2009.

Station-Apr. 09	HC	PC	AYC	BRB	D1	D3	EE1	EE2	EE3	DC	TC	DYC	BYC	MC
Diversity	12	13	8	11	13	11	7	9	7	8	5	7	10	10
Abundance	845	750	110	1250	1120	750	525	630	425	350	95	85	80	80
Inner linings (%)	21.5	17.5	28.8	11.5	29.3	25	16.5	15	21.5	91.3	92.8	80.5	91.8	91.8
Deformities (%)	12.3	16.2	19	10.2	17.5	11.5	13	9	12.5	17	13.5	14	9	8.2
<i>Ammotium cassis</i>	7	2.5	7.5	3.2	5	3.4	7.4	9	7.5	12.7	10.2	13.5	22	30
<i>Buccella frigida</i>	0	0	0	2.2	2.5	1.7	2.3	0	1.3	0	0	0	0	0
<i>Cassidulina reniforme</i>	0	0	0	1.6	0	3.2	0	2.1	0	0	0	0	0	0
<i>Cribrostomoides crassimargo</i>	2.2	2.3	5.2	0	1.1	0	0	0	0	3	0	0	10	8.2
<i>Eggerella advena</i>	32	33	37	41	24.5	29	38.5	41	37	40	33	31	25	24.5
<i>Elphidium clavatum</i>	1.5	2.1	0	0	0	0	0	0	0.5	0	0	0	0	0
<i>E. excavatum</i>	2.4	3.6	0	0	3.1	1.2	0	1.8	1.6	0	0	9	0	0
<i>E. inceratum</i>	0	0	0	8.6	11	10.6	9	5.7	9	0	0	0	0	0
<i>E. williamsoni</i>	0	3.2	0	2.3	0	2.1	0	1.1	0	0	0	2.5	0	0
<i>Haynesia orbiculare</i>	0	2.1	0		7	0	0	0	0	0	21	0	0	0
<i>Miliammina fusca</i>	5.1	3.2	1.5	3.1	4.3	0	0	0	0	0	0	0	2.1	1.2
<i>N. labradorica</i>	0	0.9	0	0	0	0	0	0	0	0	0	0	0	0
<i>Reophax arctica</i>	0.8	0	0	0	0	0	2.3	0	1.3	0	0	0	1.7	1.7
<i>R. fusiformis</i>	3.2	0	0	4.6	5.8	0	0	2.1	0	1.5	1.2	0	0	0
<i>R. nodulosa</i>	0	0	0	0	0	0	0	0	0	0	0	0	4.2	2.4
<i>R. scottii</i>	39.5	35.1	38	36.6	42	41.1	37.5	40.1	40.7	41	40.6	26	27.4	29
<i>Rosalina bulloides</i> morphotype <i>columbiensis</i>	2.1	0	0	0	0	0	0	0	0	0	0	0	2.1	2.1
<i>Saccammina atlantica</i>	3	0	2.4	1.8	2	1.4	0	0	0	0	0	10	7.5	6
<i>Spiroplectammina biformis</i>	0	2.1	0	0	1.3	0	0	0	0	0.8	0	4	1.5	1.5
<i>Textularina earlandi</i>	0	2.2	2.5	0	0	0	0	1.8	1.6	0	0	0	0	0
<i>Trochammina inflata</i>	0	0	0	3.5	0	2.6	0	0	0	0	0	0	0	0
<i>T. lobata</i>	0	0	0	0	0	0	0	0	0	2	0	0	0	0
<i>T. macrescens</i>	0	1.2	0	0	0	3	2	0	0	0	0	0	0	0
<i>T. ochracea</i>	1.8	0	1.5	0	4	0	0	0	0	1	0	0	0	1.8

Appendix 2F—Counts Of Foraminifera In Grab Samples Collected From Halifax Harbour in August 2009.

Station-Aug.09	HC	PC	AYC	BRB	D1	D3	EE1	EE2	EE3	DC	TC	DYC	BYC	MC
Diversity	10	10	7	11	13	11	6	8	7	8	5	6	10	7
Abundance	735	690	45	850	510	410	180	630	125	110	17	85	80	83
Inner linings (%)	23.5	19	32.8	11.5	29.3	25	7.5	6.5	11.5	91.3	92.8	80.5	91.8	90.8
Deformities (%)	13.3	16.2	19	10.2	17.5	11.5	13	9	12.5	17	13.5	14	9	8.2
<i>Ammotium cassis</i>	7	4.5	0	2	5	4.3	7.4	9	7.5	9.7	13	11	31	27
<i>Buccella frigida</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Cassidulina reniforme</i>	0	4.3	0	0	0	0	0	2.1	0	0	0	0	0	0
<i>Cribrostomoides crassimargo</i>	4.2	2.3	5.2	0	1.1	0	0	0	0	0	0	8.5	10	13
<i>Eggerella advena</i>	29	36	43	28	24.5	27	38.5	40	37	45	42.5	33	28	26
<i>Elphidium clavatum</i>	1.5	2.1	0	0	1.1	0	0	0.9	0.5	0	0	0	0	0
<i>E. excavatum</i>	2.4	0	0	0	3.1	1.2	1.6	0	1.6	0	0	3	0	0
<i>E. inceratum</i>	0	6.9	0	11.6	0	9.6	7	5.7	4	0	0	0	0	0
<i>E. williamsoni</i>	0	0	0	2.3	3	0	0	1.1	0	0	0	0	0	0
<i>Haynesia orbiculare</i>	0	0	0	0	6	0	0	0	0	0	0	0	0	0
<i>Miliammina fusca</i>	4.1	3.2	1.5	3.1	3	0	0	0	0	0	0	0	2.1	4
<i>Reophax arctica</i>	0	0	0	1.2	1.4	1.7	2.3	0	1.3	0.9	0	0	1.7	0
<i>R. fusiformis</i>	3.2	0	0	3	3.8	3.2	0	0	0	2.5	3.5	0	0	2
<i>R. nodulosa</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>R. scottii</i>	37.5	33.1	40	33.6	45	43.1	37.5	41.1	40.7	44	40	35	29	0
<i>Rosalina bulloides</i> morphotype <i>columbiensis</i>	2.1	0	0	0	0	0	0	0	0	0	0	0	2.1	29
<i>Saccamina atlantica</i>	0	0	2.4	0	0	1.4	0	0	0	0	0	11	9	0
<i>Spiroplectammina bififormis</i>	0	2.1	0	0	0	0	0	0	0	1.2	0	0	1.5	9
<i>Textularina earlandi</i>	0	2.2	2.5	0	3.1	0	0	1.8	0	0	0	0	0	1.5
<i>Trochammina inflata</i>	0		0	1.7	1.5	2.6	0	0	0	0	0	0	0	0
<i>T. lobata</i>	0	3	0	2.7	1.9	2.4	0	0	0	0.8	0	0	0	0
<i>T. macrescens</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>T. ochracea</i>	1.5	0	5	0	6	3	0	0	0	1	2.1	0	1.8	0

Appendix 3 B-cont'd: Counts Of Foraminifera In Core 2 From Bedford Bay, Halifax Harbour.

Core 2- Core depth (cm)-cont.	23	25	30	35	40	45	50	55	60	65	65	70	75	80	85	90	95	100
Diversity	6	7	6	8	6	7	6.0	7	8	7	7	8	7	8	6	7	6	9
Total Abundance	242	240	257	375	365	385	430	421	400	425	425	650	595	520	495	520	615	615
Calcareous spp. %	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.6	1.0	0.0	0.0	0.0	0.0
Shell deformities %	17.0	17.0	16.5	13.5	15.0	15.0	11.4	8.8	6.0	3.6	3.6	3.0	2.9	2.4	2.8	2.5	2.0	2.0
Inner linings %	37.0	35.8	35.0	39.0	37.5	32.0	24.0	21.0	15.6	9.2	9.2	4.0	2.6	1.8	1.4	1.8	2.2	2.2
<i>Haynesia orbiculaire</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0
<i>Reophax arctica</i>	0.5	0.4	0.0	1.1	0.5	0.3	0.5	0.3	0.3	0.3	0.3	0.4	0.8	0.6	0.2	0.5	1.0	1.0
<i>R. scottii</i>	4.9	5.7	3.3	5.3	5.8	4.0	5.4	5.9	4.7	5.4	5.4	4.9	5.0	3.4	4.0	4.0	2.2	2.2
<i>Saccammina atlantica</i>	19.0	19.2	17.0	16.0	16.0	17.5	21.0	19.0	5.9	13.0	13.0	10.7	15.0	15.5	15.2	19.0	22.0	22.0
<i>Spiroplectammina biformis</i>	0.0	0.2	0.9	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.8	0.8
<i>Textularia earlandi</i>	0.0	0.2	0.6	0.0	0.4	0.2	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0	0.0	1.4	0.0	0.0
<i>T. torquata</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Trochammina globigeriniformis</i>	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.6	0.0	0.0	0.8	0.3	0.0	0.0
<i>T. ochracea</i>	5.1	4.5	3.0	9.0	7.9	12.0	14.0	12.0	14.0	17.0	17.0	13.0	6.0	5.0	8.6	7.0	6.5	6.5
<i>T. macrescens</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0

Appendix 3 A-cont'd: Counts Of Foraminifera In Core 2 From Bedford Bay, Halifax Harbour.

Core 2- Core depth (cm)	85	90	95	100	105	110	115	120	125	130	140	150	160	170	175
Diversity/ 10 cc	6	7	6	9	6	6	8	6	7	7	6	5	5	5	4
Abundance/ 10 cc	495	520	615	615	650	660	525	517	597	487	429	385	325	275	205
Calcareous foraminifera %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0
Shell deformities %	2.8	2.5	2.0	2.0	2.6	2.7	1.8	1.3	1.8	1.6	0.6	0	0	0	0
<i>Ammotium cassis</i>	1.4	1.8	2.2	2.2	1.8	1.3	0.8	0.8	1.6	1.2	23	16	5	15	0
<i>Cibicides lobatulus</i>	0.2	0.5	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	27	30	35	44	47
<i>Eggerella advena</i>	4.0	4.0	2.2	2.2	0.3	0.5	0.6	0.2	1.4	1.8	29	37	21	23	32
<i>Elphidium clavatum</i>	15.2	19.0	22.0	22.0	6.8	3.5	6.0	7.7	6.2	7.2	0	0	0	0	0
<i>Haynesia orbiculaire</i>	0.0	0.0	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0
<i>Reophax arctica</i>	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.2	0.7	0.7	0	0	0	0	0
<i>R. scottii</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.5	11	12.5	0	0	0
<i>Saccammina atlantica</i>	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	12	14.6	21
<i>Spiroplectammina bifurcata</i>	8.6	7.0	6.5	6.5	0.3	0.0	0.2	0.2	0.0	4	8	6	0	0	0
<i>Trochammina lobata</i>	1.2	0.0	0.0	0.0	4.0	3.5	3.0	2.7	4.0	4.0	0	0	0	8	0
<i>T. ochracea</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0	20	0	11

Appendix 3 B- Counts Of Foraminifera In Core 3 From Bedford Bay, Halifax Harbour.

Core 3- Core depth (cm)	0-1	5	10	15	20	25	30	35	40	45	50	55	60
Diversity/ 10 cc	6	3	5	5	4	5	5	5	0	0	0	3	3
Abundance/ 10 cc	750	725	1750	1250	875	650	500	500	0	0	0	12	12
Calcareous spp. %	0.0	0.0	0.0	0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Shell deformities %	4.0	3.7	1.5	1	1.2	0.8	1.0	1.0	0.0	0.0	0.0	0.0	0.0
Inner linings %	0.0	0.0	0.0	0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Ammotium cassis</i>	0.0	0.0	1.0	13	0.0	0	0.0	0.0	0.0	0.0	0.0	7.0	7.0
<i>Cibrostomoides crassimargo</i>	30.0	27	25.0	15	7.5	6.8	6	5.2	0.0	0.0	0.0	0.0	0.0
<i>Eggerella advena</i>	40.0	0.0	22.0	11	2.0	5	7.0	4.0	0.0	0.0	0.0	11	6.0
<i>Reophax arctica</i>	1.0	0.0	0.0	0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>R. scottii</i>	8.0	6.0	0.0	0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>R. scupiurus</i>	2.0	0.0	7.0	6	5.5	5	6.0	6.0	0.0	0.0	0.0	0.0	0.0
<i>Saccamina atlantica</i>	25.0	36	45.0	54	85.0	83	80	83	0.0	0.0	0.0	83	86
<i>Spiroplectammina biformis</i>	2.5	0.0	0.0	0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>T. inflata</i>	0.0	0.0	0.0	0	0.0	0	0.5	0.5	0.0	0.0	0.0	0.0	0.0

Appendix 3 C- Counts Of Foraminifera In Core 5 From The Outer Harbour, Halifax Harbour.

Core 5- Core depth (cm)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170
Diversity/ 10 cc	32	27	29	27	30	33	30	27	28	31	33	30	28	29	31	33	32	30
Abundance/ 10 cc	6100	5725	5500	5600	5750	5875	5450	5350	5500	5875	5950	6000	5870	5950	5250	5450	5700	5750
Calcareous spp. %	90.0	87.0	90.5	85.0	83.0	88.0	84.0	90.0	89.0	88.0	90.0	82.5	85.0	87.0	88.0	90.0	84.8	87.0
Shell deformities %	0.8	1.1	0.3	0.3	0.2	1.9	2.0	0.1	0.2	0.1	0.3	0.2	0.4	0.8	0.3	0.1	0.2	0.1
Organic inner linings %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Ammotium cassis</i>	4.0	4.4	3.2	7.1	4.7	13.2	11.5	8.7	9.2	12.3	5.5	4.8	9.6	17.9	8.2	3.9	0.5	0.3
<i>Buccella frigida</i>	2.0	4.0	3.8	4.1	4.7	5.2	4.8	5.4	4.1	4.7	5.1	4.3	4.9	4.6	4.2	4.4	4.1	4.8
<i>Cassidulina reniforme</i>	0.6	0.3	0.4	0.3	0.5	0.8	0.8	0.5	0.3	0.6	0.3	0.6	0.7	0.9	0.5	0.4	0.2	0.1
<i>Cibicides lobatulus</i>	2.4	3.5	4.8	5.2	5.0	4.7	3.5	4.1	5.0	4.7	3.8	4.8	5.4	4.1	4.7	5.1	4.8	5.0
<i>Cribrostomoides crassimargo</i>	0.4	0.3	0.2	0.3	0.5	0.6	0.8	0.4	0.3	0.6	0.7	0.6	0.2	0.4	0.5	0.4	0.2	0.3
<i>Dentalina ittai</i>	0.5	0.6	0.7	0.7	0.4	1.0	0.8	0.1	1.1	0.2	0.0	0.2	0.1	0.2	0.0	3.4	0.2	0.2
<i>Eggerella advena</i>	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Elphidium clavatum</i>	11.7	9.6	5.6	6.0	7.0	6.5	5.0	7.0	9.0	7.0	5.0	11.0	9.1	6.3	7.0	5.0	7.0	8.0
<i>E. excavatum</i>	35.0	37.0	37.5	37.0	36.0	35.0	35.0	30.0	23.0	20.5	17.0	15.0	25.0	33.0	24.0	22.0	32.0	31.0
<i>E. incertum</i>	6.0	8.0	11.0	6.0	3.4	7.3	11.3	6.2	7.1	6.0	15.0	13.3	11.0	9.0	7.0	12.7	13.0	10.6
<i>E. williamsoni</i>	7.0	6.5	5.0	8.0	8.0	11.0	6.0	17.0	21.0	26.0	23.0	20.0	15.0	18.0	21.0	20.3	6.0	11.0
<i>Fissurina eburnea</i>	0.4	0.3	0.2	0.3	0.5	0.6	0.8	0.4	0.3	0.6	0.7	0.6	0.2	0.4	0.5	0.4	0.2	0.3
<i>Fursenkoina fusiformis</i>	0.8	0.6	0.6	0.7	0.6	1.0	0.0	0.1	1.5	0.0	0.0	0.2	0.1	0.2	0.5	3.4	0.2	0.2
<i>Haynesia orbiculaire</i>	9.6	8.1	9.7	0.8	1.4	1.5	1.1	0.6	1.3	0.5	1.2	2.5	3.1	6.9	11.9	9.8	10.3	6.6
<i>Lagena apiopleura</i>	0.8	0.3	0.6	0.8	0.1	0.8	0.3	0.6	0.7	0.4	0.6	0.4	0.2	0.4	0.4	0.3	1.0	0.3
<i>L. mollis</i>	0.1	0.4	0.3	0.6	0.2	0.6	0.7	0.5	0.4	0.3	0.4	0.6	0.3	0.8	0.6	0.7	0.6	0.2
<i>Laryngosigma lactea</i>	0.3	0.2	0.4	0.3	0.6	0.3	0.2	0.2	0.9	0.8	0.1	0.5	0.4	0.6	0.7	0.3	0.9	0.4
<i>Milliammina fusca</i>	0.6	0.3	0.6	0.8	0.1	0.6	0.3	0.5	0.3	0.4	0.6	0.7	0.5	0.6	0.4	0.7	1.0	0.3
<i>Nonionella labradorica</i>	0.9	1.1	0.8	1.2	0.7	0.6	0.2	0.4	0.2	0.6	0.1	0.3	0.5	0.4	0.3	0.1	0.4	0.2
<i>Oolina borealis</i>	0.6	0.3	0.3	0.1	0.8	0.9	0.7	0.1	0.3	0.5	0.7	0.3	0.4	0.6	0.4	0.2	0.8	0.1
<i>O. melo</i>	0.0	0.2	0.4	0.5	0.5	0.8	0.3	0.7	0.6	0.4	0.3	0.7	0.3	0.7	0.5	0.9	0.5	0.2
<i>Quinqueloculina arctica</i>	3.0	2.0	2.2	2.0	2.4	2.0	3.0	2.7	5.9	1.9	2.7	2.1	3.0	1.8	1.4	2.2	2.0	2.1
<i>Q. stalkerii</i>	2.0	2.1	1.6	1.8	1.8	2.4	1.2	2.6	2.8	2.1	2.0	2.7	2.0	2.6	2.0	2.1	2.7	1.9
<i>Reophax arctica</i>	0.6	0.3	0.6	0.8	0.1	0.6	0.3	0.5	0.3	0.4	0.6	0.7	0.5	0.6	0.4	0.7	1.0	0.3
<i>R. fusiformis</i>	0.0	0.4	0.3	0.6	0.5	0.8	0.7	0.3	0.9	0.5	0.4	0.6	0.3	0.8	0.5	0.8	0.6	0.2
<i>R. scottii</i>	4.8	3.3	4.4	5.3	6.3	2.1	6.6	5.4	5.4	4.9	2.8	3.8	3.6	3.6	4.2	2.8	2.2	6.8
<i>Rosalina bulloides</i> morph.																		
<i>columbiensis</i>	5.2	5.7	5.1	4.9	5.4	6.6	14.0	6.0	5.7	5.7	5.2	5.1	6.6	7.0	5.6	5.0	4.9	6.2
<i>Saccammina atlantica</i>	2.4	3.1	3.1	2.2	3.1	4.3	2.3	3.3	0.6	1.0	0.8	2.4	3.1	0.9	2.6	3.1	1.3	2.4
<i>Spiroplectammina bififormis</i>	2.8	4.4	3.3	4.1	4.0	3.8	2.0	2.4	3.1	3.1	2.2	3.1	4.3	2.3	3.3	0.6	1.0	0.8
<i>Trochammina inflata</i>	0.0	1.1	0.4	1.0	1.2	0.6	0.9	1.2	0.3	0.6	0.4	0.3	0.7	0.9	0.6	0.2	0.9	0.1
<i>T. lobata</i>	1.0	1.2	0.7	0.9	1.2	1.0	0.7	1.0	0.6	0.9	0.1	0.7	0.6	0.7	1.1	0.9	0.8	1.0
<i>T. ochracea</i>	2.5	3.6	2.4	2.5	2.8	3.4	4.1	4.7	2.0	2.4	3.1	3.1	2.2	1.3	1.6	0.6	1.5	2.7

Appendix 3 D- Counts Of Foraminifera In Core 6 From The Outer Harbour, Halifax Harbour.

Core 6-Core depth (cm)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
Diversity/ 10 cc	23	25	24	26	27	24	27	25	25	26	27	25	27	26	30	27	32	28	31	33	33
Abundance/ 10 cc	3000	3250	4000	3500	3750	3900	4000	3850	4150	5200	4250	4500	4750	5000	5250	4750	4500	5150	5000	5050	5100
Calcareous spp. %	65.0	63.0	60.0	65.0	62.0	68.5	66.5	72.5	69.0	68.0	71.0	72.5	75.0	70.0	75.0	70.0	67.5	65.0	75.5	70.0	75.0
Shell deformities %	10.0	9.8	8.4	7.5	7.0	6.4	4.8	5.0	3.6	4.5	4.0	3.0	3.0	2.0	0.3	0.5	0.9	1.0	0.8	0.3	0.5
Organic inner linings %	10.5	9.0	7.5	6.8	6.0	5.0	4.5	3.5	3.0	2.5	2.0	2.2	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Ammotium cassis</i>	8.2	7.5	8.5	11.0	9.5	9.0	8.5	8.0	4.5	7.5	7.3	6.8	6.5	5.2	8.2	3.9	2.5	4.7	7.9	3.0	4.3
<i>Buccella frigida</i>	1.0	1.8	2.1	1.3	0.7	0.8	1.2	0.4	0.3	0.5	0.4	0.6	0.8	1.2	1.5	1.2	0.8	0.6	0.3	0.6	0.8
<i>Cassidulina reniforme</i>	0.0	0.3	0.4	0.3	0.5	0.6	0.5	0.7	0.9	0.6	0.8	0.3	0.7	0.9	0.5	0.4	0.2	0.1	0.3	0.2	0.6
<i>Cibicides lobatulus</i>	1.2	3.5	4.2	4.5	4.8	5.0	5.3	4.3	2.5	4.5	5.0	5.2	5.3	4.8	5.6	4.5	3.8	3.0	4.0	2.3	1.8
<i>Cribratomoides crassimargo</i>	3.2	3.0	2.8	2.1	1.5	1.2	0.8	1.3	1.0	0.6	0.5	0.7	0.4	0.5	0.8	0.4	1.1	1.4	0.8	0.5	0.2
<i>Dentalina ittai</i>	0.0	0.0	0.0	0.0	0.5	0.9	0.5	0.3	0.7	0.2	0.6	0.5	0.7	0.9	0.5	0.4	0.2	0.1	0.0	0.2	0.1
<i>Eggerella advena</i>	27.4	26.1	24.0	23.0	21.0	20.5	19.8	24.6	23.0	21.5	20.3	22.0	19.0	21.6	17.0	20.5	16.0	19.0	14.5	22.0	20.3
<i>Elphidium clavatum</i>	8.0	5.5	3.5	0.0	5.0	5.5	4.0	11.0	7.5	8.0	13.0	0.0	7.0	6.3	7.0	9.0	7.5	10.0	11.0	7.1	5.4
<i>E. excavatum</i>	17.0	19.0	20.5	23.0	27.0	29.5	32.0	25.0	28.0	26.0	22.5	27.0	29.0	31.0	23.0	27.0	19.0	25.2	29.0	30.0	24.0
<i>E. inceratum</i>	0.0	6.0	6.7	8.0	10.0	6.5	8.0	7.5	6.0	9.5	11.5	13.0	11.0	6.5	7.0	10.0	6.0	7.5	5.0	5.4	7.0
<i>E. willamsoni</i>	8.0	4.0	5.0	6.0	2.0	3.5	3.0	4.5	5.2	7.3	5.0	0.0	8.0	7.5	12.0	10.4	11.0	9.0	10.0	7.5	9.6
<i>Fissurina eburnea</i>	0.4	0.3	0.2	0.3	0.5	0.9	0.6	0.5	0.2	1.2	0.7	0.6	0.2	0.4	0.5	0.4	0.2	0.3	0.0	0.0	0.0
<i>Fursenkoina fusiformis</i>	4.1	3.8	2.8	2.1	1.8	1.2	0.9	0.6	1.1	1.2	0.7	0.3	0.6	0.3	0.2	0.6	0.2	0.2	0.8	0.2	0.2
<i>Haynesia orbiculaire</i>	9.6	8.1	9.7	7.5	6.4	2.5	5.4	4.2	3.0	2.5	2.0	2.2	0.3	0.4	0.1	9.8	10.3	6.6	3.4	0.2	0.2
<i>Lagena apiopleura</i>	0.0	0.0	0.0	0.8	0.1	0.0	0.6	0.2	0.5	0.7	0.8	0.1	0.6	0.1	0.3	0.2	1.0	0.5	0.2	0.1	0.6
<i>L. mollis</i>	0.0	0.0	0.0	0.6	0.2	0.6	1.1	0.8	0.1	0.5	0.2	0.7	0.5	0.2	0.6	0.9	0.1	0.2	0.3	0.6	0.3
<i>Milliammina fusca</i>	1.8	2.2	3.1	1.4	2.5	1.5	2.0	1.7	0.9	1.0	1.2	1.8	2.3	1.8	1.2	0.5	1.0	1.2	0.8	1.1	1.8
<i>Nonionella labradorica</i>	0.0	0.0	0.8	1.2	0.7	0.4	0.6	1.3	0.8	0.6	0.4	0.4	0.5	0.4	0.3	0.1	0.4	0.2	0.0	0.0	0.0
<i>Oolina borealis</i>	0.0	0.0	0.0	0.1	0.3	0.8	0.6	1.0	0.6	0.5	0.6	1.8	3.0	0.6	0.4	0.2	0.8	0.1	0.0	0.0	0.0
<i>O. melo</i>	0.0	0.0	0.0	0.0	0.2	0.9	1.1	0.4	1.8	0.7	0.7	0.3	0.7	0.5	0.9	0.5	0.2	0.0	0.0	0.0	0.0
<i>Quinqueloculina arctica</i>	0.0	0.0	0.0	0.0	0.6	0.8	1.4	1.4	1.5	1.8	2.0	2.2	0.8	2.3	1.4	2.2	2.0	2.1	0.0	0.0	0.0
<i>Q. stalkerii</i>	0.0	0.0	0.0	0.0	0.2	0.4	1.0	1.8	2.0	2.2	2.5	3.0	2.0	2.6	2.0	2.1	2.7	1.9	0.0	0.0	0.0
Total <i>Quinqueloculina</i> spp.	0.0	0.0	0.0	0.0	0.8	1.2	2.4	3.2	3.5	4.0	4.5	5.2	5.7	4.8	6.2	6.5	4.2	3.2	3.0	2.8	4.6
<i>Reophax arctica</i>	0.6	0.3	0.6	0.8	0.1	0.8	0.9	0.7	0.4	1.1	0.4	0.2	0.5	0.6	0.4	0.7	1.0	0.3	0.0	0.0	0.0
<i>R. fusiformis</i>	0.0	0.4	0.3	0.6	0.5	1.0	0.5	0.6	0.3	0.6	0.8	0.1	0.3	0.8	0.5	0.8	0.6	0.2	0.0	0.0	0.0
<i>R. scottii</i>	7.5	6.2	4.4	5.3	4.8	4.1	3.8	3.2	3.0	1.5	3.0	2.8	2.4	3.6	2.8	3.0	2.2	3.6	3.1	3.6	2.8
<i>Rosalina bulloides</i>																					
<i>morph. columbiensis</i>	5.2	5.0	4.1	2.5	3.2	2.8	2.5	2.0	2.1	1.5	1.1	0.8	0.2	0.6	1.1	1.4	0.6	0.5	0.8	0.5	0.2
<i>Saccammina atlantica</i>	2.8	2.2	2.5	1.8	1.5	1.1	0.7	0.9	1.4	1.0	1.2	0.7	1.1	0.9	1.0	1.8	1.3	1.1	0.8	1.1	0.9
<i>Spiroplectammina bififormis</i>	7.2	6.5	3.3	4.8	4.0	4.1	3.8	3.2	2.5	1.8	2.4	2.0	1.0	2.3	1.5	0.8	1.0	0.8	0.6	0.4	1.1
<i>Trochammina inflata</i>	0.0	1.1	0.4	1.0	1.2	0.8	0.6	1.1	0.4	0.6	0.7	0.9	0.5	0.9	0.6	0.2	0.9	0.1	0.9	0.6	0.2
<i>T. lobata</i>	1.0	1.2	0.7	0.9	1.2	0.0	1.0	0.8	0.7	1.1	1.2	1.0	0.6	0.7	0.4	0.9	0.8	0.4	0.6	0.8	0.3
<i>T. ochracea</i>	1.2	0.9	0.8	0.6	0.5	0.8	0.7	1.1	0.8	0.6	0.5	0.8	0.9	0.5	0.8	0.6	1.0	0.6	0.4	0.1	0.2

Appendix 3E- Counts Of Foraminifera In Core 7 From The Northwest Arm, Halifax Harbour.

Core 7- Core depth (cm)	0.0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190
Diversity/10 cc	6	8	10	10	10	8	8	9	8	7	6	7	7	6	7	6	8	7	8	4
Abundance/10 cc	120	890	928	514	270	600	680	508	698	584	521	570	584	625	670	625	900	850	725	480
Calcareous spp. %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.5	17.5	0.0
Shell Deformities %	37.0	20.6	20.6	9.3	3.6	14.0	14.0	9.5	12.0	15.6	12.6	12.0	15.6	14.0	16.0	10.0	13.0	9.8	7.5	7.5
Organic inner linings %	50.0	19.0	19.6	46.7	9.2	26.0	24.0	39.4	10.8	9.6	8.0	10.0	13.2	9.6	12.0	9.8	12.0	10.0	9.0	7.0
<i>Ammotium cassis</i>	2.0	1.0	5.2	4.5	1.4	8.0	7.0	2.4	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Buccella frigida</i>	0.0	2.1	0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0	1.3	2.1	0	1.8	0.0	3.2	0.0	0.0
<i>Cribrostomoides crassimargo</i>	17.0	17.0	6.3	10.9	1.4	4.0	4.0	1.5	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Eggerella advena</i>	73.0	55.0	49.5	20.6	18.5	24.5	23.7	18.9	21.2	26.0	29.0	24.5	26.0	23.5	25.5	27.0	28.0	25.0	27.0	39.0
<i>Elphidium excavatum</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0	10.0	0.0
<i>Haynesia orbiculaire</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	7.5	0.0
<i>Miliammina fusca</i>	0.0	0.1	0.1	0.5	0.7	1.0	1.0	0.7	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Reophax arctica</i>	0.0	0.0	0.0	0.0	0.7	0.6	0.0	0.0	1.0	1.0	1.1	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>R. fusiformis</i>	0.0	0.0	2.8	1.5	1.5	1.0	1.1	1.5	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
<i>R. scottii</i>	0.0	0.0	1.0	1.5	8.1	2.0	2.6	4.8	1.4	1.4	0.0	1.1	1.4	2.0	2.0	1.9	2.3	1.3	1.3	0.0
<i>Saccamina atlantica</i>	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Spiroplectammina biformis</i>	0.0	1.9	1.6	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
<i>Trochammina inflata</i>	2.0	1.0	1.0	1.0	1.0	1.0	3.5	1.5	1.0	1.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.8
<i>T. lobata</i>	0.0	0.0	2.0	0.0	0.0	2.0	3.2	1.5	0.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>T. macrescens</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>T. ochracea</i>	8.0	4.6	14.6	5.0	22.5	45.0	47.0	29.1	55.6	58.0	57.0	56.0	58.0	56.0	54.5	55.0	58.0	54.0	52.5	57.0

Appendix 3F- Counts Of Foraminifera In Core 8 From The Inner Harbour, Halifax Harbour.

Core 8- Core depth (cm)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
Diversity/10 cc	10	11	11	10	10	14	16	16	18	19	23	25	27	27	27
Abundance/10 cc	1150	675	685	710	747	825	1225	1750	2350	3170	3780	4350	4275	4344	4200
Calcareous spp. %	0.0	0.0	0.0	0.0	0.0	5.6	14.8	18.0	27.0	37.0	44.0	51.0	57.0	73.0	77.0
Shell deformities %	7.5	13.0	10.7	11.7	11.2	7.8	7.5	7.0	5.0	4.0	3.8	2.0	0.0	0.0	0.1
Inneer linings %	4.9	11.0	5.0	7.5	9.2	9.2	8.1	7.2	3.0	1.0	0.5	1.0	0.0	0.0	0.0
<i>Ammotium cassis</i>	2.5	3.2	8.4	11.5	9.2	5.5	9.6	11.1	9.4	8.5	8.5	11.0	6.6	9.8	7
<i>Buccella frigida</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	3.0	1.3	2.4	4.0	7.0	5
<i>Cibicides lobatulus</i>	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.3	0.2	0.5
<i>Cribrostomoides crassimargo</i>	30.0	27.0	26.8	21.7	18.9	17.8	12.7	9.0	8.9	7.0	2.0	1.0	0.2	1.0	1.0
<i>Dentalina ittai</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0	0.5	0.4	0.2	0.1	0.8	0.2	0.1
<i>Eggerella advena</i>	22.0	27.0	26.0	29.0	27.0	24.0	17.4	15.0	12.7	8.6	5.0	2.0	0.0	1.4	1.6
<i>Elphidium clavatum</i>	0.0	0.0	0.0	0.0	0.0	0.0	5.7	7.0	7.5	9.0	17.0	31.0	35.6	40.0	44
<i>E. excavatum</i>	0.0	0.0	0.0	0.0	0.0	0.0	4.7	5.0	5.8	5.7	0.5	5.5	6.3	3.0	1.0
<i>E. incertatum</i>	0.0	0.0	0.0	0.0	0.0	0.0	3	2.5	4	3.2	1.7	3.5	1.8	2.5	2.3
<i>E. williamsonii</i>	0.0	0.0	0.0	0.0	0.0	0.0	1.5	2.0	4.2	5.3	2.4	2.7	0.4	1.3	2.7
<i>Fissurina eburnea</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0.4	0.2	0.3	0.3	0.7	0.9
<i>Fursenkoina fusiformis</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.2	0.0	0.6	0.5	0.7	0.4	0.8
<i>Haynesia orbiculaire</i>	0.0	0.0	0.0	0.0	0.0	0.0	3.1	11.9	10.3	9.0	6.6	5.1	0.6	2.2	1.2
<i>Lagena apiopleura</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2	1.0	0.5	0.2	0.1	0.6
<i>Lagena mollis</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.2	2.4	0.3	0.3	0.1	0.2	0.8
<i>Nonionella labradorica</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.0
<i>Quinqueloculina spp.</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	4.1	5.0	17.0	15.0	16.2	19
<i>Reophax arctica</i>	1.5	0.6	0.8	3.5	4.0	3.5	3.9	3.7	0	4.0	1.1	0.5	1.0	0.2	0.1
<i>R. fusiformis</i>	0.8	2.0	2.7	5.6	1.0	3.9	4.1	4.8	4.3	3.1	0.0	0.3	0.1	0.6	0.4
<i>R. scottii</i>	31.0	26.0	24.9	23.0	20.0	13.7	11.3	9.0	8.2	6.0	3.0	1.2	1.2	1	0.8
<i>Saccammina atlantica</i>	2.0	0.8	0.0	0.0	0.0	2.3	3.4	6.0	6.9	6.3	6.0	5.0	6.0	5.8	7.9
<i>Spiroplectammina biformis</i>	3.0	6.0	9.0	23.5	18.0	19.0	14.1	15.7	12.7	9.0	4.0	2.7	3.0	0.7	0.2
<i>Trochammina lobata</i>	1.2	2.5	3.3	3.7	2.7	1.8	3.1	2.8	0	1.8	2.5	3.3	3.7	2	3.3
<i>T. ochracea</i>	2.0	1.5	4.8	3.1	3.7	3.4	2.1	2.2	2.7	1.7	2.7	1.8	3.1	1.8	2.5

Appendix 4 A-Cont'd: Counts Of Foraminifera In Core 4 From South Arm, Sydney Harbour.

SH- Core 4 Species	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
<i>Ammonia beccarri</i>							0.4		0.8	0.4		0.9	0.3	0.2	
<i>Ammotium cassis</i>	2.7	0.6	3.2	7.1	4.7	13.2	11.5	8.7	9.2	12.3	5.5	4.8	9.6	17.9	8.2
<i>Bolivina pseudopunctata</i>				0.4										0.1	
<i>Buccella frigida</i>	1.5	1.7	0.6		4.5	2.7	0.7	0.5	1.5	1.5	0.3	0.7	1.1	0.7	
<i>Cibicides lobatulus</i>		0.4	0.2		0.1	0.4	0.2		0.3			0.1	0.1		
<i>Cyclogyra involvens</i>			0.4	0.7	0.3						0.3	0.1		0.1	
<i>Eggerella advena</i>	35.8	40.5	45.0	60.0	66.0	36.5	40.2	55.0	53.8	47.9	57.9	52.0	55.7	42.2	50.2
<i>Elphidium clavatum</i>	11.7	13.3	25.8	6.0	3.4	21.2	11.3	6.2	7.1	9.7	7.3	13.3	9.1	6.3	7.0
<i>E. exclavatum</i>	1.1	1.4	4.2	1.1	0.6	1.7	0.2		0.8	0.4		0.4	0.4	0.2	0.5
<i>E. bartletti</i>	1.1	0.7	4.8		0.6	0.2		0.1	0.5		1.3	1.4	3.4	1.0	0.2
Total of <i>E. spp</i>	0.2	0.1	1.0				0.2								7.7
<i>Fursenkoina fusiformis</i>	0.8	0.6	0.6	0.7	0.6	1.0		0.1	1.5			0.2	0.1	0.2	0.5
<i>Glomospira gordialis</i>	1.2	0.4	0.4		2.1	0.2		0.3		0.4	0.1				
<i>Haynesia orbiculaire</i>	9.6	8.1	9.7	0.4	1.4	5.0	6.5	3.8	7.8	3.2	8.6	4.7	9.5	6.9	11.9
<i>Hemisphaerina bradyi</i>	0.5			0.7	0.4	0.8		0.3	0.3	0.6				0.1	0.5
<i>Lagena spp.</i>	0.1		0.2		0.1	0.4	0.2			0.4	0.1				0.2
<i>Nonionella labradorica</i>						0.6	0.2	0.4							
<i>Quinqueloculina</i>	0.2	0.1			0.0	0.2									
<i>Reophax arctica</i>	0.6		0.6	1.1	0.1	0.6		0.5	0.3	0.4	0.6	0.7	0.4	0.3	0.7
<i>Reophax scottii</i>	4.8	3.3	4.4	5.3	6.3	2.1	6.6	5.4	5.4	4.9	2.8	3.8	3.6	3.6	4.2
<i>Rosalina columbiensis</i>	5.7	1.3	2.0	3.9	3.7	5.9	13.7	7.9	7.7	5.7	11.3	5.1	6.6	7.7	7.9
<i>Saccamina atlantica</i>	0.4		1.2	0.4	0.4	0.6				0.2	0.1	0.1	0.2	0.4	
<i>Spiroplectammina bififormis</i>		0.9					0.4	0.3					0.4		
<i>Textularia earlandi</i>	0.5	0.6	0.4		0.4		0.4	0.4		0.4		0.2	0.1	0.3	0.2
<i>Trochammina nana</i>	1.6	1.4	2.4	4.6	4.3	3.4	8.4	4.7	6.1	8.1	3.1	3.1	2.2	1.3	1.6
<i>Trochammina squamata</i>	4.0	18.5	8.2	5.7	3.6	5.2	3.8	4.1	3.6	5.1	6.8	3.2	2.5	6.2	4.2
Abundance	5246	5528	4024	2248	5816	4192	3624	6104	3136	3776	5384	8928	7152	7816	3424
Diversity	33	28	25	20	25	28	29	30	36	28	24	30	23	28	25
Calcareous spp. %	32.7	27.9	49.7	C	15.5	35.9	28.3	15.6	21.4	18.4	22.0	25.0	24.7	26.4	29.2
Abnormalities %	2.4	4.8	0.8	2.2	2.5	4.6	3.3	2.2	3.6	4.0	5.5	7.1	5.6	7.1	7.5
inner linings %	4.9	2.0	4.8	8.2	5.0	6.5	17.7	11.7	9.2	13.6	12.0	6.0	7.5	11.2	8.4

Appendix 4 A-Cont'd: Counts Of Foraminifera In Core 4 From South Arm, Sydney Harbour.

SH- Core 4 Species	150	160	170	180	190	200	210	220	230	240	250	260	270
<i>Ammonia beccarri</i>	6.4	0.5	3.3		1.7	0.3	0.5		1.8	0.9	1.4	0.9	2.3
<i>Ammotium cassis</i>	3.9	0.5	0.3	0.8	8.2	8.5	7.3	11.0	2.9	6.6	28.0	9.8	9.1
<i>Buccella frigida</i>	3.9	0.2	2.5		1.5	1.3	2.0	2.4	2.9	0.9	0.1	0.2	0.6
<i>Cibicides lobatulus</i>	0.3	0.2	0.3			0.5	0.4	0.5		0.3			0.1
<i>Cyclogyra involvens</i>	1.4	1.0	0.5	0.4			0.2				0.2		
<i>Eggerella advena</i>	18.2	44.7	37.1	59.5	43.5	41.1	36.6	36.7	24.7	49.3	28.6	43.3	54.8
<i>Elphidium clavatum</i>	17.4	16.5	10.6	4.6	8.9	6.7	13.3	8.0	16.1	9.7	7.3	11.4	5.4
<i>E. exclavatum</i>	2.5	4.2	1.8	0.2	1.2	0.5	0.5	0.5	0.5	0.3			0.3
<i>E. bartletti</i>	3.9	4.1	3.8	1.3	0.3	2.4	0.7	2.7	1.6	0.4	1.0	1.3	2.8
<i>Fursenkoina fusiformis</i>	3.4	0.2	0.2			0.6	1.6	0.5	0.3	0.7	0.8	0.4	0.1
<i>Glomospyra gordialis</i>	7.0	0.5	1.2	1.3	1.0			0.3		0.1	0.5	0.2	0.2
<i>Haynesia orbiculaire</i>	9.8	10.3	6.6	17.6	5.3	6.6	1.4	5.1	3.9	0.6	1.6	2.2	5.5
<i>Hemisphaerina bradyi</i>	4.2	3.2	1.8	6.5	1.0	1.0	0.7	1.3	2.3	1.2	0.3	0.7	1.2
<i>Lagena mollis</i>	0.3		0.3		0.7	0.3		0.3		0.1	0.1	0.2	
<i>Lagena spp.</i>	0.3		0.2		0.2		0.4						0.3
<i>Quinqueloculina agglutinans</i>	3.6	1.7	4.0	0.4	0.5	0.5	0.2	0.5	3.4				0.4
<i>Reophax arctica</i>		1.0	0.3	0.8	0.2	1.1	0.2	0.5	0.8	1.0	0.2	0.2	0.1
<i>Reophax scottii</i>	2.8	2.2	6.8	2.1	7.7	5.8	6.2	5.6	4.7	2.7	3.5	2.8	7.4
<i>Rosalina columbiensis</i>	4.8	4.2	10.3	1.7	7.2	11.7	12.8	12.9	22.9	14.9	9.0	12.3	4.1
<i>Saccammina atlantica</i>		0.7		0.2									
<i>Spiroplectammina biformis</i>	0.6	1.0			0.2		0.7	0.5			0.1		0.2
<i>Textularia earlandi</i>		0.7		0.8	0.3	0.2	0.5	0.3	0.3			0.4	
<i>Trochammina globigeriniformis</i>		1.0	0.3	0.4	0.2	0.2		0.8		0.4	0.2		
<i>Trochammina nana</i>	0.6	1.5	2.7	0.4	0.7	2.4	0.9	1.9	3.9	2.5	1.3	1.1	0.3
<i>Trochammina squamata</i>	2.8	3.9	4.7	0.6	8.7	7.5	12.3	7.2	6.0	7.0	8.5	12.2	4.7
Abundance	2856	3256	4824	3816	4688	4984	4504	2984	3072	5368	7312	4344	7464
Diversity	29	34	25	22	30	36	23	28	30	34	32	29	38
Calcareous spp. %	56.3	37.3	40.8	26.0	27.1	31.3	34.1	33.0	50.3	28.9	21.8	28.9	21.5
Abnormalities %	5.6	6.9	6.5	5.2	9.4	14.4	5.3	1.1	2.9	3.1	4.9	5.3	7.5
Inner linings %	4.2	7.9	7.6	0.6	9.9	4.0	19.5	16.9	30.5	21.3	12.5	16.4	5.9
Total Ostracods	112	96	232	144	560	200	136	136	248	16	80	160	272

Appendix 4 B-Counts Of Foraminifera In Core 15 From South Arm, Sydney Harbour.

SH-Core 15-Core depth	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170
Abundance	5250	2550	4750	5250	5375	5600	5860	5900	6250	6300	7750	5750	4550	7750	3550	6350	5150	4750
Diversity	24	15	19	23	25	27	31	30	33	28	29	30	33	28	31	32	32	33
Calcareous spp. %	33.1	31.2	19.0	17.5	31.0	37.0	36.0	33.1	35.0	37.0	39.0	41.0	44.0	39.0	45.0	46.0	31.5	56.4
Abnormalities %	9.5	15.8	11.8	10.5	6.5	4.5	3.7	4.1	3.1	3.8	3.2	2.5	1.4	1.6	2.4	1.3	2.1	1.4
Organic inner linings %	6.4	8.5	6.8	6.4	5.6	4.0	3.2	3.8	3.2	2.5	1.1	0.8	0.9	1.1	0.5	0.4	0.8	0.9
Total Ostracods	60	0	30	54	65	75	175	150	125	225	375	325	225	150	235	175	230	225
<i>Ammotium cassis</i>	10.5	17.0	16.0	13.0	12.0	9.0	6.5	8.7	9.2	7.8	5.5	4.8	9.6	6.3	6.3	4.8	5.2	6.3
<i>Buccella frigida</i>	3.1	2.4	2.0	1.5	1.5	0.7	1.6	1.1	1.5	1.1	1.1	0.7	1.1	0.7	2.5	3.9	0.2	2.5
<i>Cibicides lobatulus</i>	1.2	0.5	0.8	1.5	2.8	3.8	2.5	2.2	2.8	4.5	1.9	2.5	4.5	3.6	1.1	2.2	1.8	0.8
<i>Eggerella advena</i>	52.0	58.5	55.0	52.0	45.0	39.5	43.0	42.7	53.8	43.0	41.0	40.0	39.0	35.0	38.0	43.0	44.7	37.1
<i>Elphidium clavatum</i>	9.0	6.2	7.0	8.2	7.5	8.0	3.2	8.0	7.1	3.2	3.2	13.3	9.1	6.3	7.0	17.4	16.5	10.6
<i>E. excavatum</i>	19.7	12.0	15.0	17.2	19.7	21.0	23.0	20.8	26.0	31.0	30.0	33.0	36.0	32.0	33.0	36.0	35.8	33.0
<i>E. williamsoni</i>	6.5	3.0	5.1	3.8	4.0	1.2	3.0	5.0	7.0	7.6	11.2	11.0	10.5	12.0	11.4	10.2	9.0	8.3
<i>Fursenkoina fusiformis</i>	1.4	0.8	1.1	1.0	0.8	1.0	1.1	0.4	1.5	1.8	2.1	1.6	0.1	2.4	2.8	3.4	1.6	1.9
<i>Haynesia orbicularis</i>	6.5	2.0	3.5	4.0	9.0	8.8	9.7	8.7	8.0	6.5	10.5	11.0	3.1	9.6	11.9	9.8	13.5	6.6
<i>Lagena meridionalis</i>	0.8	0.0	0.4	0.8	1.5	0.6	1.1	0.8	2.1	0.1	0.5	0.7	0.8	0.3	0.2	0.7	0.2	0.3
<i>Milliammina fusca</i>	0.8	0.7	1.1	0.8	1.1	1.3	0.6	0.8	1.5	2.3	2.3	0.6	0.2	0.2	1.1	0.9	0.7	0.8
<i>Nonionella labradorica</i>	0.6	0.0	0.2	0.6	0.6	1.0	1.2	1.6	2.0	2.4	3.2	2.8	3.8	3.6	2.5	3.2	4.1	1.8
<i>Pattelina corrugata</i>	0.3	0.0	0.0	0.3	0.5	0.2	0.2	0.6	1.2	1.4	0.3	0.8	0.2	1.1	0.2	0.5	0.8	1.0
<i>Pyrgo williamsoni</i>	0.5	0.0	0.2	0.4	0.6	1.2	1.8	0.8	1.1	1.4	1.2	1.4	1.8	2.6	2.5	2.1	2.0	3.2
<i>Quinqueloculina agglutinans</i>	0.8	0.0	0.4	0.8	1.0	1.4	1.2	1.5	1.0	1.2	3.0	2.8	3.6	1.4	1.8	3.6	1.7	4.0
<i>Q. seminulum</i>	0.7	0.0	0.4	0.7	1.0	1.8	0.8	1.1	1.4	1.8	0.0	2.6	1.8	3.6	2.8	1.5	0.7	0.2
<i>Reophax arctica</i>	0.8	1.2	1.4	1.8	0.8	0.9	0.1	0.5	1.1	8.0	1.1	0.7	0.4	0.3	0.7	0.8	1.0	0.3
<i>R. fusiformis</i>	1.5	1.1	2.7	4.1	3.8	1.6	1.4	1.1	0.9	0.8	0.6	0.5	0.8	0.4	0.3	0.4	0.3	0.7
<i>R. scottii</i>	11.0	17.0	13.5	11.4	10.0	8.0	10.4	7.6	9.5	8.5	6.1	3.8	3.6	3.6	4.2	2.8	2.2	6.8
<i>Saccamina atlantica</i>	0.0	0.0	0.0	0.4	0.8	0.3	0.7	0.4	4.6	8.6	5.6	0.7	0.2	0.4	0.8	0.3	0.7	0.1
<i>Spiroplectammina biformis</i>	1.1	1.8	5.8	4.6	3.8	2.9	3.1	1.8	3.1	0.5	2.8	2.6	0.4	2.2	1.8	2.3	2.6	3.1
<i>Textularia earlandi</i>	2.2	1.3	1.6	0.6	1.5	2.7	1.8	0.7	2.4	0.9	1.9	2.2	1.3	1.6	0.6	0.9	2.2	1.3
<i>Trochammina inflata</i>	1.7	2.1	2.4	1.5	2.7	1.6	0.9	2.1	0.9	1.2	0.9	0.3	0.4	0.6	0.5	0.4	1.0	0.3
<i>T. lobata</i>	0.8	1.1	0.6	1.5	0.9	0.3	1.0	0.4	1.0	0.6	1.0	0.2	0.5	0.4	0.3	0.2	0.5	0.4
<i>T. macrescens</i>	2.4	2.6	2.6	2.1	2.6	0.4	1.8	2.6	1.8	0.8	1.8	0.8	0.1	0.7	0.5	0.2	0.2	0.4
<i>T. nana</i>	3.5	2.8	3.1	3.3	3.8	3.4	2.1	1.8	2.8	1.5	2.8	3.1	2.2	1.3	1.6	0.6	1.5	2.7
<i>T. ochracea</i>	2.5	6.2	6.4	5.3	6.2	1.8	2.2	4.3	3.1	1.1	2.7	3.2	2.5	3.1	3.2	2.8	3.9	2.8