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Diatom stratigraphy of Borehole TA8, Portage, Alaska

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Aim

This report presents the results of diatom analyses of 69 samples taken from Borehole TA8 at Portage, Alaska. Borehole TA8 was drilled in 1988, with the lithology and radiocarbon ages reported shortly afterwards (Combellick, 1991). Following a preliminary study in 2011 that established good diatom preservation in various parts of the sequence, the archive cores were sampled at selected intervals to study the changes across major lithological boundaries as well as general trends through the whole sequence. We make some provisional comparisons with results from Girdwood and suggest options for possible further analysis.

Methods

In order to minimise disturbance of the archived cores we sampled across the organic layers radiocarbon dated by Combellick (1991) at 1 or 2 cm intervals, and at wider spaced intervals in the minerogenic layers (Appendix 1). Appendix 2 lists the diatom frequencies for each sample analysed.

Results

The following sections show a summary diatom diagram with brief commentary. We make a preliminary estimate of the change in elevation represented by the diatom and stratigraphic data and probable correlation with the sequence at Girdwood (Shennan et al., 2008). These are preliminary because: 1) in the absence of direct measurements of tide levels at Portage we use our measurements from Girdwood (Hamilton and Shennan, 2005) to calibrate the transfer function model estimates of elevation changes; 2) low water salinities at the head of Turnagain Arm may lead to poor matches between the fossil samples and our modern training set, Girdwood is the closest site for our modern samples; 3) the radiocarbon dates for the Portage core are based on bulk peat samples and may give ages that are too old (Hamilton et al., 2005); 4) a single borehole cannot provide evidence for the lateral continuity of a sharp stratigraphic contact, one of the key criteria suggested by (Nelson et al., 1996) so we require very strong support from the other evidence to make correlations with paleoseismic records at other sites.

Peat contact 388 cm

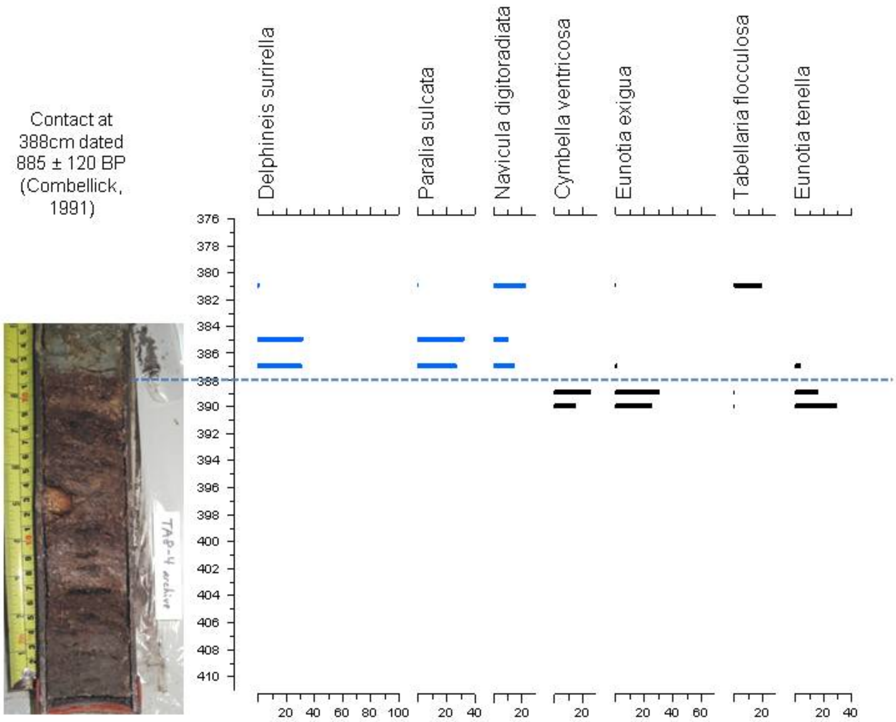

Figure 1: Summary diatom diagram of samples counted from core TA-8, across peat contact at 388 cm depth, showing only those species that reached >10%. Blue shows species that favour marine and brackish water. See Appendix 2 for full data. Equivalent layer dated by Combellick (1991).

The sharp peat-silt contact and clear change in diatom assemblages indicate a rapid change in environment, with subsidence estimated at ~1.6 ± 0.5 m (1σ) using our transfer function model . This is very similar to AD 1964 and the estimate for the penultimate great earthquake at Girdwood (Shennan and Hamilton, 2006).

Peat contact 621 cm

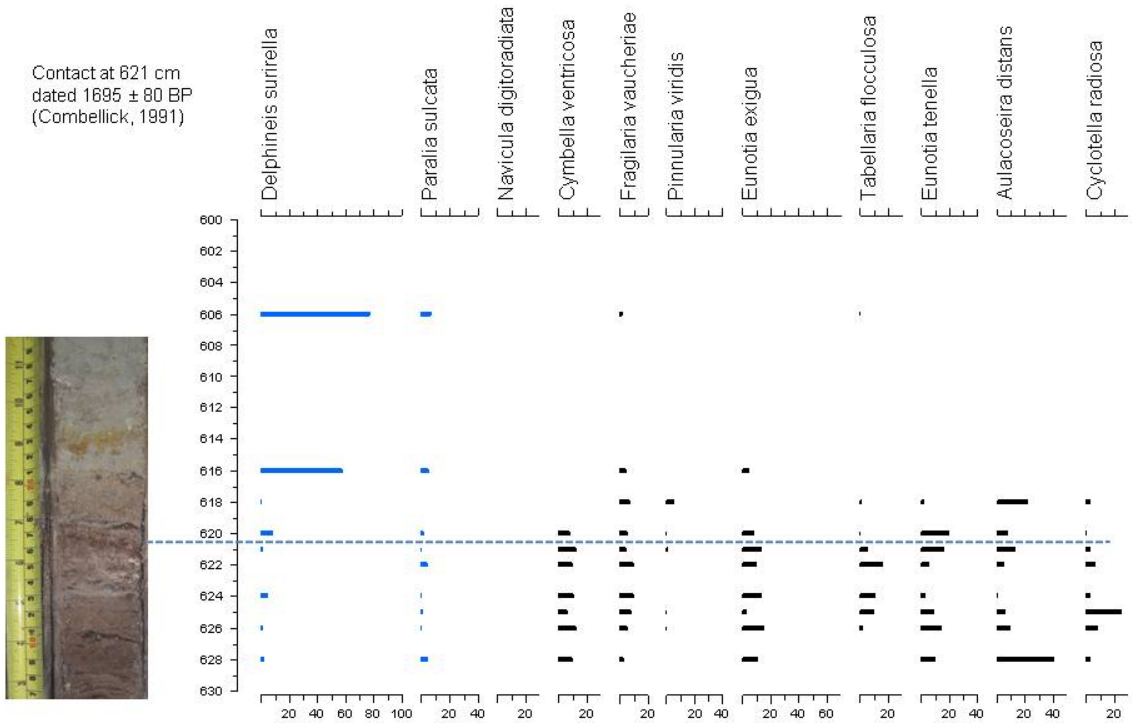

Figure 2: Summary diatom diagram of samples counted from core TA-8, across peat contact at 621 cm depth, showing only those species that reached >10%. Blue shows species that favour marine and brackish water. See Appendix 2 for full data. Equivalent layer dated by Combellick (1991).

Visual inspection of the stratigraphy suggests likely sediment mixing at the peat-silt boundary. The transfer function model estimates indicate subsidence in the order of 1.2 ± 0.5 m. This compares with 1.4 ± 0.3 m ~1500 BP at Girdwood.

Peat contact 756 cm

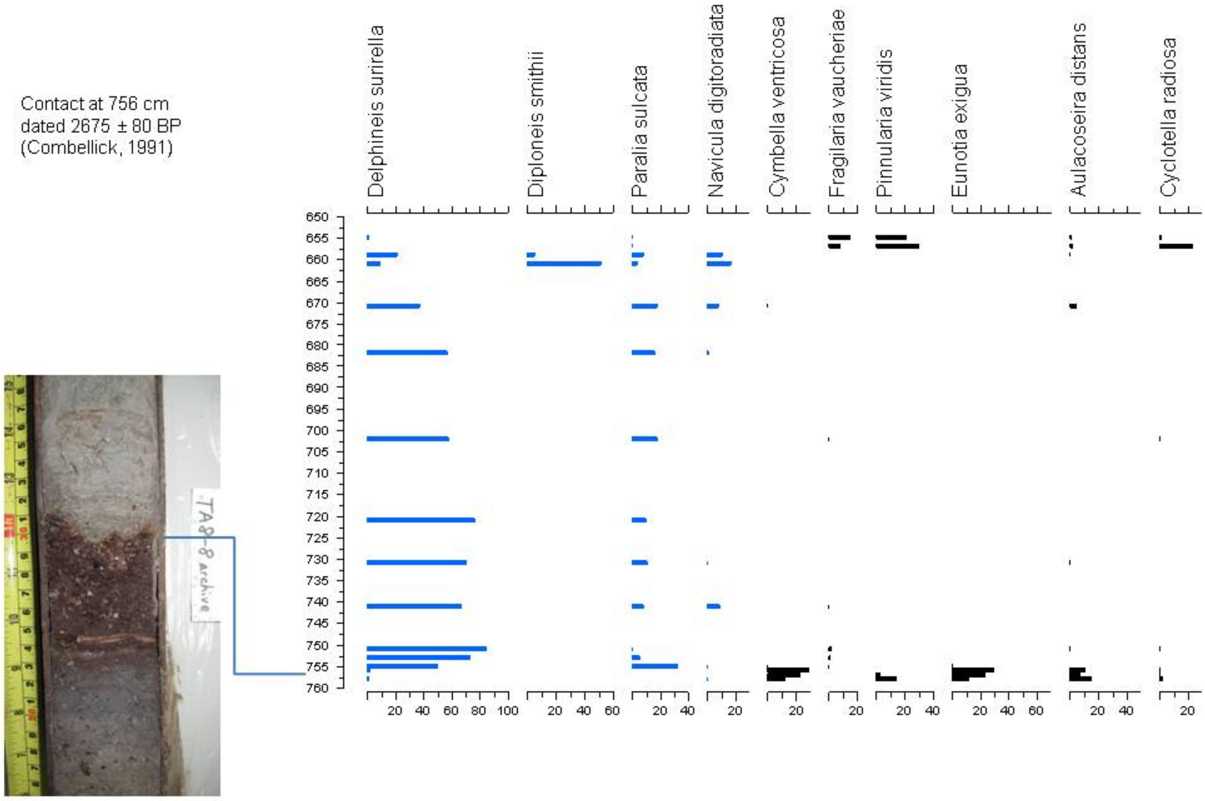

Figure 3: Summary diatom diagram of samples counted from core TA-8, across peat contact at 756 cm depth, showing only those species that reached >10%. Blue shows species that favour marine and brackish water. See Appendix 2 for full data. Equivalent layer dated by Combellick (1991). Silt layer, more laminated below 750 cm, continues to gradual boundary to peat at top of diagram (base of the same peat layer in figure 2).

The wavy boundary at the top of the peat layer suggests possible erosion of the contact. The change from predominantly freshwater diatom species in the peat to marine and brackish species in the silt unit suggests rapid submergence at 756 cm, and a gradual return to peat accumulation above 660 cm. The transfer function model estimates 1.4 ± 0.5 m subsidence across the contact at 756 cm. Given the possibility of erosion at the contact and the limitations of the radiocarbon dating we cannot be certain of the correlation with Girdwood, but given the sequences above and below this peat, it appears likely that this peat records the same earthquake dated ~2100 BP at Girdwood, with 1.2 ± 0.3 m subsidence.

Peat contact 924 cm

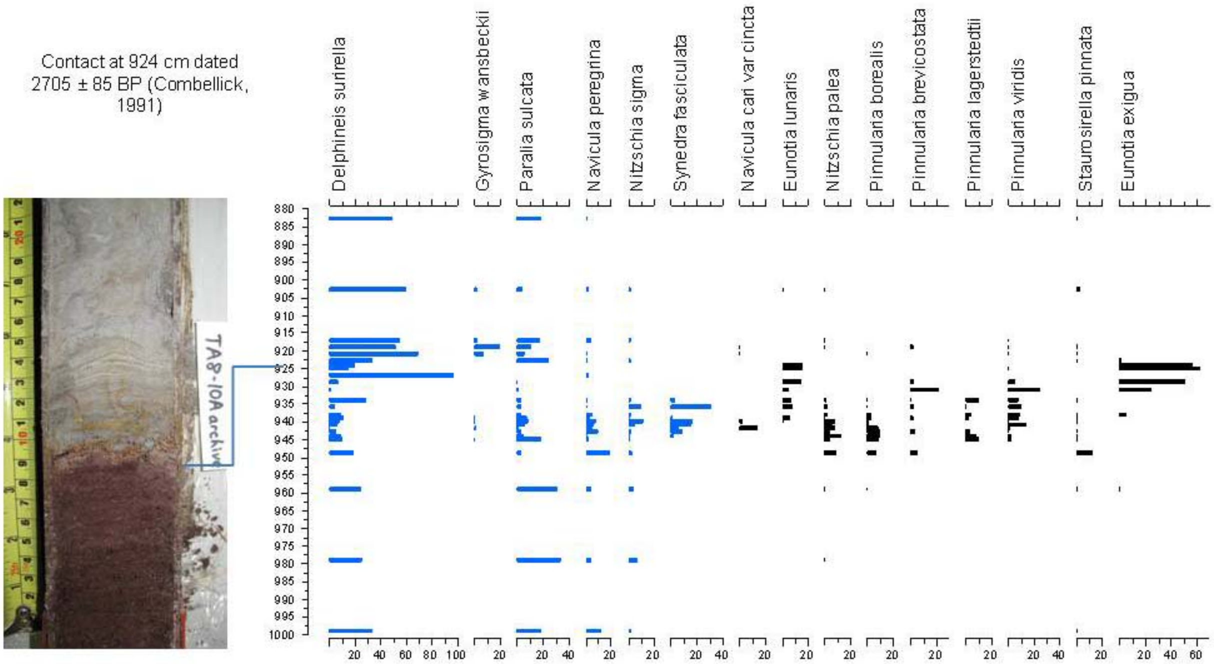

Figure 4: Summary diatom diagram of samples counted from core TA-8, across peat contact at 924 cm depth, showing only those species that reached >10%. Blue shows species that favour marine and brackish water. See Appendix 2 for full data. Equivalent layer dated by Combellick (1991).

Depth cm	Composition
883	silt/fine sand
903	silt/fine sand
917	fine sand
919	laminated silt
921	laminated silt
923	silt
924	peat
925	oeat
927	peat
929	peat
931	peat
934	peat
936	peat
938	peaty-silt transition
939	silt
940	silt
941	silt
942	peaty clay
943	peaty clay
944	peaty clay
945	slightly peaty clay
949	slightly peaty clay
959	clay silt
979	laminated silt
999	laminated silt

Table 1. Copy of sampling notes recoding the 0.5 cc sediment sample taken at each level, 883 to 999 cm (full list in Appendix 1).

The diatom assemblages show a rapid change from predominantly freshwater species to marine and brackish species across the top contact of the peat layer, at 924 cm. Poor diatom preservation at 927 cm allowed gave a count of only 37 diatoms, so the peak in *Delphineis surirella* at this level is not reliable. The transfer function model estimates subsidence of 1.3 ± 0.5 m. Provisional correlation with Girdwood is the earthquake 1.4 ± 0.3 m, ~2500 BP. The peaty clay – silt – peat sequence, 945 to 938 cm, coincides with temporary peaks of *Nitzschia sigma* and *Synedra fasciculata*, and the transfer function predicts possible submergence in the order of 0.3 ± 0.6 m. This may be the equivalent of a peat-silt couplet at Girdwood, ~2800 BP deemed non-seismic by Shennan and Hamilton (2006).

Organic silt contacts 1108 and 1148 cm

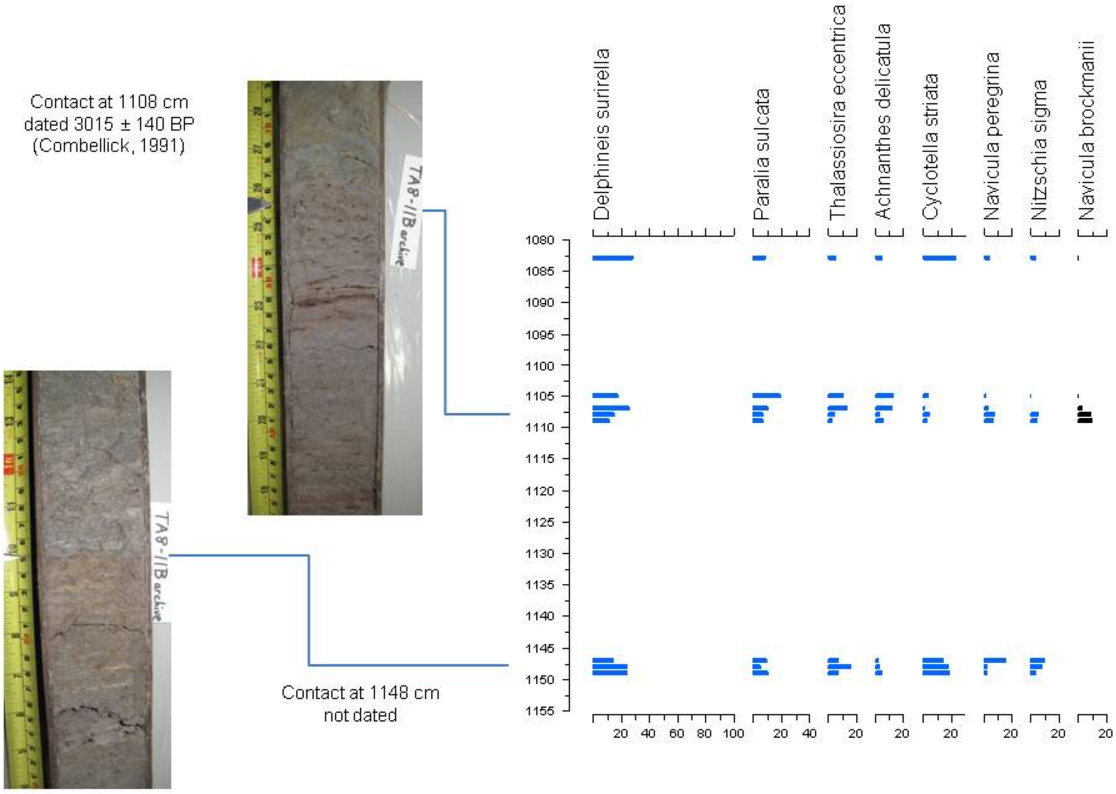

Figure 5: Summary diatom diagram of samples counted from core TA-8, across contacts at 1108 and 1148 cm depth, showing only those species that reached >10%. Blue shows species that favour marine and brackish water. See Appendix 2 for full data. Equivalent layer dated by Combellick (1991).

Changes in organic content suggest two possible rapid submergence events, at 1108 cm and 1148 cm. Both record changes in diatom assemblages, in mainly marine and brackish species. The transfer function model suggests possible submergence, 0.6 ± 0.6 m at 1108 cm, but no predicted submergence, -0.2 ± 0.6 m.

Organic silt contact 1264 cm

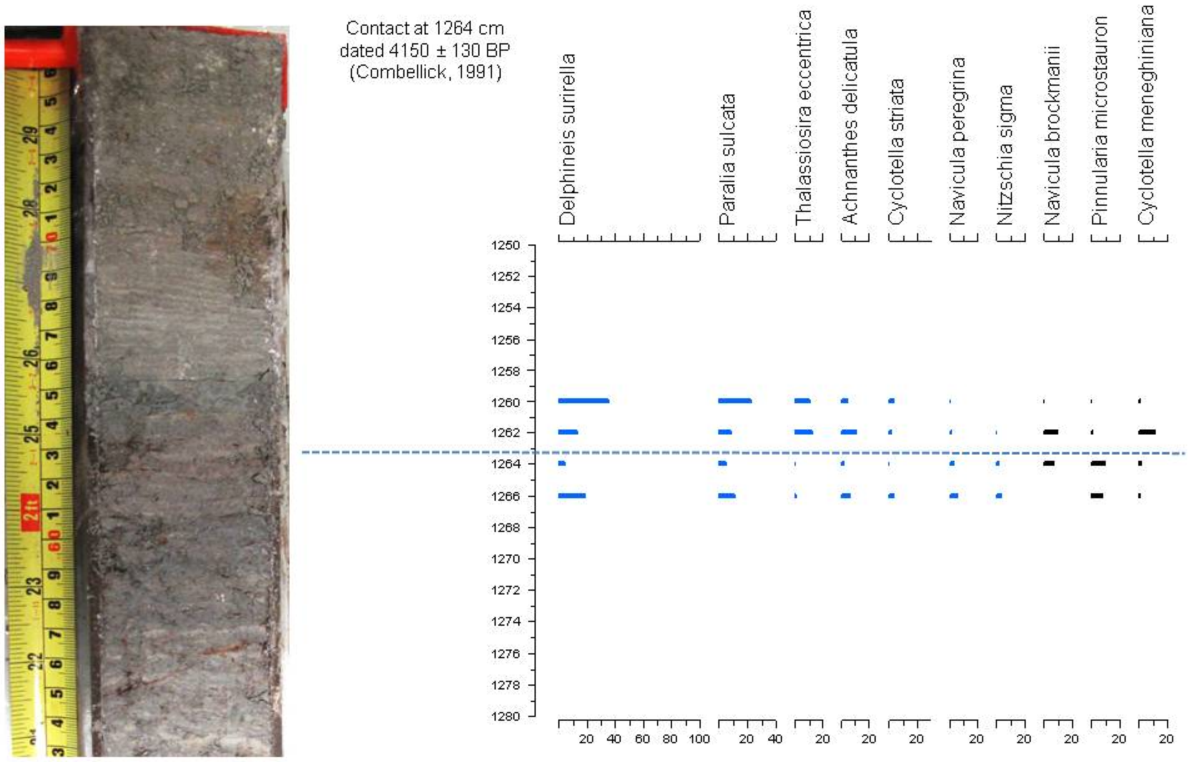

Figure 6: Summary diatom diagram of samples counted from core TA-8, across contacts at 1264 cm depth, showing only those species that reached >10%. Blue shows species that favour marine and brackish water. See Appendix 2 for full data. Equivalent layer dated by Combellick (1991).

A change in organic content 1264 cm suggests possible submergence. Changes in diatom frequencies possibly suggest gradual trends rather than an abrupt change but we would require further counts to confirm this. The transfer function model predicts submergence of 0.6 ± 0.6 m.

Overview of borehole from 300 to 1300 cm

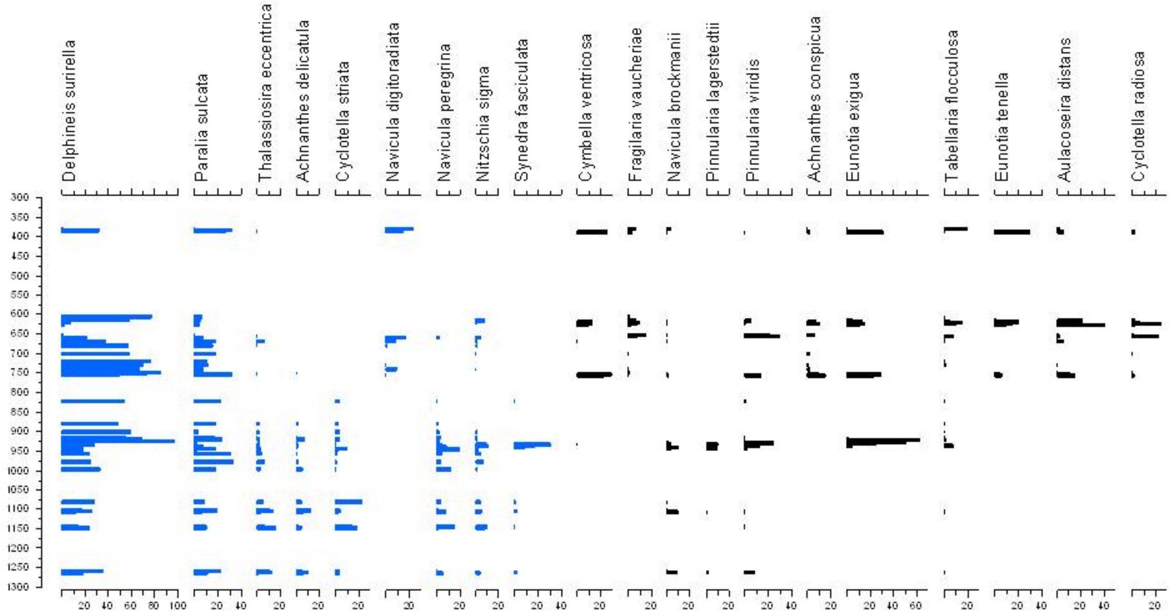

Figure 7: Summary diatom diagram of samples counted from core TA-8, from 300 to 1300 cm depth, showing only those species that reached >20% in more than one level. Blue shows species that favour marine and brackish water. See Appendix 2 for full data.

Figure 7: Summary diatom diagram of samples counted from core TA-8, from 300 to 1300 cm depth, showing only those species that reached >20% in more than one level. Blue shows species that favour marine and brackish water. See Appendix 2 for full data.

The diatom assemblage data down core to 1300 cm depth confirm sediment accumulation in a tidal environment, with predominantly intertidal minerogenic and organic marsh sediments. Both the sediment stratigraphy and diatom assemblages reflect the spatial changes of an infilling embayment superimposed on generally rising relative sea level and multiple earthquake deformation cycles. No well developed peat layers occur below 950 cm core depth and any evidence of coseismic submergence occurs within probable low marsh or tidal flat paleoenvironments. These give less precise reconstructions of elevation changes. We would require a borehole further inland to record the peat-forming marsh communities of that period. Above 950 cm core depth, diatom assemblages show how peat layers developed in freshwater conditions, though still controlled by tide levels. Only two samples, 388 and 390 cm, show no clearly discernible marine or brackish influence.

Conclusions

Fossil diatom abundances provide a record of late of sediment infilling at the head of Turnagain Arm, revealing ~13 m net relative sea level rise superimposed with elevation changes associated with multiple earthquake deformation cycles. Preliminary correlation with Girdwood indicates four prehistoric earthquakes with similar coseismic subsidence. Events older than ~3000 BP are less precisely recorded as the Portage location was in a more open tidal flat environment at that time.

Analysis of further samples, both those already taken from the cores and further samples from the cores in store, would provide more detailed analysis of the paleoenvironmental changes at the head of Turnagain Arm. They would provide information for numerous lines of inquiry, not just paleoseismology, but other fields, including sediment dynamics, sediment compaction, glacial isostatic adjustment, sediment delivery during the Little Ice Age and crustal loading.

The key to virtually all of these possible developments is an improved chronology. This requires sampling of the core and careful picking of plant macrofossils, or other suitable material, for high precision/small sample radiocarbon dating. These are methods were not available when the borehole was drilled. The archive core has been well preserved and should provide multiple samples suitable for dating.

References (including those cited in Appendices)

Combellick, R.A., 1991. Palaeoseismicity of the Cook Inlet region, Alaska: Evidence from peat stratigraphy in Turnagain and Knik Arms. Alaska Division of Geological and Geophysical Surveys Professional Report, 112: 1-52.

Hamilton, S. and Shennan, I., 2005. Late Holocene relative sea-level changes and the earthquake deformation cycle around upper Cook Inlet, Alaska. Quaternary Science Reviews, 24(12-13): 1479-1498.

Hamilton, S., Shennan, I., Combellick, R., Mulholland, J. and Noble, C., 2005. Evidence for two great earthquakes at Anchorage, Alaska and implications for multiple great earthquakes through the Holocene. Quaternary Science Reviews, 24(18-19): 2050-2068.

Hartley, B., Barber, H.G. and Carter, J.R., 1996. An atlas of British diatoms. Biopress, Bristol, 601 pp.

Hemphill-Haley, E., 1993. Taxonomy of recent and fossil (Holocene) diatoms (Bacillariophyta) from northern Willapa Bay, Washington. U.S. Geological Survey Open File Report, 93-289: 1-151.

Nelson, A.R., Shennan, I. and Long, A.J., 1996. Identifying coseismic subsidence in tidal-wetland stratigraphic sequences at the Cascadia subduction zone of western North America. Journal of Geophysical Research, 101: 6115-6135.

Palmer, A.J.M. and Abbott, W.H., 1986. Diatoms as indicators of sea-level change. In: O. Van de Plassche (Editor), Sea-level research: a manual for the collection and evaluation of data. Geo Books, Norwich, pp. 457-488.

Patrick, R. and Reimer, C.W., 1966. The Diatoms of the United States. Volume 1. Monographs of The Academy of Natural Sciences of Philadelphia No 13. Academy of Natural Sciences of Philadelphia, Philadelphia, 688 pp.

Patrick, R. and Reimer, C.W., 1975. The Diatoms of the United States. Volume 2, Part 1. Monographs of The Academy of Natural Sciences of Philadelphia No 13. The Academy of Natural Sciences of Philadelphia, Philadelphia, 213 pp.

Shennan, I., Barlow, N. and Combellick, R., 2008. Palaeoseismological records of multiple great earthquakes in south-central Alaska – a 4000 year record at Girdwood. In: J.T. Freymueller, P.J. Haeussler, R. Wesson and G. Ekstrom (Editors), Active tectonics and seismic potential of Alaska. Geophysical Monograph Series, Volume 179. American Geophysical Union Washington, pp. 185-199.

Shennan, I. and Hamilton, S., 2006. Coseismic and pre-seismic subsidence associated with great earthquakes in Alaska. Quaternary Science Reviews, 25(1-2): 1-8.

Van der Werff, A. and Huls, H., 1958-1974. Diatomeeenflora van Nederland. 8 parts. Published privately, De Hoef, The Netherlands.

Appendix 1

Samples taken from the archive cores, August 2011. Samples measured from the base of the storage tube for each core section. Some cores showed slight shrinkage or settlement during storage so boundaries of units may differ slightly from those reported by Combellick (1991) and the preliminary report (2011). Depth from surface calculated from the base of core sections data reported by Combellick (1991).

Archive core label	sample #	Measured distance above base of tube cm	Depth from surface cm	Composition	Equivalent 14C sample by Combellick (1991)
TA8-4	18	51	357	silt	
TA8-4	17	39	369	silt	
TA8-4	19	33	375	silt + organics	
TA8-4	16	31	377	silt	
TA8-4	15	27	381	silt	
TA8-4	14	23	385	silt	
TA8-4	13	21	387	base of silt	
TA8-4	12	20	388	top of peat	GX-15218: 885+-120 BP
TA8-4	11	19	389	peat	
TA8-4	10	18	390	peat	
TA8-4	9	16	392	peat	
TA8-4	8	13	395	peat	
TA8-4	7	10	398	peat	
TA8-4	6	9	399	peaty silt	
TA8-4	5	8	400	peaty silt	
TA8-4	4	7	401	peat below silt	
TA8-4	3	5	403	base of peat	
TA8-4	2	3	405	silt	
TA8-4	1	1	407	silt	
TA8-5A	22	40	423	silt	
TA8-5A	21	25	438	silt	
TA8-5A	20	5	458	silt	
TA8-5B	25	45	488	silt	
TA8-5B	24	25	508	silt	
TA8-5B	23	5	528	silt	
TA8-6	40	61	576	silt	
TA8-6	39	51	586	silt	
TA8-6	38	41	596	silt	
TA8-6	37	31	606	silt	
TA8-6	36	21	616	silt	
TA8-6	35	19	618	silt & plant fragments	
TA8-6	34	17	620	silt	
TA8-6	33	16	621	peat	GX-15219: 1695+-80 BP
TA8-6	32	15	622	organic silt	
TA8-6	31	13	624	silt	
TA8-6	30	12	625	peat & silt	
TA8-6	29	11	626	peat & silt	

Archive core label	sample #	Measured distance above base of tube cm	Depth from surface cm	Composition	Equivalent 14C sample by Combellick (1991)
TA8-6	28	9	628	peat	
TA8-6	27	6	631	peat	
TA8-6	26	2	635	peat	
TA8-7	48	57	653	peat (below silt contamination)	
TA8-7	47	55	655	peat	
TA8-7	46	53	657	clay peat	
TA8-7	45	51	659	organic clay	
TA8-7	44	49	661	silt & clay	
TA8-7	43	39	671	silt	
TA8-7	42	28	682	silt	
TA8-7	41	8	702	silt	
TA8-8	63	64	721	silt	
TA8-8	62	54	731	silt	
TA8-8	61	44	741	silt	
TA8-8	60	34	751	laminated silt	
TA8-8	59	32	753	laminated silt	
TA8-8	58	30	755	laminated silt	
TA8-8	57	29	756	top of peat	GX-15220: 2675+-80 BP
TA8-8	56	28	757	peat	
TA8-8	55	27	758	peat	
TA8-8	54	26	759	peat	
TA8-8	53	25	760	peat	
TA8-8	52	23	762	organic clay	
TA8-8	51	21	764	clay peat	
TA8-8	50	13	772	laminated silt	
TA8-8	49	3	782	laminated silt	
TA8-9	65	40	823	laminated silt	
TA8-9	64	10	853	laminated silt	
TA8-10A	76	50	883	silt/fine sand	
TA8-10A	75	30	903	silt/fine sand	
TA8-10A	74	16	917	fine sand	
TA8-10A	73	14	919	laminated silt	
TA8-10A	72	12	921	laminated silt	
TA8-10A	71	10	923	silt	
TA8-10A	70	9	924	peat	GX-15221: 2705+-85 BP
TA8-10A	69	8	925	peat	
TA8-10A	68	6	927	peat	
TA8-10A	67	4	929	peat	
TA8-10A	66	2	931	peat	
TA8-10B	90	75	934	peat	
TA8-10B	89	73	936	peat	
TA8-10B	88	71	938	peaty-silt transition	
TA8-10B	87	70	939	silt	
TA8-10B	86	69	940	silt	

Archive core label	sample #	Measured distance above base of tube cm	Depth from surface cm	Composition	Equivalent 14C sample by Combellick (1991)
TA8-10B	85	68	941	silt	
TA8-10B	84	67	942	peaty clay	
TA8-10B	83	66	943	peaty clay	
TA8-10B	82	65	944	peaty clay	
TA8-10B	81	64	945	slightly peaty clay	
TA8-10B	80	60	949	slightly peaty clay	
TA8-10B	79	50	959	clay silt	
TA8-10B	78	30	979	laminated silt	
TA8-10B	77	10	999	laminated silt	
TA8-11A	93	50	1037	silt	
TA8-11A	92	28	1059	silt	
TA8-11A	91	4	1083	silt	
TA8-11B	116	68	1105	silt	
TA8-11B	115	66	1107	silt	
TA8-11B	114	65	1108	top contact of organic laminated silt	GX-15222: 3015+-140 BP
TA8-11B	113	64	1109	organic laminated silt	
TA8-11B	112	63	1110	organic laminated silt	
TA8-11B	111	62	1111	organic laminated silt	
TA8-11B	110	60	1113	organic laminated silt	
TA8-11B	109	58	1115	organic laminated silt	
TA8-11B	108	54	1119	organic laminated silt	
TA8-11B	107	48	1125	organic laminated silt	
TA8-11B	106	42	1131	organic laminated silt	
TA8-11B	105	36	1137	laminated silt + plant fragments	
TA8-11B	104	28	1145	laminated silt + plant fragments	
TA8-11B	103	26	1147	laminated silt	
TA8-11B	102	25	1148	top contact of organic laminated silt	
TA8-11B	101	24	1149	organic laminated silt	
TA8-11B	100	23	1150	organic laminated silt	
TA8-11B	99	21	1152	organic laminated silt	
TA8-11B	98	19	1154	organic laminated silt	
TA8-11B	97	17	1156	laminated silt + plant fragments	
TA8-11B	96	13	1160	laminated silt + plant fragments	
TA8-11B	95	9	1164	laminated silt	
TA8-11B	94	5	1168	laminated silt	
TA8-12A	118	45	1205	laminated silt	
TA8-12A	117	14	1236	laminated silt	
TA8-12B	126	68	1258	laminated silt	
TA8-12B	125	66	1260	laminated silt	
TA8-12B	124	64	1262	laminated silt	
TA8-12B	123	62	1264	laminated silt + plant fragments	GX-15223: 4150+-130 BP
TA8-12B	122	60	1266	laminated silt + plant fragments	

Archive core label	sample #	Measured distance above base of tube cm	Depth from surface cm	Composition	Equivalent 14C sample by Combellick (1991)
TA8-12B	121	50	1276	laminated silt + plant fragments	
TA8-12B	120	30	1296	laminated silt + plant fragments	
TA8-12B	119	12	1314	laminated silt + plant fragments	
TA8-13A	129	30	1372	dark grey lamination	
TA8-13A	128	29	1373	light grey lamination	
TA8-13A	127	14	1388	laminated silt	
TA8-13B	131	48	1430	laminated silt	
TA8-13B	130	34	1444	unlaminated silt	
TA8-14A	134	15	1538	laminated silt	
TA8-14A	133	3	1550	silt, possible organic matter	
TA8-14A	132	2	1551	silt	
TA8-14B	140	54	1574	laminated silt	
TA8-14B	139	44	1584	laminated silt, possibly tephra	
TA8-14B	138	32	1596	laminated silt	
TA8-14B	137	22	1606	laminated silt	
TA8-14B	136	18	1610	laminated silt, possibly tephra	
TA8-14B	135	6	1622	laminated silt	

Appendix 2

Diatom data

Preparation of diatom samples followed standard laboratory methods (Palmer and Abbott, 1986). The two key reference volumes for coastal and estuarine diatoms are based on NW European material (Hartley et al., 1996; Van der Werff and Huls, 1958-1974) together with supplementary information from the Pacific Northwest (Hemphill-Haley, 1993) and flora of north American freshwater species (Patrick and Reimer, 1966; Patrick and Reimer, 1975). Samples were counted by KP and OST, then checked by IS and NB for consistency and comparison with species identified from other sites. Diatom preservation was variable; with some slides giving total counts less than 100 and these levels should be treated with caution. The table below gives the total counted per level, then the percentage frequency of each species for each sample counted.

Sample #	15	14	13	11	10	37	36	35	34	33	32	31	30	29	28	47	46	45	44	43	42	41	63	62	61
Depth	**381**	**385**	**387**	**389**	**390**	**606**	**616**	**618**	**620**	**621**	**622**	**624**	**625**	**626**	**628**	**655**	**657**	**659**	**661**	**671**	**682**	**702**	**721**	**731**	**741**
Sum	98	101	109	126	109	102	101	103	115	108	115	110	102	138	114	96	105	94	100	101	101	101	100	102	100
Actinoptychus senarius	0.0	3.0	0.9	0.0	0.0	1.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.0	2.0	2.0	5.9	1.0	2.0	4.0
Caloneis brevis	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	0.0	0.0	0.0	0.0	0.0
Cocconeis peltoides	1.0	0.0	0.0	0.0	0.0	6.9	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	2.0	6.9	9.9	0.0	0.0	0.0	0.0
Delphineis surirella	2.0	32.7	32.1	0.0	0.0	77.5	58.4	1.0	8.7	1.9	0.0	5.5	0.0	1.4	2.6	2.1	0.0	22.3	10.0	37.6	57.4	58.4	77.0	70.6	67.0
Diploneis smithii	1.0	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	6.4	52.0	0.0	0.0	0.0	0.0	0.0	0.0
Gyrosigma wansbeckii	1.0	1.0	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	1.0	3.0	3.0	2.0	0.0
Navicula distans	0.0	0.0	0.0	0.0	0.0	0.0	1.0	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
Navicula palpebralis	2.0	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	1.0	0.0	0.0	0.0	0.0	0.0
Navicula forcipata	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	0.0	0.0	0.0	0.0	0.0
Navicula species 1	2.0	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	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Nitzschia socialis	0.0	1.0	0.9	0.0	0.0	0.0	0.0	0.0	0.9	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
Odontella aurita	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	0.0	2.0
Paralia sulcata	1.0	32.7	27.5	0.0	0.0	7.8	5.9	0.0	2.6	0.9	5.2	0.9	2.0	0.7	5.3	1.0	1.0	8.5	4.0	18.8	16.8	18.8	11.0	11.8	9.0
Pinnularia cruciformis	0.0	0.0	0.0	0.0	0.0	0.0	8.9	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
Plagiogramma vanheurckii	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	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Surirella fastuosa	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	0.0	0.0	0.0	1.0	0.0
Thalassionema nitzschioides	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	0.0	0.0	0.0	0.0	0.0
Thalassiosira eccentrica	0.0	0.0	0.9	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	1.0	0.0	0.0	6.9	1.0	0.0	0.0	0.0	0.0
Achnanthes delicatula	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	0.0	0.0	0.0	0.0	0.0
Cyclotella striata	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	0.0	0.0	0.0	0.0	0.0
Diploneis interrupta	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	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
Navicula digitoradiata	23.5	11.9	15.6	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	11.7	18.0	8.9	2.0	0.0	0.0	1.0	10.0
Navicula peregrina	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	3.2	3.0	0.0	0.0	0.0	0.0	0.0	0.0
Navicula salinarum	2.0	2.0	0.9	0.0	0.0	0.0	0.0	4.9	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
Nitzschia obtusa	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	0.0	0.0	0.0	0.0	0.0
Nitzschia sigma	0.0	0.0	0.0	0.0	0.0	0.0	3.0	7.8	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	3.2	5.0	2.0	2.0	1.0	0.0	0.0	1.0
Nitzschia vitrea	1.0	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	0.0	1.0	0.0	0.0	0.0
Rhopalodia operculata	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	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Surirella ovalis	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	1.0	1.0	0.0	0.0	0.0	0.0
Synedra fasciculata	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	0.0	0.0	0.0	0.0	0.0
Amphora veneta	4.1	2.0	3.7	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	1.0	1.0	0.0	0.0	0.0	0.0
Luticola mutica	9.2	4.0	2.8	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	0.0	0.0
Navicula cari var cincta	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	0.0	0.0	0.0	0.0	0.0
Nitzschia frustulum	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.9	0.0	0.0	0.9	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Nitzschia tryblionella	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	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Achnanthes exigua	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	5.5	0.0	0.0	0.0	1.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Achnanthes lanceolata	0.0	0.0	0.0	0.8	0.9	0.0	0.0	0.0	1.7	0.0	0.0	5.5	4.9	0.7	0.9	0.0	0.0	0.0	0.0	1.0	1.0	1.0	3.0	3.9	2.0
Amphora ovalis	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	0.0	0.0	0.0	0.0	0.0
Caloneis bacillum	0.0	0.0	0.0	0.0	0.0	0.0	3.0	16.5	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	0.0
Caloneis ventricosa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ceratoneis arcus	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	0.0	0.0	0.0	0.0	0.0

Sample #	15	14	13	11	10	37	36	35	34	33	32	31	30	29	28	47	46	45	44	43	42	41	63	62	61
Depth	**381**	**385**	**387**	**389**	**390**	**606**	**616**	**618**	**620**	**621**	**622**	**624**	**625**	**626**	**628**	**655**	**657**	**659**	**661**	**671**	**682**	**702**	**721**	**731**	**741**
Sum	98	101	109	126	109	102	101	103	115	108	115	110	102	138	114	96	105	94	100	101	101	101	100	102	100
Cymbella affinis	4.1	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	21.9	12.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cymbella cistula	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	0.0	0.0	0.0	0.0	0.0
Cymbella ventricosa	0.0	0.0	0.0	26.2	15.6	0.0	0.0	0.0	8.7	13.0	10.4	11.8	6.9	13.0	10.5	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Diploneis ovalis	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	0.0	0.0	0.0	0.0	0.0
Epithemia turgida	0.0	1.0	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	0.0	0.0	0.0	0.0
Eunotia germainii	0.0	1.0	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	0.0	0.0	0.0	0.0
Eunotia lunaris	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	0.0	0.0	0.0	0.0	0.0
Eunotia pectinalis	1.0	0.0	0.0	0.8	0.9	0.0	0.0	0.0	3.5	0.9	5.2	2.7	1.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fragilaria construens	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	5.2	1.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Fragilaria vaucheriae	7.1	0.0	0.0	0.8	4.6	2.9	5.0	7.8	6.1	5.6	10.4	10.0	8.8	5.8	3.5	15.6	8.6	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0
Fragilariforma virescens	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	2.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gomphonema acuminatum	0.0	0.0	0.0	0.8	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
Gomphonema gracile	0.0	0.0	0.0	0.0	0.0	0.0	1.0	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
Meridion circulare	1.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Navicula begeri	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	0.0	0.0	0.0	0.0	0.0
Navicula brockmanii	4.1	1.0	0.9	0.0	0.9	0.0	0.0	1.0	0.0	0.0	0.0	0.9	0.0	0.7	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Navicula pupula	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	4.2	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Navicula pusilla	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	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Navicula radiosa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.6	0.0	0.9	0.0	0.0	0.0	1.8	0.0	0.0	10.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Navicula tripunctata	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	0.0	0.0	0.0	0.0	0.0
Navicula viridula	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	0.0	0.0	0.0	0.0	0.0
Nitzschia fruticosa	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	0.0	0.0	0.0	0.0	0.0
Nitzschia linearis	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	0.0	0.0	0.0	0.0	0.0
Nitzschia palea	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Nitzschia palustris	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	0.0	0.0	0.0	0.0	0.0
Pinnularia abaujensis	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	0.0	0.0	2.6	1.8	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pinnularia borealis	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	0.0	0.0	0.0	0.0	0.0
Pinnularia brevicostata	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	0.0	0.0	0.0	0.0	0.0
Pinnularia intermedia	0.0	0.0	0.0	0.8	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	0.0
Pinnularia lagerstedtii	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	0.0	0.0	0.0	0.0	0.0
Pinnularia mesolepta	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	0.0	0.0	0.0	0.0	0.0
Pinnularia microstauron	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	0.0	0.0	0.0	0.0	0.0
Pinnularia viridis	0.0	0.0	0.0	0.8	0.0	0.0	0.0	5.8	0.9	1.9	0.0	0.0	1.0	0.7	0.0	21.9	30.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pseudostaurosira brevistriata	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	0.0	0.0	0.0	0.0	0.0
Stauroneis anceps	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	0.0	0.0	0.0	0.0	0.0
Stauroneis phoenicentron	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	0.0	0.0	0.0	0.0	0.0
Staurosirella pinnata	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	3.0	0.0	0.0	0.0	0.0
Synedra ulna	0.0	1.0	0.0	0.0	0.9	0.0	0.0	2.9	1.7	1.9	0.0	0.0	2.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Achnanthes conspicua	1.0	0.0	0.0	2.4	2.8	0.0	0.0	0.0	7.0	7.4	5.2	5.5	4.9	10.1	0.0	7.3	0.0	0.0	0.0	0.0	0.0	3.0	0.0	2.0	3.0
Eunotia exigua	1.0	0.0	1.8	31.7	26.6	0.0	5.0	0.0	8.7	13.9	10.4	14.5	3.9	15.9	11.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Eunotia praerupta	0.0	0.0	0.0	3.2	2.8	0.0	0.0	0.0	8.7	6.5	0.9	10.0	6.9	5.8	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Sample #	15	14	13	11	10	37	36	35	34	33	32	31	30	29	28	47	46	45	44	43	42	41	63	62	61
Depth	**381**	**385**	**387**	**389**	**390**	**606**	**616**	**618**	**620**	**621**	**622**	**624**	**625**	**626**	**628**	**655**	**657**	**659**	**661**	**671**	**682**	**702**	**721**	**731**	**741**
Sum	98	101	109	126	109	102	101	103	115	108	115	110	102	138	114	96	105	94	100	101	101	101	100	102	100
Fragilaria leptostauron	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	0.0	0.0	0.0	0.0	0.0
Frustulia rhomboides	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	0.0	0.0	0.0	0.0	0.0
Nitzschia gracilis	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	4.3	0.0	0.0	0.0	0.0	3.1	0.0	6.4	0.0	1.0	1.0	0.0	0.0	0.0	0.0
Pinnularia subcapitata	0.0	0.0	0.0	0.0	0.0	2.0	3.0	8.7	0.9	5.6	5.2	0.9	2.9	2.2	0.0	0.0	3.8	4.3	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Pinnularia subsolaris	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tabellaria fenestrata	0.0	0.0	0.9	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	0.0	0.0
Tabellaria flocculosa	20.4	0.0	0.0	0.8	0.9	1.0	0.0	1.9	0.9	6.5	16.5	11.8	10.8	2.9	0.0	0.0	8.6	0.0	1.0	1.0	0.0	0.0	2.0	2.9	0.0
Navicula ramosissima	2.0	5.9	2.8	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	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neidium bisulcatum	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	0.0	0.0	0.0	0.0	0.0
Cyclotella meneghiniana	2.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.9	1.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	1.0	0.0
Caloneis westii	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	0.0	0.0	0.0	0.0	0.0
Eunotia tenella	0.0	0.0	4.6	16.7	30.3	0.0	0.0	2.9	20.9	16.7	6.1	3.6	9.8	15.2	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fragilaria construens var. binodis	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	0.0	0.0	0.0	0.0	0.0
Navicula capitata var. hungarica	2.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	4.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Pinnularia major	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	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
Aulacoseira distans	3.1	0.0	0.0	6.3	6.4	0.0	0.0	22.3	7.8	13.0	5.2	0.9	5.9	9.4	41.2	2.1	2.9	1.1	0.0	5.0	0.0	0.0	0.0	1.0	0.0
Navicula subtilissima	0.0	0.0	0.0	0.8	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	0.0
Fragilariforma constricta	0.0	0.0	0.0	0.0	0.9	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
Achnanthes clevei	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	0.0	0.0	0.0	0.0	0.0
Cyclotella radiosa	0.0	0.0	3.7	3.2	2.8	0.0	0.0	3.9	0.9	3.7	7.0	3.6	25.5	8.7	3.5	2.1	23.8	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
Fragilaria construens var. venter	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	0.0	0.0	0.0	0.0	0.0
Navicula ignota var. palustris	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0

Sample #	60	59	58	57	56	55	65	76	75	74	73	72	71	70	69	68	67	66	90	89	88	87	86	85	84
Depth	**751**	**753**	**755**	**756**	**757**	**758**	**823**	**883**	**903**	**917**	**919**	**921**	**923**	**924**	**925**	**927**	**929**	**931**	**934**	**936**	**938**	**939**	**940**	**941**	**942**
Sum	100	102	109	150	187	125	223	231	200	214	171	158	191	155	199	38	205	237	104	214	158	219	168	238	228
Actinoptychus senarius	1.0	0.0	3.7	0.0	0.0	0.8	3.6	7.4	2.0	2.3	0.0	1.3	2.6	0.0	0.0	0.0	1.5	0.0	1.0	0.0	2.5	2.3	0.0	0.8	0.0
Caloneis brevis	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	0.0	2.3	0.6	0.0	0.0
Cocconeis peltoides	4.0	4.9	0.0	0.0	0.0	0.0	0.0	4.3	6.0	1.9	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.9
Delphineis surirella	85.0	73.5	50.5	2.7	0.0	1.6	53.8	49.8	60.0	56.1	52.6	70.3	34.0	20.6	15.1	97.4	6.8	1.7	28.8	4.7	8.9	11.9	8.3	5.9	1.3
Diploneis smithii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0
Gyrosigma wansbeckii	2.0	2.9	0.0	0.0	0.0	0.0	0.0	0.4	2.5	2.8	19.9	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.2	0.0	1.8
Navicula distans	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	0.0	0.0	0.0	0.0	0.0
Navicula palpebralis	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	0.0	0.0	0.0	0.0	0.0
Navicula forcipata	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	4.8	1.7	11.0
Navicula species 1	0.0	1.0	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	0.0	1.2	1.3	3.5
Nitzschia socialis	1.0	1.0	0.0	0.0	0.0	0.8	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
Odontella aurita	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0
Paralia sulcata	1.0	5.9	33.0	0.0	0.0	0.0	23.8	19.5	4.5	18.7	11.7	5.7	24.1	0.0	0.0	0.0	1.0	1.7	3.8	3.3	3.8	7.8	8.3	6.3	1.8
Pinnularia cruciformis	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	0.0	0.0	0.0	0.0	0.0
Plagiogramma vanheurckii	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	0.0	0.0	0.0	0.0	0.0
Surirella fastuosa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	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
Thalassionema nitzschioides	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	1.5	0.5	0.0	1.3	3.1	0.0	0.0	0.0	0.0	0.8	1.0	0.0	2.5	0.5	0.6	0.0	0.0
Thalassiosira eccentrica	0.0	1.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.5	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.9	0.0	0.0	0.0
Achnanthes delicatula	0.0	1.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	1.9	0.0	0.0	7.9	0.0	0.0	0.0	0.0	0.0	1.9	0.0	3.2	0.0	0.0	0.0	0.0
Cyclotella striata	0.0	0.0	0.0	0.0	0.0	0.0	4.0	3.9	4.5	0.0	0.0	0.0	4.7	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Diploneis interrupta	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	0.0	0.0	0.0	0.0	0.0
Navicula digitoradiata	0.0	0.0	0.9	0.0	0.0	0.8	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
Navicula peregrina	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.2	3.0	4.7	0.0	1.3	1.6	0.0	0.0	2.6	0.0	0.0	1.9	0.5	5.1	3.7	7.7	6.3	5.7
Navicula salinarum	0.0	1.0	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	0.0	0.0	0.0	0.0
Nitzschia obtusa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.3	0.0	0.0	0.0	0.0	0.0
Nitzschia sigma	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.4	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	1.9	10.3	1.9	0.9	11.9	5.5	0.0
Nitzschia vitrea	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	0.0	0.0	0.0	0.0	0.0
Rhopalodia operculata	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	0.0	0.0	0.0	0.8	0.0
Surirella ovalis	0.0	0.0	0.9	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Synedra fasciculata	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	31.3	0.0	1.4	17.3	15.5	6.1
Amphora veneta	0.0	1.0	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	0.0	0.0	0.0	0.0
Luticola mutica	0.0	2.0	4.6	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	0.0	0.0
Navicula cari var cincta	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	13.6
Nitzschia frustulum	0.0	1.0	0.9	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	0.5	0.0	0.0	0.0	0.0	0.0
Nitzschia tryblionella	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	0.0	0.0	0.0	0.0	0.0
Achnanthes exigua	0.0	0.0	0.0	0.0	1.1	0.8	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
Achnanthes lanceolata	0.0	0.0	0.0	0.0	0.0	0.8	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
Amphora ovalis	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	2.6	0.0	0.0	0.0	0.0	1.0	1.4	0.6	0.5	0.0	3.8	0.9
Caloneis bacillum	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	0.0	0.5	0.0	0.0	0.0
Caloneis ventricosa	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	0.0	0.0	0.0	0.0	0.0
Ceratoneis arcus	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	0.0	0.0	0.0	0.0	0.4

Sample #	60	59	58	57	56	55	65	76	75	74	73	72	71	70	69	68	67	66	90	89	88	87	86	85	84
Depth	**751**	**753**	**755**	**756**	**757**	**758**	**823**	**883**	**903**	**917**	**919**	**921**	**923**	**924**	**925**	**927**	**929**	**931**	**934**	**936**	**938**	**939**	**940**	**941**	**942**
Sum	100	102	109	150	187	125	223	231	200	214	171	158	191	155	199	38	205	237	104	214	158	219	168	238	228
Cymbella affinis	0.0	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	0.0	0.0	0.0	0.0
Cymbella cistula	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	0.6	0.5	0.0	0.0	0.0
Cymbella ventricosa	0.0	0.0	0.9	30.0	23.5	12.8	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	0.5	0.0	0.0	0.0	0.0	0.0
Diploneis ovalis	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	0.0	0.0	0.0	0.0	1.3
Epithemia turgida	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.4	0.0	0.0	0.6	0.9	0.0	0.0	0.0
Eunotia germainii	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	0.0	4.1	0.0	0.0	0.0
Eunotia lunaris	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	16.1	16.6	0.0	15.1	5.1	7.7	7.9	0.0	6.4	0.6	0.0	0.0
Eunotia pectinalis	0.0	0.0	0.0	0.0	3.2	0.0	0.9	0.0	0.0	1.4	0.6	0.0	1.0	0.6	1.0	0.0	0.0	1.3	1.9	2.8	0.0	0.0	0.0	0.0	0.0
Fragilaria construens	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	0.0	0.0	0.0	0.0	0.0
Fragilaria vaucheriae	3.0	2.0	0.9	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	0.0	0.0
Fragilariforma virescens	0.0	0.0	0.0	0.0	7.0	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	0.0
Gomphonema acuminatum	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	0.0	0.0	0.0	0.0	0.0
Gomphonema gracile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	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	1.4	0.0	0.0	0.0
Meridion circulare	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	0.0	0.0	0.0	0.0	0.0
Navicula begeri	0.0	0.0	0.0	0.7	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	0.0
Navicula brockmanii	0.0	0.0	0.9	0.7	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	4.8	0.9	3.8	1.8	1.2	2.1	9.2
Navicula pupula	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.9	0.0	0.6	0.5	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.4	1.3
Navicula pusilla	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	0.0	0.9	2.4	2.1	1.8
Navicula radiosa	0.0	0.0	0.0	0.7	0.0	2.4	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
Navicula tripunctata	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	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
Navicula viridula	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	0.6	0.0	0.0	0.0	0.9
Nitzschia fruticosa	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	0.9	0.6	0.0	1.2	1.3	2.6
Nitzschia linearis	0.0	0.0	0.0	0.0	0.0	0.0	1.3	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
Nitzschia palea	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.5	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	2.8	2.5	0.5	8.3	5.9	8.8
Nitzschia palustris	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	0.0	0.9	0.0	2.5	0.0
Pinnularia abaujensis	0.0	0.0	0.0	0.0	0.0	2.4	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
Pinnularia borealis	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.5	3.8	3.2	1.8	2.1	8.8
Pinnularia brevicostata	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	3.4	22.8	1.0	3.3	0.0	2.3	0.0	0.0	0.4
Pinnularia intermedia	0.0	0.0	0.0	0.0	0.0	0.8	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
Pinnularia lagerstedtii	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	10.6	0.9	4.4	2.3	0.0	0.0	0.0
Pinnularia mesolepta	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	0.0	1.8	0.6	0.0	0.9
Pinnularia microstauron	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.5	0.0	0.6	0.6	0.0	0.0	1.0	0.0	2.0	5.5	1.9	0.0	1.3	1.4	2.4	2.9	3.5
Pinnularia viridis	0.0	0.0	0.0	0.0	3.2	15.2	1.3	0.0	0.0	0.5	1.2	1.3	0.0	0.0	0.5	0.0	5.4	24.9	7.7	10.7	8.9	8.2	1.2	13.9	1.8
Pseudostaurosira brevistriata	1.0	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	0.0	0.0	0.0	0.0	0.0
Stauroneis anceps	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	1.3	0.5	4.2	1.3	2.6
Stauroneis phoenicentron	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	0.0	0.0	0.0	0.0	0.0
Staurosirella pinnata	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	3.5	0.0	1.8	1.3	1.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	1.3	0.9	1.8	0.0	0.0
Synedra ulna	0.0	1.0	0.0	0.0	0.0	2.4	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
Achnanthes conspicua	0.0	0.0	0.0	10.7	15.5	11.2	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
Eunotia exigua	0.0	0.0	0.9	30.0	23.5	12.8	0.0	0.0	0.0	0.0	0.0	0.0	2.1	56.8	63.3	0.0	51.2	25.3	0.0	0.0	5.7	0.0	0.0	0.0	0.0
Eunotia praerupta	0.0	0.0	0.0	2.7	3.7	3.2	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

Sample #	60	59	58	57	56	55	65	76	75	74	73	72	71	70	69	68	67	66	90	89	88	87	86	85	84
Depth	**751**	**753**	**755**	**756**	**757**	**758**	**823**	**883**	**903**	**917**	**919**	**921**	**923**	**924**	**925**	**927**	**929**	**931**	**934**	**936**	**938**	**939**	**940**	**941**	**942**
Sum	100	102	109	150	187	125	223	231	200	214	171	158	191	155	199	38	205	237	104	214	158	219	168	238	228
Fragilaria leptostauron	0.0	0.0	0.0	0.0	0.0	0.0	0.4	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
Frustulia rhomboides	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.6	0.5	1.8	0.8	0.0
Nitzschia gracilis	0.0	1.0	0.0	0.0	0.0	1.6	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
Pinnularia subcapitata	0.0	0.0	0.0	2.7	2.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	3.4	0.0	0.0	1.9	1.4	1.2	0.0	0.0
Pinnularia subsolaris	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	0.0	0.0	0.0	0.0	0.0
Tabellaria fenestrata	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	0.0	0.0	0.0	0.0	0.0
Tabellaria flocculosa	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.7	0.5	0.9	0.6	0.0	1.0	2.6	0.0	0.0	0.0	0.4	1.0	0.5	8.2	9.1	0.0	0.0	0.0
Navicula ramosissima	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	0.0	0.0	0.0	0.0	0.0
Neidium bisulcatum	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	4.9	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cyclotella meneghiniana	0.0	0.0	1.8	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	5.8	3.7	10.8	9.1	3.0	2.9	0.0
Caloneis westii	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	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
Eunotia tenella	0.0	0.0	0.0	5.3	5.9	7.2	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
Fragilaria construens var. binodis	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	1.0	6.1	3.2	0.0	0.0	3.8	3.9
Navicula capitata var. hungarica	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	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
Pinnularia major	0.0	0.0	0.0	0.0	1.6	0.8	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
Aulacoseira distans	1.0	0.0	0.0	11.3	7.5	16.0	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
Navicula subtilissima	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	0.0	0.0	0.0	0.0	0.0
Fragilariforma constricta	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	0.0	0.0	0.0	0.0	0.0
Achnanthes clevei	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	3.2	0.0	0.0	0.0	0.0
Cyclotella radiosa	1.0	0.0	0.0	0.7	0.5	2.4	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
Fragilaria construens var. venter	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0	2.8	6.4	1.3	8.9	0.0	0.0	0.0	0.0	0.4	0.0	0.9	7.6	3.2	4.2	10.1	5.3
Navicula ignota var. palustris	0.0	0.0	0.0	1.3	0.5	0.8	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

Sample #	83	82	81	80	79	78	77	91	116	115	114	113	103	102	101	125	124	123	122
Depth	**943**	**944**	**945**	**949**	**959**	**979**	**999**	**1083**	**1105**	**1107**	**1108**	**1109**	**1147**	**1148**	**1149**	**1260**	**1262**	**1264**	**1266**
Sum	229	224	227	230	226	237	228	212	181	209	183	185	143	175	156	194	198	169	150
Actinoptychus senarius	0.4	0.4	4.4	2.2	7.5	7.2	6.6	7.1	7.2	4.3	1.1	3.2	2.8	7.4	4.5	7.7	1.5	1.2	2.7
Caloneis brevis	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
Cocconeis peltoides	0.4	0.4	0.0	0.0	5.8	5.9	6.6	2.4	2.2	3.3	3.8	1.1	3.5	3.4	7.1	0.5	0.0	0.0	0.7
Delphineis surirella	5.2	8.9	11.0	19.6	24.3	25.3	33.8	29.2	18.8	26.8	15.8	12.4	15.4	25.1	24.4	36.1	14.1	5.3	19.3
Diploneis smithii	0.0	0.0	0.0	0.0	0.4	0.0	0.4	0.0	0.6	0.0	1.1	0.0	0.7	0.0	0.6	0.0	0.0	0.0	0.0
Gyrosigma wansbeckii	0.0	0.0	0.4	0.0	0.0	0.0	0.0	1.4	1.7	1.0	0.0	1.1	0.0	0.0	0.0	0.5	0.0	0.6	0.0
Navicula distans	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
Navicula palpebralis	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Navicula forcipata	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.9	0.5	1.1	0.0	0.0	0.0	1.0	2.0	2.4	0.0
Navicula species 1	1.3	3.1	3.1	2.6	2.2	0.0	0.0	0.0	2.8	3.8	4.4	5.4	7.0	1.7	3.8	1.0	0.5	2.4	3.3
Nitzschia socialis	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
Odontella aurita	0.0	0.0	0.4	0.0	0.0	0.4	0.0	0.5	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
Paralia sulcata	3.1	5.4	18.9	3.5	31.4	33.8	18.9	9.4	19.9	11.0	8.2	7.6	10.5	6.3	10.9	23.2	9.6	5.9	12.0
Pinnularia cruciformis	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
Plagiogramma vanheurckii	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
Surirella fastuosa	0.0	0.0	0.4	0.0	0.4	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	1.8	5.3
Thalassionema nitzschioides	0.0	0.4	0.4	0.0	2.2	0.0	0.4	1.4	6.1	3.8	3.8	2.7	2.8	1.1	5.8	1.5	5.6	0.0	1.3
Thalassiosira eccentrica	0.0	0.0	0.0	3.9	4.9	7.2	3.1	5.7	11.6	13.9	4.9	3.2	7.7	16.6	7.7	11.3	12.6	1.2	2.0
Achnanthes delicatula	0.9	0.0	0.0	0.0	2.2	3.0	6.6	5.7	13.8	12.4	3.8	6.5	2.8	3.4	5.1	5.2	11.6	2.4	7.3
Cyclotella striata	0.0	0.0	11.0	2.6	1.8	1.7	1.3	24.1	4.4	1.9	5.5	3.2	14.7	18.9	19.2	4.1	3.0	0.6	4.0
Diploneis interrupta	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
Navicula digitoradiata	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
Navicula peregrina	9.6	2.2	2.6	20.0	4.9	4.2	13.2	4.7	1.7	3.3	8.2	7.6	16.1	2.3	2.6	0.5	1.5	3.6	6.0
Navicula salinarum	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
Nitzschia obtusa	0.0	0.0	0.4	0.0	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nitzschia sigma	1.7	1.3	0.9	2.6	4.4	7.6	1.8	4.7	1.1	0.0	6.0	5.4	10.5	8.6	4.5	0.0	0.5	2.4	4.7
Nitzschia vitrea	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
Rhopalodia operculata	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0
Surirella ovalis	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
Synedra fasciculata	9.6	2.7	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	2.2	0.0	0.7	0.0	0.0	0.0	0.0	3.6	0.0
Amphora veneta	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
Luticola mutica	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
Navicula cari var cincta	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	2.5	10.7	2.0
Nitzschia frustulum	0.0	4.0	2.6	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
Nitzschia tryblionella	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
Achnanthes exigua	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
Achnanthes lanceolata	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
Amphora ovalis	0.0	0.4	0.4	0.4	0.4	0.0	0.4	0.5	0.0	1.0	1.1	1.1	0.0	0.6	0.0	0.0	0.5	7.1	0.7
Caloneis bacillum	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	3.0	3.3
Caloneis ventricosa	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
Ceratoneis arcus	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	0.5	0.0	0.0

Sample #	83	82	81	80	79	78	77	91	116	115	114	113	103	102	101	125	124	123	122
Depth	**943**	**944**	**945**	**949**	**959**	**979**	**999**	**1083**	**1105**	**1107**	**1108**	**1109**	**1147**	**1148**	**1149**	**1260**	**1262**	**1264**	**1266**
Sum	229	224	227	230	226	237	228	212	181	209	183	185	143	175	156	194	198	169	150
Cymbella affinis	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
Cymbella cistula	0.0	0.0	0.4	0.0	0.0	0.0	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
Cymbella ventricosa	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
Diploneis ovalis	0.4	2.2	0.0	0.0	0.4	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
Epithemia turgida	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Eunotia germainii	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
Eunotia lunaris	0.0	0.0	0.0	0.0	0.4	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
Eunotia pectinalis	0.0	0.0	0.0	0.4	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
Fragilaria construens	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
Fragilaria vaucheriae	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
Fragilariforma virescens	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
Gomphonema acuminatum	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
Gomphonema gracile	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
Meridion circulare	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
Navicula begeri	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
Navicula brockmanii	10.5	4.5	4.8	0.0	0.0	0.0	0.4	0.5	0.6	3.8	9.3	10.8	0.0	0.0	0.0	0.5	10.1	7.7	0.0
Navicula pupula	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.6	3.2	0.0	0.0	0.0	0.0	1.0	5.3	0.0
Navicula pusilla	1.3	2.2	0.4	0.9	0.4	0.0	0.0	0.0	0.0	0.5	2.2	3.2	0.0	0.0	0.0	0.5	1.0	1.2	3.3
Navicula radiosa	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
Navicula tripunctata	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
Navicula viridula	0.9	1.8	0.9	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
Nitzschia fruticosa	7.4	8.9	3.5	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
Nitzschia linearis	1.3	1.3	3.1	1.3	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nitzschia palea	4.4	13.4	4.4	9.6	0.9	0.8	0.0	0.0	0.0	0.0	1.1	5.4	0.0	0.0	0.0	0.0	1.0	2.4	7.3
Nitzschia palustris	0.4	0.9	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.6	0.0
Pinnularia abaujensis	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
Pinnularia borealis	10.0	10.3	9.7	7.0	0.9	0.0	0.0	0.0	1.1	0.5	7.7	3.2	2.1	1.7	1.3	0.0	0.0	0.0	2.0
Pinnularia brevicostata	4.4	0.0	0.0	6.5	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
Pinnularia intermedia	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
Pinnularia lagerstedtii	3.1	8.9	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.5	2.4	0.7
Pinnularia mesolepta	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	1.8	0.0
Pinnularia microstauron	3.1	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.5	3.2	0.0	0.0	0.0	0.5	1.5	10.1	8.7
Pinnularia viridis	0.9	2.7	2.6	0.0	0.0	0.4	0.0	0.0	0.0	0.5	0.0	0.5	0.7	0.0	0.0	0.0	2.5	8.3	0.0
Pseudostaurosira brevistriata	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
Stauroneis anceps	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	3.6	0.0
Stauroneis phoenicentron	0.0	0.0	0.0	0.0	0.0	0.4	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
Staurosirella pinnata	0.4	1.8	1.3	13.0	1.8	0.0	0.9	1.4	0.0	0.0	2.7	0.0	0.7	1.7	0.0	0.5	0.0	0.0	0.0
Synedra ulna	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Achnanthes conspicua	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
Eunotia exigua	0.0	0.0	0.0	0.0	0.4	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
Eunotia praerupta	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

Sample #	83	82	81	80	79	78	77	91	116	115	114	113	103	102	101	125	124	123	122
Depth	**943**	**944**	**945**	**949**	**959**	**979**	**999**	**1083**	**1105**	**1107**	**1108**	**1109**	**1147**	**1148**	**1149**	**1260**	**1262**	**1264**	**1266**
Sum	229	224	227	230	226	237	228	212	181	209	183	185	143	175	156	194	198	169	150
Fragilaria leptostauron	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.6	0.0	0.5	0.0	0.0
Frustulia rhomboides	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.5	2.0	0.0	0.0
Nitzschia gracilis	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
Pinnularia subcapitata	0.0	1.3	0.4	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
Pinnularia subsolaris	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
Tabellaria fenestrata	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
Tabellaria flocculosa	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.6	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.5	0.0	0.0
Navicula ramosissima	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
Neidium bisulcatum	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
Cyclotella meneghiniana	8.3	4.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	1.4	0.0	4.3	0.0	0.0	0.0	1.5	12.1	3.0	2.0
Caloneis westii	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.5	0.7	0.6	1.3	2.1	0.5	0.0	0.7
Eunotia tenella	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
Fragilaria construens var. binodis	7.0	0.4	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
Navicula capitata var. hungarica	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	0.5	0.0	0.0	0.7
Pinnularia major	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
Aulacoseira distans	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
Navicula subtilissima	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
Fragilariforma constricta	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
Achnanthes clevei	0.9	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
Cyclotella radiosa	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
Fragilaria construens var. venter	2.6	1.3	0.9	3.5	1.3	1.7	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Navicula ignota var. palustris	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