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ENVIRONMENTAL CHARACTERISTICS AND SEDIMENT DIATOMS OF 51 LAKES ON SOUTHERN VANCOUVER ISLAND AND SALTSPRING ISLAND

by

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ABSTRACT

A comparison of 51 lakes in the southeastern lowlands of Vancouver Island and Saltspring Island was based on recent profundal sediment diatoms, morphometric and land drainage characteristics, and physico-chemical attributes of mid-lake surface waters. The study was initiated in Elk Lake to: (1) develop a method of quantitative slide preparation, establish a procedure for counting and expressing absolute diatom numbers, and determine optimum subsampling designs for within lake and between lake comparative studies, (2) investigate the spatial variation in sediment diatom assemblages along a traverse of decreasing depth, and (3) ascertain the extent of seasonal variation in deepwater surface sediment diatoms by monthly sampling in conjunction with measurement of contemporary fluctuation in physico-chemical attributes of the water column. Results were used to develop the sampling program for the comparative survey, and assess the ecological significance of between lake differences in environmental variables.

Environmental heterogeneity of the study area, including the glacial history as it relates to lake basin formation, was described based on review of the literature. Variates of physiographic location, morphometry and land drainage, and water chemistry for the 51 lakes were analyzed by methods of classification and ordination. Relationships between the three classes of variables were explored and lakes were grouped on the basis of environmental similarities. Analysis included indirect assessment of trophic status.

A total of 427 diatom taxa were identified in the counts from 51 lakes or 56 basins (five double basin lakes were represented). Taxonomic

information and cell dimensions of representative specimens were presented. Analysis of the sampling design indicated a high degree of reliability is associated with total cell counts/microscope field for all lakes. Diatom data were expressed as presence/absence, absolute cell numbers/mg dry weight of sediment and relative abundances, and descriptive summary statistics were computed for all taxonomic levels. Relationships between individual taxonomic units and environmental variables were examined using correlation and stepwise multiple regression. As with environmental data, classification and ordination were used to examine relationships between diatoms on the basis of their habitat preferences and those between lakes on the basis of the expression of diatoms.

Differences between planktonic and nonplanktonic diatoms and the association with the physical environment were reflected in correlation between taxa and with morphometric variables. Within the planktonic components there was a distinct dichotomy between those which proliferate in environments of high conductivity (eutrophy) and those which reach maximum development in waters of low conductivity (oligotrophy). These basic patterns recurred throughout the analysis with slight modification in interpretation depending on the taxonomic level involved. Lake ordinations described the variation in the diatom count matrix in terms of gradients of conductivity and maximum basin depth. Differences in sediment diatoms of double basin lakes were insignificant in the context of this study. Within the study area, lakes occur in physiographic regions defined by latitude, longitude, altitude and climate, and these regions reflect underlying geological differences. Lakes in these regions have more physico-chemical properties in common than morphometric similarities. Lake groups formed on the basis of taxonomic similarity at the specific and varietal levels conform most closely to physiographic locations and are similar in water chemistry. The most abundant taxon in 33 basins belongs to the Araphidineae, while centric taxa dominate in the other 23 basins. The most abundant taxon was *Fragilaria pinnata* Ehrenberg var. *pinnata* dominant in 25 basins, and the second most abundant taxon, *Cyclotella stelligera* Cleve *et* Grunow was dominant in 18 basins. A basic differentiation occurs between upland and lowland basins with regards to conductivity and diatom composition at all taxonomic levels of organization.

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Table 20. Location, latitude, longitude, altitude and land drainage areas (A_d) of the 51 study lakes numbered in Figure 17.

No.	Lake	District[1]	North Lat. 48°	West Long. 123°	Alt.[2] (m)	A_d[3] ($10^4 m^2$)	
01	Elk	Lake	31'49"	23'29"	60	664.4	
02	Beaver	Lake	30 49	23 30	60	876.5	1
03	Blenkinsop	Victoria	28 53	21 34	25	290.7	
04	Swan	Victoria	27 49	22 18	12	1002.8	3
*05	Prospect	Lake	30 52	26 28	47	862.2	6,7
06	Maltby	Lake	29 49	27 01	51	131.5	
07	Killarney	Lake	31 44	27 18	106	74.1	
08	Heal	Highland	32 20	27 47	128	147.6	
09	Durrance	Highland	32 51	28 34	132	180.1	
10	Pease	Highland	32 44	29 45	138	181.4	
11	Third	Highland	31 57	29 54	185	191.6	
12	Second	Highland	31 24	29 58	168	520.0	11
13	Mitchell	Highland	30 46	30 12	160	677.0	12
*14	Matson	Highland	29 17	30 45	104	1494.0	13
15	Teanook	Highland	29 19	30 23	101	15.4	
16	Fork	Highland	31 11	29 00	217	208.7	
17	Fizzle	Highland	30 41	29 10	207	304.9	16
18	Pike	Highland	29 22	28 04	59	1026.0	17
19	McKenzie	Highland	28 57	28 45	49	339.6	
20	Prior	Highland	28 36	27 54	38	620.5	19,22
*21	Upper Thetis	Highland	28 16	28 41	52	146.7	
22	Lower Thetis	Highland	28 05	28 03	51	183.7	21
23	Florence	Esquimalt	27 30	30 42	76	178.6	
24	Langford	Esquimalt	26 56	31 47	62	496.3	
25	Glen	Esquimalt	26 15	31 22	63	282.4	
26	Blinkhorn	Metchosin	23 15	34 28	130	37.0	
*27	Matheson	Sooke	21 51	35 57	18	530.0	
28	Glinz	Goldstream	25 03	38 18	256	588.2	
*29	Shields	Sooke	26 55	39 19	422	108.1	
30	Crabapple	Malahat	27 47	39 13	425	172.8	
31	Jack	Malahat	28 35	38 20	387	381.1	32
32	Mavis	Malahat	29 31	38 29	443	109.0	
33	Goldstream	Malahat	30 29	37 26	460	1062.4	34
34	Lubbe	Malahat	32 10	37 07	471	608.5	35
35	Butchart	Malahat	31 59	37 46	534	358.3	
36	Spectacle	Malahat	34 45	34 10	381	496.0	
37	Oliphant	Malahat	36 02	34 33	427	222.8	
38	Shawnigan	Malahat	38 21	38 27	116	6658.5	
39	Dougan	Shawnigan	42 54	36 45	37	573.5	
40	Quamichan	Comiaken	47 58	39 40	34	1322.1	
41	Somenos	Cowichan	48 06	42 15	15	6601.4	
42	Fuller	Chemainus	54 32	43 10	46	163.4	
43	Stowell	Saltspring Isl.	46 54	26 31	69	318.0	
44	Weston	Saltspring Isl.	47 02	25 28	61	371.6	
45	Ford	Saltspring Isl.	47 51	28 16	76	831.1	

Table 20. Continued.

No.	Lake	District[1]	North Lat. 48°	West Long. 123°	Alt.[2] (m)	A_d[3] ($10^4 m^2$)	
46	Cusheon	Saltspring Isl.	48'58"	28'03"	99	755.6	47
47	Blackburn	Saltspring Isl.	49 18	28 59	120	551.2	48
48	Roberts	Saltspring Isl.	50 00	30 57	229	101.2	
49	Maxwell	Saltspring Isl.	49 21	32 34	313	162.5	
50	Bullocks	Saltspring Isl.	52 27	30 27	31	300.3	
51	St. Mary	Saltspring Isl.	53 36	32 26	46	573.3	

1 Land Districts are administrative subdivisions of the province.

2 Altitudes were determined by field altimeter and from various project maps. Where discrepancies occurred between sources, altitudes were adjusted according to known drainage patterns.

* Lakes with representative samples from 2 basins.

+ The land drainage of other lakes included, *e.g.*, the land drainage of Beaver Lake includes that of Elk Lake (01).


ALTITUDE (m)
>500
250-500
100-250
0-100
CHEMAINUS
SALTSPRING ISLAND
DUNCAN
COWICHAN VALLEY
SATELLITE CHANNEL
SAANICH INLET
MILL BAY
SIDNEY
SAANICH
MT NEWTON
PENINSULA
BEAR HILL
MALAHAT
HIGHLANDS
RITHET'S BOG
VICTORIA
GOLDSTREAM
WATERSHED
SOOKE HILLS
SOOKE
0 1 2 5 10
km

Table 22. Lakes subjected to marine flooding during the Pleistocene (primarily from Halstead 1966, 1967, 1968) and lake basin types summarized according to Hutchinson's*(1957) classification, with additional descriptive information from the literature (F = flooded, NF = not flooded; conflict is noted).

Lake	Pleistocene Marine Flooding	Lake Basin Type and Description
Elk	F	combination of glacial ice-scour in bedrock and an eroded hollow in the drift mantle; lying between parallel ridges of glacial outwash, Saanichton gravel [7,8,2,12]; (Type 26 & 34)
Beaver	F	as above; original dam of alluvium reinforced artificially *ca.* 1873; (26 & 34)
Blenkinsop	F	an eroded hollow in the drift mantle [7,2,12]; (34)
Swan	F	an eroded hollow in the drift mantle [2,12]; (34)
Prospect	F	shrunken remnant of dammed N-S glaciated valley; glacial ice-scour, deepened rock basin [7,2,12]; (26 & 31 ?)
Maltby	F	glacial ice-scour in bedrock; thin cover of drift with alluvial deposits; (26 & 34 ?)
Killarney	NF	glacial ice-scour in bedrock; valley glacier deflected by Mt. Wark [2,12]; (26)
Heal	NF	glacial ice-scour in bedrock; valley glacier deflected by Mt. Wark [2,12]; (26)
Durrance	NF	glacial ice-scour in bedrock; valley glacier deflected by Mt. Wark along a contact fault; natural dam of outwash reinforced artificially since 1913 [2,12]; (26 & 31)
Pease	NF	glacial ice-scour in bedrock; valley glacier deflected by Mt. Wark [2,12]; (26)
Third	NF	glacial ice-scour in bedrock; valley glacier deflected by Mt. Wark [2,12]; (26)
Second	NF	glacial ice-scour in bedrock valley; (26)

*Hutchinson, G. E. 1957. A Treatise on Limnology Vol. 1. J. Wiley & Sons NY 1015 pp.

Table 24. Morphometric parameters and flushing rates of the 51 study lakes. Symbols and definitions follow Hutchinson (1957) except as noted in the text.

Lake	A_o ($10^4 m^2$)	V ($10^5 m^3$)	$\bar{z}$ (m)	z_m (m)	L (m)	D_L	D_V	S_A %	S_V %	$\bar{s}$ %	S_s %	I %	FR t/y
Elk	186.24	163.24	8.8	15.3	7228	1.49	1.73	33	60	3.0	6.5	0.3	0.17
Beaver	37.68	8.44	2.3	6.4	4257	1.96	1.05	99	99	2.6	3.8	8.8	4.1
*Blenkinsop	3.93	0.83	2.1	4.9	1984	2.83	1.28	100	100	10.6	10.6	4.0	6.0
*Swan	10.32	2.79	1.3	5.8	1312	1.15	0.69	100	100	3.0	4.5	0.0	7.5
Prospect	71.02	46.02	6.5	13.7	4907	1.64	1.42	41	78	5.6	10.9	0.1	0.77
Maltby	7.37	3.75	5.1	8.2	1193	1.24	1.85	50	93	7.7	18.4	0.0	1.4
Killarney	3.97	3.35	8.5	19.5	949	1.34	1.31	39	57	20.5	32.0	0.0	1.0
*Heal	1.74	0.31	1.8	4.9	598	1.27	1.10	100	100	8.2	9.3	0.0	24.0
Durrance	8.05	6.14	7.6	16.8	1482	1.47	1.36	44	60	14.1	19.0	0.0	1.7
Pease	3.56	1.15	3.2	5.8	844	1.26	1.67	100	100	8.8	12.0	0.0	9.6
Third	3.44	0.84	2.4	4.9	829	1.26	1.50	100	100	6.2	6.7	0.0	14.0
Second	6.68	1.84	2.8	9.4	1475	1.61	0.88	84	91	6.5	13.8	1.2	17.0
Mitchell	2.91	0.52	1.8	7.9	1152	1.90	0.67	95	97	8.3	19.3	0.0	78.0
Matson	3.32	0.50	1.5	3.0	1100	1.70	1.50	100	100	4.9	8.2	2.4	170.0
Teanook	3.24	0.78	2.4	7.6	781	1.23	0.95	95	99	7.9	9.4	0.0	1.4
Fork	3.76	1.13	3.0	9.1	906	1.32	0.99	92	96	9.7	12.1	0.0	9.8
Fizzle	4.53	2.03	4.5	11.6	1308	1.73	1.16	72	86	17.4	19.0	0.0	8.0
*Pike	7.41	3.08	4.2	8.8	1462	1.52	1.42	73	94	10.8	13.3	0.0	15.0
*McKenzie	3.20	0.68	2.1	4.9	909	1.43	1.31	100	100	7.1	8.1	0.0	24.0
*Prior	1.50	0.28	1.9	5.5	490	1.13	1.04	100	100	8.8	9.5	0.0	75.0
Upper Thetis	19.67	5.86	3.0	5.8	4498	2.86	1.54	100	100	5.0	5.8	2.4	1.3
Lower Thetis	17.20	9.15	5.3	9.8	3368	2.29	1.64	67	86	7.4	30.1	9.2	1.1
Florence	9.55	2.01	2.0	4.3	1513	1.38	1.42	100	100	3.5	4.2	0.0	5.2
Langford	59.33	38.00	6.4	17.1	4868	1.78	1.13	56	66	5.8	6.3	0.2	0.78
Glen	15.01	11.60	7.7	15.5	1880	1.37	1.49	40	66	10.5	19.5	0.0	1.3
Blinkhorn	2.23	0.57	2.6	5.8	565	1.07	1.31	100	100	8.2	9.0	0.0	4.0
Matheson	53.18	17.95	3.4	5.8	535	1.92	1.75	100	100	3.3	4.6	0.8	1.7
Glinz	3.12	1.37	4.4	10.1	798	1.28	1.32	71	87	14.9	18.2	0.0	33.0
Shields	13.68	5.59	4.1	14.0	3014	2.11	0.87	74	89	11.5	12.5	1.5	1.8
Crabapple	6.52	2.35	3.6	11.6	1737	1.92	0.94	76	90	11.5	14.2	8.0	6.5

Table 25. Sampling date, station depth and selected physico-chemical characteristics of deepwater surface sediments and the surface waters of 56 lake basins sampled during the study.

Lake & Basin	Date	z_{st} m	Sed LOI %	Temp Cond iso	Temp Cond stra	Secchi Depth m	pH	TA mg/l $CaCO_3$	NCH mg/l $CaCO_3$	Ca mg/l	Mg mg/l	σ µmho/cm @ 25°C
Elk	29 07 72	17.0	27.5		1	6.2	7.30	41.0	7.0	14.0	3.2	293
Beaver	29 07 72	6.5	46.0		1	4.0	8.60	40.0+	6.0	13.2	3.2	295
Blenkinsop	14 04 73	3.1	46.9		1	1.4	7.00	63.0	31.0	27.6	6.1	492
Swan	29 08 72	5.3	21.7		1	1.2	8.30	108.5	0.0	29.6	8.3	643
Prospect S	02 08 72	13.8	25.6		1	6.9	8.50	24.0	5.0	8.4	1.9	192
Prospect N	02 08 72	10.8	25.3		1	5.6	8.50	24.0	5.0	8.4	1.9	192
Maltby	14 02 73	8.4	43.1	1		2.8	6.75	19.5	4.5	6.4	1.9	170
Killarney	09 09 72	19.9	31.5		1	5.7	7.50	29.0	8.0	10.4	2.7	238
Heal	16 04 73	6.1	53.4		1	6.0	6.90	51.0	6.0	18.0	2.9	298
Durrance	17 08 72	18.0	25.7		1	7.1	7.09	54.0	9.0	22.4	2.2	329
Pease	15 04 73	5.8	25.5		1	5.6	6.95	29.0	3.0	7.6	3.2	191
Third	23 02 73	5.8	44.7		1	5.1	6.90	16.5	6.5	6.4	1.7	97
Second	23 02 73	11.1	43.5		1	7.1	7.00	17.5	14.5	6.8	1.2	101
Mitchell	23 02 73	9.2	45.2		1	7.1	7.05	18.5	6.5	7.6	1.5	106
Matson S	24 02 73	2.4	48.8	1		2.4	6.95	22.5	5.5	8.4	1.7	115
Matson N	24 02 73	1.5	38.7		1	1.5	6.95	22.5	5.5	8.4	1.7	115
Teanook	23 02 73	7.9	50.3		1	3.4	6.90	20.1	11.9	7.2	3.4	115
Fork	17 03 73	8.5	39.9		1	4.8	6.75	13.0	4.0	4.8	1.2	135
Fizzle	17 03 73	11.6	38.7		1	4.5	6.75	13.5	3.9	5.2	1.8	140
Pike	17 03 73	8.9	32.3		1	3.5	6.90	23.0	4.2	8.4	1.5	184
McKenzie	17 03 73	4.9	45.1		1	3.4	6.95	38.0	8.4	14.0	2.8	324
Prior	10 09 72	5.5	46.9		1	2.2	7.50	45.0	0.0	13.6	2.4	329
Upper Thetis NW	29 08 72	4.5	41.8		1	3.2	7.50	32.0	0.0	9.2	2.2	227
Upper Thetis NE	29 08 72	4.8	31.3		1	3.5	7.60	28.5	3.5	8.8	2.4	226
Lower Thetis	29 08 72	11.3	52.8		1	4.0	7.60	28.0	5.0	8.0	3.2	215
Florence	29 07 72	5.2	58.4		1	2.5	8.50	49.0	0.0	10.8	1.7	220
Langford	30 07 72	15.2	33.7		1	6.7	8.50	48.0+	3.0	15.2	3.2	292
Glen	16 08 72	15.5	36.8		1	5.6	7.00	36.0	3.4	11.2	2.8	257
Blinkhorn	15 10 72	5.5	46.4		1	3.1	6.90	25.5	0.0	6.8	0.2	135

Maltby (#06)

Table 35. Presence/absence (X/.) data matrix of 427 diatom taxa found in counts of recent profundal sediment samples from 56 lake basins on southern Vancouver Island and Saltspring Island. Lake code numbers are from Table 20, the sequential taxon code numbers are from Appendix I, and taxa are presented in order of decreasing constancy.

Genus	Species	Variety	SEQ TAXON CODE	Constancy
ACHNANTHES	SPP	(GV)	30	56
ACHNANTHES	LINEARIS		21	56
ACHNANTHES	MINUTISSIMA	MINUTISSIMA	24	56
FRAGILARIA	PINNATA	PINNATA	153	55
NAVICULA	RADIOSA	TENELLA	202	55
AMPHORA	LIBYCA		34	55
CYCLOTELLA	STELLIGERA		68	55
EUNOTIA	SPP	(GV)	138	55
FRAGILARIA	CROTONENSIS	CROTONENSIS	150	55
GOMPHONEMA	SPP	(GV)	191	55
NAVICULA	PUPULA	PUPULA	256	55
NAVICULA	RADIOSA	RADIOSA	260	55
NITZSCHIA	PALEA		310	53
CYMBELLA	SPP	(GV)	97	53
NAVICULA	SPP	(GV)	281	52
FRAGILARIA	CONSTRUENS	CONSTRUENS	146	52
MELOSIRA	ITALICA		213	52
NITZSCHIA	DISSIPATA		299	52
PINNULARIA	SPP	(GV)	366	52
RHOPALODIA	GIBBA	GIBBA	369	51
CYMBELLA	GRACILIS	[illegible]	84	51
CYMBELLA	MICROCEPHALA		89	51
SYNEDRA	ULNA		419	51
TABELLARIA	FENESTRATA	FENESTRATA	424	50
FRAGILARIA	VIRESCENS	VIRESCENS	157	49
NAVICULA	LAEVISSIMA	LAEVISSIMA	243	49
STAURONEIS	PHOENICENTERON	PHOENICENTERON	377	49
STAURONEIS	PHOENICENTERON	GRACILIS	378	48
ASTERIONELLA	FORMOSA	FORMOSA	44	48
EUNOTIA	INCISA	INCISA	127	48
FRAGILARIA	VAUCHERIAE	VAUCHERIAE	155	48
MELOSIRA	DISTANS	(2)	204	48
NAVICULA	CRYPTOCEPHALA	CRYPTOCEPHALA	229	47
NAVICULA	SEMINULUM	SEMINULUM	265	47
NITZSCHIA	AMPHIBIA		297	47
NITZSCHIA	SIGMOIDEA		313	45
COCCONEIS	PLACENTULA	PLACENTULA	58	45
EUNOTIA	CURVATA	CURVATA	122	45
FRAGILARIA	BREVISTRIATA	INFLATA	142	45
GOMPHONEMA	GRACILE		178	45
NITZSCHIA	FONTICOLA	GENUINA	301	43
NITZSCHIA	VERMICULARIS		316	42
CYMBELLA	VENTRICOSA	GENUINA	94	42
DIPLONEIS	OCULATA	OCULATA	106	42
EUNOTIA	FLEXUOSA	FLEXUOSA	124	42
MELOSIRA	DISTANS	AFRICANA	200	41
DIPLONEIS	ELLIPTICA	ELLIPTICA	103	41
MELOSIRA	FENNOSCANDICA		207	41
NAVICULA	DISJUNCTA		233	41
SURIRELLA	SPP	(GV)	402	40
ACHNANTHES	LANCEOLATA	DUBIA	16	40
CYMBELLA	VENTRICOSA	MINUTA	95	40
NITZSCHIA	SIGMA		312	40
PINNULARIA	NODOSA	NODOSA	352	39
ACHNANTHES	EXIGUA	EXIGUA	9	39
NAVICULA	LANCEOLATA	LANCEOLATA	244	39
NITZSCHIA	FRUSTULUM		302	38
CYMBELLA	TURGIDA		93	38
ANOMOEONEIS	SERIANS	BRACHYSIRA	41	38
ANOMOEONEIS	VITREA	LANCEOLATA	43	38
MELOSIRA	DISTANS	(4)	206	38
TABELLARIA	FLOCCULOSA	FLOCCULOSA	425	37
CYMBELLA	CISTULA	GENUINA	77	37
EPITHEMIA	TURGIDA	GENUINA	116	37
NAVICULA	PSEUDOVENTRALIS		255	37
ACHNANTHES	MICROCEPHALA	MICROCEPHALA	23	36
GOMPHONEMA	ACUMINATUM	CORONATUM	169	35
AMPHIPLEURA	PELLUCIDA	PELLUCIDA	32	35
DIPLONEIS	FINNICA	FINNICA	104	35
PINNULARIA	LEGUMEN	LEGUMEN	346	35
PINNULARIA	MAJOR	TRANSVERSA	348	35
PINNULARIA	STAUROPTERA	LONGA	357	34
FRUSTULIA	RHOMBOIDES	CRASSINERVIA	162	34
CYCLOTELLA	KUTZINGIANA		64	33
EUNOTIA	DIODON	DIODON	123	33
EUNOTIA	NAEGELII	NAEGELII	131	33
NAVICULA	BACILLUM	BACILLUM	225	32
EPITHEMIA	ZEBRA	PROBOSCIDEA	118	32
GOMPHONEMA	SUBTILE	SAGITTUM	190	32
NEIDIUM	SPP	(GV)	295	31
MELOSIRA	DISTANS	(1)	205	31
MERIDION	CIRCULARE		222	31
NAVICULA	VENTRALIS		274	31
NITZSCHIA	ACICULARIS		296	31
STAURONEIS	ANCEPS	GRACILIS	374	30
CYMBELLA	EHRENBERGII	TYPICA	81	30

LAKE CODE

			SEQ TAXON CODE	01	02	03	04	05A	05B	06	07	08	09	10	11	12	13	14A	14B	15	16	17	18	19	20	21A	21B	22	23	24	25	26	27A	27B	28	29A	29B	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	
NAVICULA	CUSPIDATA	CUSPIDATA	230	.	X	X	X	.	X	.	.	X	.	X	X	X	X	X	X	.	X	X	X	X	X	.	X	.	X	.	.	X	X	X	.	.	.	X	X	X	.	X	.	X	X	.	.	X	.	.	X	.	.	.	.	.	.	.	X	30
NAVICULA	GYSINGENSIS	GYSINGENSIS	238	.	.	X	.	.	.	X	X	.	.	X	X	X	X	X	X	X	X	X	.	X	X	.	.	.	.	.	X	X	.	.	X	X	.	X	X	X	X	X	X	X	X	X	.	.	.	X	X	.	X	.	.	.	.	.	.	30
NAVICULA	SCHADEI		265	X	X	.	.	X	X	X	X	X	X	X	.	.	.	X	.	X	.	.	X	X	X	X	X	X	X	.	X	.	X	X	.	.	.	.	.	.	.	.	.	X	.	.	X	X	.	X	.	X	.	X	.	.	X	X	X	30
FRAGILARIA	CAPUCINA	CAPUCINA	143	X	X	X	X	X	X	X	X	X	.	.	.	.	.	X	X	X	.	.	.	X	X	X	X	X	X	X	X	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	X	.	X	.	X	.	X	X	X	.	.	X	.	29
FRUSTULIA	RHOMBOIDES	RHOMBOIDES	159	.	.	.	.	X	.	X	.	.	.	.	.	X	.	.	X	X	X	X	X	X	.	.	.	X	.	.	.	X	X	X	X	X	X	X	X	X	X	X	X	.	.	.	.	.	.	X	X	.	X	X	X	X	.	X	.	29
NAVICULA	(1)		279	.	.	.	.	.	.	.	X	X	.	X	X	X	.	X	X	X	X	X	X	X	.	.	.	.	.	.	.	.	X	X	X	.	.	X	X	X	X	X	X	X	X	.	.	X	.	X	.	X	.	X	.	.	X	X	.	29
EPITHEMIA	ZEBRA	(GV)	117	X	.	X	X	X	X	.	.	.	.	.	.	.	.	X	X	.	.	.	X	X	X	.	X	X	X	.	.	X	X	X	.	.	.	.	.	.	.	.	X	X	.	.	X	X	X	.	X	X	X	X	X	.	.	X	X	28
CYMBELLA	CUSPIDATA	ANGLICA	78	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	X	X	X	.	X	X	X	X	X	.	X	.	.	X	X	.	X	X	X	.	X	X	X	X	.	X	X	X	.	X	.	X	X	.	.	X	.	.	X	.	.	28
GOMPHONEMA	PARVULUM	EXILISSIMUM	184	.	.	.	.	.	.	X	.	.	.	X	X	X	X	X	X	X	.	X	X	X	.	X	X	.	.	.	.	X	X	X	.	.	.	X	.	.	.	X	X	.	.	.	.	X	.	X	X	X	X	.	X	X	X	X	.	28
ACHNANTHES	LANCEOLATA	LANCEOLATA	15	X	X	X	X	X	X	X	X	X	X	X	.	.	.	.	X	.	.	.	X	X	X	X	.	X	.	X	X	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	.	.	X	X	X	.	.	.	X	28
STENOPTEROBIA	INTERMEDIA	GENUINA	382	.	.	.	.	.	.	X	X	.	.	X	X	.	.	X	.	X	X	X	X	.	.	.	.	.	.	.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	.	.	.	.	.	X	.	X	X	.	.	X	.	.	28
SURIRELLA	ELEGANS	NORVEGICA	391	.	X	.	.	X	X	X	X	X	.	X	.	.	.	.	X	X	X	.	.	.	X	X	X	X	X	.	.	.	X	X	X	.	X	.	.	.	.	.	.	X	X	X	X	X	.	X	X	.	X	X	.	.	.	.	.	28
EPITHEMIA	TURGIDA	(GV)	115	X	X	X	X	X	X	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	X	X	X	X	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	X	X	X	X	X	X	X	.	X	X	27
GOMPHONEMA	ABBREVIATUM		166	.	.	X	.	X	X	X	.	.	.	.	X	.	X	.	.	.	X	X	X	X	.	.	.	.	.	.	.	.	X	X	X	.	.	.	X	.	.	X	X	X	.	.	X	X	X	X	X	X	.	X	.	.	X	X	X	27
CYCLOTELLA	BODANICA		62	X	X	.	.	X	X	X	.	.	X	.	.	.	.	.	.	.	.	X	.	.	X	.	.	X	.	X	X	X	.	.	.	.	X	X	X	X	X	X	X	.	.	X	X	.	.	X	X	X	X	X	.	X	.	X	.	27
NAVICULA	PERPUSILLA		253	X	X	.	.	X	X	X	X	X	.	X	X	.	.	X	X	X	.	.	X	X	X	X	X	X	X	.	X	X	.	.	.	.	.	X	.	.	.	.	.	X	.	.	X	.	.	.	X	.	X	.	X	.	.	.	.	27
NAVICULA	PSEUDOSCUTIFORMIS	PSEUDOSCUTIFORMIS	254	X	.	.	.	.	X	.	.	.	.	X	X	X	.	X	X	X	X	X	X	.	.	X	.	X	.	.	X	.	X	X	X	.	.	.	X	X	X	X	.	.	.	X	.	X	.	X	.	.	.	X	.	.	X	.	X	27
NITZSCHIA	DENTICULA	CURTA	298	X	X	X	X	.	.	.	.	X	X	X	.	X	X	.	.	X	.	.	X	.	.	X	X	X	X	.	.	.	X	X	.	.	.	.	.	.	.	X	.	X	X	X	X	X	X	.	.	X	.	.	.	.	X	X	.	27
AMPHIPRORA	ORNATA		33	.	.	.	.	.	X	X	X	.	.	X	X	.	X	X	X	X	X	X	X	X	X	X	X	X	.	.	X	X	.	.	.	.	.	.	.	.	.	.	X	X	X	X	.	.	.	.	.	.	.	.	.	.	X	X	.	26
NAVICULA	AURORA	AURORA	224	X	.	.	.	X	X	.	.	X	X	X	.	X	.	X	X	X	.	.	.	X	X	X	X	X	X	X	X	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	X	.	.	.	X	.	X	.	.	26
NAVICULA	EXPLANATA	EXPLANATA	236	X	.	.	.	.	.	X	.	X	X	X	X	X	.	X	X	X	X	X	.	X	X	X	X	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	X	X	.	X	X	.	.	.	X	.	.	.	.	X	X	.	25
NAVICULA	VIRIDULA	VIRIDULA	275	X	.	.	.	X	.	.	.	.	.	X	X	X	X	X	X	X	X	.	X	.	.	X	X	X	.	.	.	.	.	.	.	.	.	.	X	X	.	X	.	.	X	.	.	X	.	.	X	X	X	X	X	.	X	.	.	25
EUNOTIA	FORMICA	FORMICA	126	.	X	X	X	.	.	X	X	.	.	.	.	.	X	.	.	X	.	.	X	X	X	X	X	.	.	.	X	X	.	.	X	.	.	.	.	.	X	.	.	X	.	.	.	.	X	.	X	.	X	X	X	X	.	X	.	24
NAVICULA	AMERICANA	AMERICANA	223	.	.	X	X	.	.	.	.	X	.	.	.	.	.	X	.	X	.	.	X	X	X	X	.	.	X	.	.	X	.	.	X	X	X	.	X	X	.	.	X	X	.	.	.	X	.	.	X	.	.	X	X	X	.	X	.	24
NAVICULA	PUPULA	RECTANGULARIS	259	.	.	.	X	.	.	.	X	.	.	X	.	X	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	X	.	.	X	.	.	.	.	X	X	X	X	X	X	X	X	X	.	X	.	X	X	.	X	X	X	X	.	24
PINNULARIA	BICEPS	AMPHICEPHALA	324	.	.	.	.	X	X	X	X	.	.	X	X	X	.	X	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	X	X	X	X	.	X	X	.	X	.	.	X	X	.	.	.	.	X	.	.	.	24
PINNULARIA	STAUROPTERA	MINUTA	358	.	.	.	.	.	X	X	.	.	.	.	X	X	X	X	.	X	X	.	X	.	X	.	.	.	.	.	.	X	.	.	X	X	X	X	X	X	.	X	.	X	X	.	X	.	.	.	.	.	X	X	.	.	X	.	.	24
STAURONEIS	KRIEGERI	KRIEGERI	375	.	X	X	X	.	.	.	.	X	.	.	.	.	X	.	X	.	X	X	X	X	X	.	.	.	X	X	X	.	.	.	.	.	.	.	X	X	.	.	.	X	X	.	.	X	X	.	.	X	.	X	X	.	.	.	.	24
ACHNANTHES	FLEXELLA	FLEXELLA	11	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	X	X	X	.	X	X	X	X	.	.	X	.	.	.	.	X	X	X	X	X	X	X	X	.	X	X	X	X	.	.	.	.	.	.	.	.	.	.	X	.	.	23
MELOSIRA	ISLANDICA		212	X	X	.	.	X	.	X	.	.	.	.	X	X	.	.	.	.	.	X	X	X	X	X	X	X	.	X	X	X	X	X	.	.	.	.	.	.	.	.	X	.	.	.	X	.	X	.	X	.	.	.	.	.	X	.	.	23
NAVICULA	RHYNCHOCEPHALA	RHYNCHOCEPHALA	263	.	X	.	X	.	.	X	.	.	.	.	.	.	X	X	X	X	.	.	X	X	X	.	.	.	.	.	X	X	.	.	.	.	.	.	X	X	X	.	.	.	.	.	.	X	X	.	X	X	X	X	X	.	.	X	.	23
OPEPHORA	MARTYI	MARTYI	319	X	.	.	.	X	X	X	X	.	X	.	.	.	.	.	.	.	.	.	X	X	X	X	.	.	X	X	X	X	.	X	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	.	X	X	X	.	X	.	.	.	X	23
STEPHANODISCUS	ASTRAEA	MINUTULUS	365	X	X	X	X	X	X	.	X	.	X	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	.	X	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	X	X	.	.	X	X	.	.	.	.	X	X	23
CYMBELLA	CESATII	GENUINA	75	.	.	.	.	.	.	.	.	.	X	X	.	X	X	.	X	X	X	X	.	.	.	.	.	X	.	.	.	.	.	.	X	X	X	X	X	.	X	X	X	X	X	X	.	.	.	X	.	.	.	X	.	.	.	.	.	22
GOMPHONEMA	ANGUSTATUM	GENUINUM	172	.	.	.	X	.	.	.	.	.	.	X	.	X	X	.	X	X	X	X	X	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	X	X	.	X	.	.	X	X	X	.	X	.	X	X	X	.	X	.	.	.	.	22
NAVICULA	COCCONEIFORMIS	COCCONEIFORMIS	228	.	.	.	.	.	.	X	X	.	.	X	.	X	.	X	X	X	X	X	X	.	X	X	.	.	.	.	.	.	.	.	X	X	X	.	X	X	.	X	X	X	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	22
NAVICULA	PUPULA	CAPITATA	257	.	.	.	.	.	.	.	.	X	X	X	X	.	.	X	.	X	.	.	.	.	X	.	.	.	.	.	.	X	X	X	X	X	X	X	X	X	X	X	.	X	X	X	.	.	.	.	.	.	.	.	.	.	X	.	.	22
NITZSCHIA	LINEARIS		309	.	X	.	X	X	X	.	.	X	X	X	.	.	.	X	X	X	.	.	.	X	X	X	.	.	.	X	.	X	X	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	.	.	.	X	.	.	X	.	.	.	X	22
ACHNANTHES	[illegible]		3	.	.	.	.	.	X	X	.	.	.	X	X	.	X	X	X	X	.	X	X	.	X	.	.	X	.	.	.	.	.	X	X	.	.	.	X	X	.	.	.	X	X	.	.	.	.	X	.	.	X	.	.	X	X	.	.	22
SYNEDRA	PARASITICA	PARASITICA	412	.	.	.	.	.	.	.	.	X	.	.	X	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	.	.	.	.	X	X	X	.	X	X	X	X	X	X	X	X	X	X	X	X	X	22
EUNOTIA	PERPUSILLA	PERPUSILLA	133	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	X	X	.	.	.	.	.	.	.	X	X	.	.	X	X	X	X	X	X	X	X	X	X	.	.	X	.	X	.	X	X	.	.	.	X	.	.	.	21
GOMPHONEMA	ANGUSTATUM	SARCOPHAGUS	173	.	X	.	X	.	X	.	.	.	.	.	.	X	X	X	X	.	.	.	.	X	X	.	.	.	.	.	.	X	.	.	.	X	.	X	X	X	.	.	.	X	.	X	.	.	.	X	X	.	X	X	X	.	.	.	.	21
HANTZSCHIA	AMPHIOXYS		196	.	X	.	X	.	.	.	.	.	.	X	.	.	X	.	X	.	.	X	X	X	X	.	.	X	.	.	.	X	X	.	.	.	.	.	X	X	X	.	.	X	X	.	X	.	X	.	.	.	.	X	.	.	.	X	.	21
ACHNANTHES	EXIGUA	HETEROVALVA	10	X	X	.	.	.	.	X	X	X	.	.	X	X	.	.	.	.	X	X	X	X	X	.	.	X	.	X	.	.	X	X	X	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	X	.	.	X	X	.	.	21
ACHNANTHES	MARGINULATA	MARGINULATA	22	.	.	.	.	.	.	X	.	.	.	.	X	X	X	.	X	X	X	X	.	.	.	.	.	X	.	.	.	.	X	X	X	X	X	X	X	.	X	X	X	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	21
NAVICULA	HASSIACA	HASSIACA	239	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	X	X	X	X	.	.	.	.	X	X	.	.	.	X	X	X	X	X	X	X	X	X	X	X	X	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	21
NAVICULA	LATEROSTRATA		245	X	X	.	.	.	X	X	.	X	X	.	X	.	.	X	X	X	.	.	X	X	.	.	.	.	X	X	.	.	X	X	X	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	.	.	.	.	X	.	X	21
GOMPHONEMA	CONSTRICTUM	CAPITATUM	176	.	X	.	X	.	.	.	.	.	.	.	X	X	X	.	X	X	.	.	.	.	.	X	.	.	.	X	.	.	X	.	.	X	.	.	.	X	X	.	X	X	X	.	.	.	.	X	X	.	X	.	.	.	X	.	.	20
ACHNANTHES	LANCEOLATA	HAYNALDII	17	.	.	X	X	.	.	X	X	.	.	.	X	.	.	.	.	.	.	.	X	X	X	.	.	.	.	.	X	X	.	X	.	.	.	.	X	.	.	.	.	.	.	.	X	.	X	.	X	X	X	.	X	X	.	X	.	20
NEIDIUM	AFFINE	AFFINE	282	.	.	.	.	.	X	X	.	.	.	X	X	X	.	.	.	.	X	X	X	X	.	.	.	.	.	.	.	.	.	X	X	X	X	X	X	X	X	X	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	20
NEIDIUM	IRIDIS	AMPLIATUM	293	.	.	.	.	.	.	X	.	.	.	.	X	X	X	.	.	X	X	.	.	.	X	.	.	.	X	X	.	.	.	.	X	X	X	X	X	.	.	X	.	X	X	X	.	.	.	X	.	.	.	.	.	.	X	.	.	20
ACHNANTHES	LEVANDERI	LEVANDERI	20	.	.	X	.	.	X	.	.	.	.	X	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	X	X	X	X	X	X	X	X	X	X	X	X	.	.	.	X	.	.	.	.	.	.	.	.	X	20
PINNULARIA	BRAUNII	MARGINATA	330	.	.	.	.	.	.	X	.	.	.	.	.	X	.	X	X	X	X	X	X	X	X	X	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	.	X	X	.	.	.	.	.	X	.	X	.	X	X	.	X	.	20
CYMBELLA	CAESPITOSA		74	X	X	.	.	.	.	X	.	.	.	X	.	X	X	X	.	.	.	.	.	.	.	.	.	X	X	.	.	X	X	.	.	.	.	.	X	X	.	X	.	.	.	.	X	.	X	X	X	.	.	.	.	.	X	.	X	20
MELOSIRA	TENELLA		218	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	.	.	.	.	.	X	X	.	.	.	.	X	X	.	20
ACHNANTHES	CLEVEI	CLEVEI	4	X	.	.	.	X	.	X	X	.	X	X	.	.	.	.	.	.	.	.	X	.	.	X	.	X	.	X	X	.	X	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.	.	X	.	.	X	.	X	19
NAVICULA	VIRIDULA	LINEARIS	276	.	X	.	.	.	.	X	X	.	.	X	X	.	.	.	.	.	.	X	.	.	X	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	X	X	X	.	X	X	.	.	X	X	.	X	.	.	.	X	X	19
PINNULARIA	MICROSTAURON	MICROSTAURON	350	.	.	.	.	.	.	.	.	X	X	.	X	X	.	.	.	X	X	X	.	.	.	.	.	.	.	.	X	.	.	.	.	X	X	X	.	X	X	X	X	X	X	X	.	.	.	.	.	.	.	.	.	X	.	.	19
SURIRELLA	ROBUSTA		397	X	X	.	.	X	X	.	X	.	.	X	X	.	.	X	X	.	X	.	X	.	.	.	.	.	.	.	.	.	X	.	.	.	.	X	X	X	.	X	.	.	.	X	.	X	X	.	.	.	.	.	.	.	.	.	.	19
FRUSTULIA	RHOMBOIDES	CAPITATA	161	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	X	X	.	X	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	X	X	X	X	.	X	.	X	.	.	X	X	.	.	.	X	.	.	.	.	.	18
GOMPHONEMA	ACUMINATUM	TURRIS	171	.	.	X	.	.	.	X	.	.	.	.	X	.	.	.	.	.	X	.	X	X	X	.	X	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	X	X	.	.	X	X	.	.	.	X	X	X	.	.	X	.	.	18
EUNOTIA	PECTINALIS	MINOR	132	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	.	.	X	X	X	X	.	X	X	.	.	.	.	.	.	.	.	.	X	X	X	X	.	X	.	.	.	.	X	.	.	X	X	X	.	.	.	.	.	18
PINNULARIA	ACROSPHAERIA	ACROSPHAERIA	320	.	.	.	.	X	.	X	.	.	.	.	.	X	X	.	X	X	.	.	X	X	X	.	.	X	.	.	.	X	.	X	X	.	.	.	.	X	.	.	.	.	.	.	X	X	.	.	.	X	.	.	.	.	X	.	.	18
STEPHANODISCUS	ASTRAEA	TYPICUS	384	X	X	X	X	X	X	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	X	X	.	.	X	.	.	.	.	X	X	X	18
SYNEDRA	MINUSCULA	MINUSCULA	410	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	X	X	X	.	.	.	.	X	.	X	X	X	X	X	X	X	X	X	X	X	18
ANOMOEONEIS	VITREA	VITREA	42	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	X	X	X	.	X	X	X	X	X	X	.	.	X	.	X	.	X	.	X	.	17
GYROSIGMA	SPENCERII	SPENCERII	194	X	.	.	X	.	X	X	X	.	.	X	.	.	.	.	.	.	X	X	X	.	.	X	X	X	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	X	17
CYMBELLA	(N)FLORENTINA		83	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	X	.	.	.	.	.	.	.	X	.	X	.	X	X	.	X	X	X	X	.	.	X	.	X	X	X	.	.	.	.	.	X	.	.	.	.	X	.	.	17
NEIDIUM	IRIDIS	AMPHIGOMPHUS	292	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.	.	.	X	.	.	X	.	X	X	X	X	.	.	X	X	X	.	X	.	X	.	X	.	X	.	.	.	.	.	.	.	.	.	17
PINNULARIA	BICEPS	MINOR	325	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	X	X	.	.	X	.	.	.	.	.	.	.	X	.	X	X	X	X	X	X	X	X	.	X	X	.	.	.	.	.	X	.	.	.	.	.	.	.	.	17
PINNULARIA	STAUROPTERA	GENUINA	356	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	X	.	.	.	X	.	.	.	X	.	.	.	.	.	.	.	X	X	X	.	X	.	X	X	X	X	.	.	.	.	.	.	X	X	.	.	X	X	.	.	17
CYCLOTELLA	MENEGHINIANA		66	.	X	X	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	X	X	X	X	X	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	X	.	.	.	.	X	X	.	17
DIATOMA	HIEMALE	MESODON	99	.	.	.	.	.	.	.	.	.	.	X	.	X	X	.	.	.	X	.	X	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	X	X	.	X	.	.	.	X	.	.	X	X	.	X	X	X	X	.	.	.	.	17
CYMBELLA	CESATII	(1)	76	.	.	.	.	.	.	.	X	.	X	X	.	.	.	.	.	X	X	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	X	X	.	X	X	X	X	X	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	17
ACHNANTHES	LATEROSTRATA		19	.	.	.	.	X	X	X	.	.	.	.	.	X	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	X	X	.	X	.	.	.	.	.	X	X	X	X	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	16
SYNEDRA	SPP	(GV)	423	.	.	X	.	.	.	.	.	.	.	.	.	X	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	X	X	X	.	.	X	.	.	X	.	X	X	X	.	X	X	.	.	.	.	.	.	.	.	16
GOMPHONEMA	CONSTRICTUM	GENUINUM	175	.	X	X	.	.	.	.	.	X	.	.	.	.	X	X	X	.	.	.	.	X	X	X	X	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	X	.	.	.	.	.	.	15
MELOSIRA	VARIANS		220	X	.	X	X	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	.	.	.	.	X	X	.	.	X	.	15
CYMBELLA	NAVICULIFORMIS		90	.	.	.	.	.	.	.	X	.	.	.	X	X	.	.	.	.	X	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	X	.	X	X	.	.	X	X	.	X	.	.	.	.	.	X	.	.	15
NEIDIUM	HITCHCOCKII	HITCHCOCKII	289	.	.	.	.	X	.	X	.	.	.	.	.	.	.	.	X	X	X	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	X	X	X	.	X	.	.	X	.	X	.	.	.	.	.	.	.	.	X	.	.	.	.	15
ACHNANTHES	CONSPICUA		5	X	X	.	.	X	.	.	.	X	X	X	.	.	.	.	.	.	.	X	.	.	.	X	.	.	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	X	X	.	.	.	X	.	.	.	.	.	.	X	X	15
AMPHORA	PEDICULUS		37	X	X	.	.	X	X	.	X	X	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	X	X	.	X	.	.	.	.	.	X	.	.	.	X	15
CYMBELLA	VENTRICOSA	OBTUSA	96	.	.	.	.	.	.	.	.	.	.	X	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	X	X	X	X	X	X	X	.	.	X	.	X	.	.	.	.	.	.	.	.	15
CALONEIS	SPP	(GV)	55	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	X	.	.	X	.	.	X	.	.	X	.	X	X	X	X	X	X	.	.	.	.	X	.	.	.	.	X	15
PINNULARIA	BOREALIS	BOREALIS	328	.	.	X	X	.	.	.	.	.	.	.	.	.	X	X	.	.	.	X	X	.	.	.	.	.	.	.	X	.	.	.	.	.	X	.	X	X	X	.	.	.	.	.	.	.	.	.	X	.	X	.	X	.	.	X	.	15
STEPHANODISCUS	HANTZSCHIA	PUSILLUS	386	X	X	X	X	X	X	.	X	X	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	X	.	.	.	.	.	X	X	15

LAKE CODE

			SEQ TAXON CODE	01	02	03	04	05A	05B	06	07	08	09	10	11	12	13	14A	14B	15	16	17	18	19	20	21A	21B	22	23	24	25	26	27A	27B	28	29A	29B	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	
SURIRELLA	DELICATISSIMA		390	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	X	X	X	X	X	.	X	X	X	.	.	.	X	.	.	.	.	.	.	.	.	.	15
SYNEDRA	RADIANS	RADIANS	415	.	.	.	.	.	.	X	X	X	X	.	.	X	.	.	.	X	.	X	.	.	X	.	X	.	.	.	.	X	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	X	15
SYNEDRA	ULNA	ULNA	420	.	.	.	X	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	X	.	.	.	.	.	.	.	X	X	.	.	.	.	X	.	.	X	X	X	.	.	.	X	X	.	.	.	.	X	15
GOMPHONEMA	INTRICATUM	GENUINUM	179	.	.	.	X	.	.	.	.	X	.	X	.	.	X	.	.	.	.	X	X	.	.	.	.	.	X	.	.	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	.	X	.	X	.	.	.	X	14
MELOSIRA	DISTANS	(3)	205	.	.	.	.	X	X	.	X	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	X	.	X	X	X	.	X	X	X	.	.	X	X	X	14
NAVICULA	CAPITATA	HUNGARICA	227	.	.	X	.	X	X	X	X	.	X	X	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	X	X	X	.	.	.	X	14
CALONEIS	VENTRICOSA	GENUINA	53	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	X	X	.	.	.	X	.	.	.	X	X	.	.	X	X	X	.	X	.	.	.	X	.	.	X	.	.	X	.	.	X	.	.	.	.	.	14
NITZSCHIA	SPP	(GV)	318	.	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	X	X	X	.	X	.	X	X	X	.	X	.	.	.	.	X	.	.	X	.	14
FRAGILARIA	PINNATA	LANCETTULA	154	.	.	.	.	.	.	.	.	X	.	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	.	.	.	X	X	X	X	X	X	X	.	X	.	.	.	X	.	14
PINNULARIA	INFLATA	GENUINA	341	.	.	.	.	.	.	.	.	.	.	.	X	X	.	X	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	.	X	X	X	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	14
RHOICOSPHENIA	CURVATA	CURVATA	368	X	.	X	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	X	.	.	.	X	X	X	.	X	14
STAURONEIS	LIVINGSTONII	LIVINGSTONII	376	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	X	.	X	X	X	X	.	.	.	.	.	X	.	.	.	.	.	.	.	.	14
STENOPTEROBIA	ARCTICA		381	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	X	X	X	X	X	X	.	.	.	.	X	X	.	.	.	.	.	.	.	.	14
SYNEDRA	ULNA	SUBAEQUALIS	422	.	.	.	.	.	.	.	X	X	.	.	.	X	X	.	.	X	.	X	X	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	X	X	.	X	X	.	.	.	.	14
EUNOTIA	SERRA	DIADEMA	136	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	X	.	.	.	.	.	.	.	.	.	X	X	X	X	X	X	X	X	X	.	.	X	.	.	.	.	X	X	X	.	X	.	.	.	.	14
CYMBELLA	HUNGARICA	SIGNATA	86	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	X	.	.	X	.	.	X	X	.	X	.	X	.	.	.	.	X	X	.	X	13
CALONEIS	BACILLUM	FONTINALIS	45	.	X	X	.	.	.	.	.	.	.	X	.	.	.	X	.	.	.	.	X	.	.	.	.	.	.	X	.	.	X	.	.	.	.	.	.	.	X	X	.	.	.	X	X	.	.	.	X	.	.	.	.	.	.	.	X	13
NITZSCHIA	SCALARIS		311	X	X	X	X	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	X	X	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	X	X	.	.	.	X	.	.	.	.	.	.	.	X	13
PINNULARIA	FLEXUOSA		338	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.	X	.	.	.	X	X	.	.	X	.	.	.	X	.	.	X	X	X	.	.	X	.	.	.	X	.	.	.	.	X	.	13
STAURONEIS	ANCEPS	AMERICANA	373	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	X	.	.	X	.	.	.	.	.	.	.	.	.	.	X	X	.	X	X	.	.	X	.	.	X	X	X	.	.	X	.	.	X	.	.	.	.	.	X	.	.	13
STEPHANODISCUS	NIAGARAE		388	X	X	.	X	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	X	.	.	.	.	X	13
SYNEDRA	CAPITATA	CAPITATA	404	.	.	.	.	X	X	.	X	X	X	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	X	X	.	.	.	.	.	13
SYNEDRA	CYCLOPUM	CYCLOPUM	405	X	X	X	.	X	X	.	X	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.	X	X	13
SYNEDRA	DELICATISSIMA	ANGUSTISSIMA	406	.	X	X	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	X	X	X	X	13
ACHNANTHES	DIVERGENS		8	X	X	X	X	X	X	X	.	X	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	X	.	.	.	.	.	.	.	13
NAVICULA	CAPITATA	CAPITATA	226	X	.	.	X	.	.	.	X	.	.	X	.	.	X	X	X	.	.	.	.	.	.	.	X	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	12
NAVICULA	HASTA		240	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	.	X	.	.	.	X	X	X	.	X	.	.	.	.	.	.	.	.	.	.	.	12
EUNOTIA	ARCUS	ARCUS	119	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	X	.	X	X	.	X	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	12
CYMBELLA	HYBRIDA	CAPITATA	87	.	.	.	.	.	.	.	.	.	.	X	.	X	X	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	X	X	X	X	X	.	.	.	.	.	.	.	.	.	.	.	X	.	.	12
GOMPHONEMA	PARVULUM	SUBELLIPTICUM	186	.	.	X	.	.	.	.	.	.	.	.	.	.	X	X	X	X	.	.	X	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.	X	.	12
PINNULARIA	BIGLOBOSA	GENUINA	326	.	.	.	.	.	.	X	.	.	.	.	X	X	X	X	X	.	.	X	X	.	X	.	.	X	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	12
PINNULARIA	LATEVITTATA	DOMINGENSIS	344	.	.	.	.	X	.	.	.	.	.	.	X	X	.	.	X	.	.	.	.	X	.	X	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	.	.	X	X	.	12
CALONEIS	TRUCHUS	SCHILBERSZKYI	51	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	X	.	.	.	X	.	.	.	.	X	.	.	.	X	.	.	.	.	X	X	.	12
PINNULARIA	STOMATOPHORA	STOMATOPHORA	360	.	.	.	.	X	.	.	.	.	.	X	.	.	X	.	.	.	.	.	X	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	X	.	.	.	.	.	.	.	.	.	X	.	.	.	X	.	12
GOMPHONEMA	ACUMINATUM	PANTOCSEKII	170	.	.	.	.	.	.	.	.	X	.	.	.	.	X	X	.	.	.	X	.	.	.	X	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	.	X	.	.	X	.	.	.	.	.	X	.	12
FRAGILARIA	BICAPITATA	BICAPITATA	139	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.	.	.	X	X	X	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	X	X	.	X	.	.	.	.	.	.	X	.	12
GOMPHONEMA	PARVULUM	MICROPUS	185	.	.	X	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	X	X	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	X	.	11
PINNULARIA	CARDINALICULUS	CARDINALICULUS	332	.	.	.	.	X	.	X	X	.	.	.	.	X	.	X	X	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	X	.	11
CYMBELLA	ASPERA	GENUINA	73	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	.	.	X	X	.	X	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	X	.	X	.	11
PINNULARIA	SUBCAPITATA	SUBCAPITATA	361	.	.	.	X	.	.	.	.	.	.	.	.	.	X	.	.	X	X	X	X	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	X	.	.	.	11
PINNULARIA	VIRIDIS	VIRIDIS	364	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	X	X	.	.	.	.	X	X	X	.	X	.	.	.	.	X	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	11
SYNEDRA	FILIFORMIS	EXILIS	408	.	.	.	.	.	.	.	X	X	.	X	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	11
COCCONEIS	PLACENTULA	EUGLYPTA	59	.	.	X	.	.	.	.	.	.	.	X	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	X	X	.	X	.	X	X	.	.	11
NAVICULA	SUBTILISSIMA	SUBTILISSIMA	271	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	X	X	X	X	.	X	.	X	X	X	.	X	X	X	X	X	.	.	.	.	11
PINNULARIA	ACUMINATA	GENUINA	321	.	X	.	.	X	.	X	.	.	.	X	.	.	.	.	.	.	.	.	X	X	X	.	.	X	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	X	.	.	.	.	.	10
PINNULARIA	INTERMEDIA	INTERMEDIA	342	.	.	.	X	.	.	X	.	.	.	.	.	X	X	.	X	.	.	.	X	.	X	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	10
FRAGILARIA	BREVISTRIATA	CAPITATA	141	.	.	.	.	.	.	.	.	X	X	X	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	X	X	.	X	.	.	.	.	.	10
CAMPYLODISCUS	HIBERNICUS	ARMATUS	56	.	.	.	.	X	X	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	10
NAVICULA	MONOCULATA		248	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	X	.	.	.	X	X	.	.	.	X	X	.	.	.	.	.	.	X	.	.	.	.	X	.	.	9
ACHNANTHES	DEPRESSA		6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	.	X	X	X	X	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	9
DIATOMA	TENUE	ELONGATUM	100	.	.	X	.	.	.	.	X	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	X	X	X	X	.	X	X	X	X	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	9
STAURONEIS	ACUTA	ACUTA	371	.	.	.	.	.	.	.	.	.	.	X	.	X	.	X	X	X	.	.	.	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	X	X	.	.	.	.	.	X	.	.	.	X	X	9
STAURONEIS	STODDERI	STODDERI	380	.	.	.	.	.	.	X	.	.	.	.	.	.	X	X	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	X	X	X	.	X	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	9
ACHNANTHES	(N)MINUTISSIMA	MACROCEPHALA	25	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	X	X	.	X	X	.	.	.	9
MELOSIRA	MIKKELSENII	(N)MELOSIRAAGASSIZI	216	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	X	X	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	9
MELOSIRA	ITALICA	SUBARCTICA	214	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	9
MELOSIRA	GRANULATA	ANGUSTISSIMA	209	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	.	.	X	X	X	.	.	X	.	9
NAVICULA	ELGINENSIS	ELGINENSIS	234	.	.	.	.	.	X	.	.	.	.	.	.	.	.	X	.	.	.	.	X	.	X	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	X	.	9
ACHNANTHES	KRYOPHILA		14	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	X	X	.	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	8
EUNOTIA	MEISTERI		129	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	X	X	.	.	.	X	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	8
EPITHEMIA	SOREX	ACUTA	114	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	X	X	.	X	X	X	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	8
CYMBELLA	SINUATA	TYPICA	91	.	.	.	.	X	X	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	X	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	.	.	.	.	.	.	.	.	8
PINNULARIA	DIVERGENS	DIVERGENS	335	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	X	.	.	X	.	X	.	X	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	8
ACHNANTHES	SUCHLANDTI		28	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	X	X	.	X	X	.	.	.	.	.	.	.	.	X	.	X	.	8
SYNEDRA	RUMPENS	FAMILIARIS	417	.	.	X	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	X	X	8
FRUSTULIA	RHOMBOIDES		158	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	.	X	X	.	.	.	.	X	X	.	.	.	.	X	.	X	X	8
MELOSIRA	GRANULATA	(1)	210	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	X	X	X	X	X	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	8
NAVICULA	PEREGRINA	PEREGRINA	252	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	X	X	7
FRUSTULIA	VULGARIS	VULGARIS	163	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	X	.	X	X	.	.	X	.	.	X	.	.	7
CYMBELLA	AEQUALIS		70	.	.	.	.	.	X	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	7
NAVICULA	ELGINENSIS	LATA	235	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.	X	.	.	X	.	.	.	X	.	7
EPITHEMIA	ARGUS	GENUINA	110	.	.	.	.	.	.	.	X	X	X	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	.	X	.	X	.	.	.	.	.	.	.	.	.	7
ACHNANTHES	DIDYMA		7	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	X	X	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	7
EUNOTIA	FLEXUOSA	EURYCEPHALA	125	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	.	.	X	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	7
MELOSIRA	UNDULATA		219	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	X	X	7
ACHNANTHES	LAPPONICA	FENNICA	18	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	X	.	.	X	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	7
GOMPHONEMA	SUBTILE	ROTUNDATUM	169	X	.	.	.	.	.	.	.	X	.	.	.	X	X	X	X	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	7
CYMBELLA	EHRENBERGII	HUNGARICA	82	.	.	.	.	.	.	.	.	.	.	.	X	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	X	.	.	.	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	7
TETRACYCLUS	LACUSTRIS	LACUSTRIS	426	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	7
MELOSIRA	GRANULATA	(N)MELOSIRAAGASSIZI	211	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	X	X	X	X	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	7
NEIDIUM	PRODUCTUM	PRODUCTUM	294	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	7
NAVICULA	DETENTA		231	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	6
DIPLONEIS	OBLONGELLA	OBLONGELLA	105	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	X	X	X	.	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	6
COCCONEIS	DIMINUTA		57	X	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	6
CYCLOTELLA	KUTZINGIANA	PLANETOPHORA	65	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	6
FRAGILARIA	BREVISTRIATA	BREVISTRIATA	140	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	X	.	.	.	.	.	.	.	.	.	6

LAKE CODE

			SEQ TAXON CODE	01	02	03	04	05A	05B	06	07	08	09	10	11	12	13	14A	14B	15	16	17	18	19	20	21A	21B	22	23	24	25	26	27A	27B	28	29A	29B	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	
																																			.	.	.	.	X	X	.	X	.	X	.	.	X	.	.	.	.	.	X	.	.	.	.	.	.	6
STAURONEIS	ANCEPS	ANCEPS	372	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	6
GOMPHONEMA	SUBTILE	TYPICUM	188	.	.	.	.	.	.	.	.	.	X	.	X	X	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	6
SURIRELLA	HELVETICA		393	.	.	.	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	6
CALONEIS	BACILLUM	INCONSTANTISSIMA	46	.	.	.	.	.	.	.	X	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	6
SYNEDRA	PULCHELLA	LACERATA	414	X	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	.	.	X	.	.	.	.	.	.	6
FRAGILARIA	CAPUCINA	MESOLEPTA	144	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.	X	.	.	6
MELOSIRA	DISTANS	(N)HUMILIS	202	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	.	X	X	.	.	.	.	.	.	.	X	.	.	.	.	.	.	6
ACHNANTHES	AFFINIS	AFFINIS	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	5
NAVICULA	VULPINA	VULPINA	278	.	.	.	.	.	.	.	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	.	.	.	.	.	.	.	X	5
NAVICULA	HUSTEDTII	OBTUSA	242	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	5
NITZSCHIA	LANCEOLATA	MINIMA	308	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	X	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	5
ANOMOEONEIS	SERIANS	SERIANS	40	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	5
PINNULARIA	BICEPS	BICEPS	323	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	X	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	5
PINNULARIA	BRAUNII	BRAUNII	329	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	X	.	.	.	.	.	.	.	.	.	.	5
COCCONEIS	PLACENTULA	LINEATA	60	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	X	.	.	.	X	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	5
PINNULARIA	DISTINGUENDA		333	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	5
AMPHORA	OVALIS	TYPICA	35	.	.	.	.	X	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	X	X	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	5
NAVICULA	RADIOSA	SUBROSTRATA	261	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	5
SURIRELLA	MUELLERIANA	BIROSTRATA	395	.	.	.	.	.	.	.	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	5
SURIRELLA	TENERA	NERVOSA	400	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	5
NAVICULA	SEMEN	SEMEN	268	.	X	.	X	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	.	.	.	.	5
GOMPHONEMA	MONTANUM	ACUMINATUM	163	.	.	.	.	.	.	.	.	.	.	X	.	.	X	.	X	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	5
NAVICULA	GRACILLOIDES	GRACILOIDES	237	X	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	X	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	5
MELOSIRA	DISTANS	(N)EXIGUA	201	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	X	.	X	.	X	.	X	.	.	.	.	5
GOMPHONEMA	LANCEOLATUM	INSIGNIS	181	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	X	.	X	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	5
DIPLONEIS	SMITHII	SMITHII	107	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	X	.	.	.	.	.	.	.	.	.	.	4
ACHNANTHES	HUNGARICA	HUNGARICA	13	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	.	.	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	4
FRAGILARIA	CONSTRICTA	CONSTRICTA	145	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4
EPITHEMIA	SOREX	GENUINA	113	X	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4
NITZSCHIA	GANDERSHEIMIENSIS		303	.	.	.	.	.	.	.	X	X	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	4
NITZSCHIA	HEUFLERIANA		305	.	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	.	.	.	.	.	.	.	.	4
PINNULARIA	ACUMINATA	(I)	322	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	X	.	.	X	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	4
PINNULARIA	POLYONCA		353	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4
PINNULARIA	SOCIALIS	SOCIALIS	355	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.	.	X	.	.	.	.	.	.	4
EUNOTIA	PRAERUPTA	BIDENS	135	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4
PINNULARIA	STAUROPTERA	RECTA	359	.	.	.	.	.	.	X	.	X	.	.	.	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	4
CALONEIS	BACILLUM	SUBCUNEATA	48	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	4
NAVICULA	OBLONGA	OBLONGA	251	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	X	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	4
EUNOTIA	VALIDA	VALIDA	137	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4
GYROSIGMA	ATTENUATUM	ATTENUATUM	192	.	.	.	.	.	.	.	.	X	X	X	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	4
SYNEDRA	NANA	GENUINA	411	.	.	.	.	.	.	.	X	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4
CYMBELLA	TUMIDA	GENUINA	92	.	.	X	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	4
STEPHANODISCUS	INVISITATUS		367	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3
ANOMOEONEIS	FOLLIS	FOLLIS	39	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3
ACHNANTHES	HOLSTII		12	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3
ACHNANTHES	PERAGALLI	PERAGALLI	26	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	3
NAVICULA	VARIOSTRIATA	VARIOSTRIATA	273	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	3
FRAGILARIA	CONSTRUENS	VENTER	149	.	.	.	.	.	.	.	.	X	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3
EUNOTIA	MAJOR	MAJOR	128	.	.	.	.	.	.	.	.	X	.	.	.	.	X	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	3
PINNULARIA	VIRIDIS	FALLAX	365	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	X	.	3
NITZSCHIA	FILIFORMIS	ELONGATA	300	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	3
FRAGILARIA	VAUCHERIAE	GRACILIOR	156	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3
NEIDIUM	IRIDIS	IRIDIS	291	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3
SURIRELLA	ROBUSTA	NOBILIS	398	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	X	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	3
SURIRELLA	ROBUSTA	(I)	399	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	3
FRUSTULIA	RHOMBOIDES	AMPHIPLEUROIDES	160	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	X	.	.	.	.	X	.	3
GYROSIGMA	OBSCURUM	OBSCURUM	193	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	3
NITZSCHIA	GRACILIS	BREVIOR	304	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3
SYNEDRA	RUMPENS	RUMPENS	416	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	3
EPITHEMIA	PROBOSCIDEA	TYPICA	111	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3
NEIDIUM	BISULCATUM	BAICALENSE	287	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3
CALONEIS	SILICULA	LIMOSA	50	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	3
NEIDIUM	IRIDIS		290	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3
CYMBELLA	MEXICANA		88	X	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	3
SYNEDRA	AMPHICEPHALA	AMPHICEPHALA	403	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
PINNULARIA	DIVERGENTISSIMA	DIVERGENTISSIMA	337	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
MASTOGLOIA	SMITHII	LACUSTRIS	199	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	2
CYMBELLA	ANGUSTATA	INAEQUILATERA	72	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	2
PINNULARIA	MAJOR	MAJOR	347	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	2
MELOSIRA	ROESEANA		217	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
PINNULARIA	NOBILIS		351	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
PINNULARIA	RUTTNERI	RUTTNERI	354	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	X	.	2
NAVICULA	LEVANDERI		246	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
DIPLONEIS	SPP	(GV)	108	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
NAVICULA	(N)LEVANDERI		247	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
SEMIORBIS	HEMICYCLUS	HEMICYCLUS	370	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
CYMBELLA	CUSPIDATA	ELLIPTICA	79	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	2
DIATOMA	SPP	(GV)	101	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
SURIRELLA	GUATIMALENSIS		392	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
SURIRELLA	LINEARIS	CONSTRICTA	394	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
EUNOTIA	BIGIBBA	PUMILLA	120	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	2
EUNOTIA	MONODON	MONODON	130	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
CYMATOPLEURA	SOLEA	GENUINA	69	.	.	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
NAVICULA	VITAJUNDA		277	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	2
TETRACYCLUS	LACUSTRIS	STRUMOSUS	427	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	2
CALONEIS	TROCHUS	TRINODIS	52	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2

LAKE CODE

			SEQ TAXON CODE
PINNULARIA	UNDULATA	STAURONEIFORMIS	363
NAVICULA	DIGNA		232
NAVICULA	SUBHAMULATA	SUBHAMULATA	270
FRAGILARIA	LEPTOSTAURON	LEPTOSTAURON	152
NITZSCHIA	KUTZINGIANA		306
FRAGILARIA	CONSTRUENS	BINODIS	147
CYCLOTELLA	OCELLATA		67
AMPHORA	VENETA		38
SURIRELLA	OVATA	PINNATA	396
NAVICULA	SCUTELLOIDES	SCUTELLOIDES	266
CYMBELLA	AMPHIOXYS		71
PINNULARIA	BIPECTINALIS	TYPICA	327
FRUSTULIA	REINHOLDII	REINHOLDII	164
NAVICULA	RHYNCHOCEPHALA	AMPHICEROS	264
DIATOMELLA	BALFOURIANA	BALFOURIANA	102
PINNULARIA	DIVERGENS	ELLIPTICA	336
CALONEIS	VENTRICOSA	INTERMEDIA	54
PINNULARIA	SUDETICA	LEPTOGONGYLA	362
RHIZOSOLENIA	LONGISETA		367
NITZSCHIA	THERMALIS	MINOR	315
PINNULARIA	GENTILIS		339
GOMPHONEMA	ACUMINATUM	BREBISSONII	166
ACTINELLA	PUNCTATA	PUNCTATA	31
EPITHEMIA	ARGUS	(GV)	109
MASTOGLOIA	SMITHII	AMPHICEPHALA	198
CALONEIS	BACILLUM	SUBUNDULATA	49
PINNULARIA	HEMIPTERA	ATTENUATA	340
NEIDIUM	AFFINE	HUMEROS	264
NEIDIUM	AFFINE	LONGICEPS	285
SYNEDRA	FASCICULATA	FASCICULATA	407
SYNEDRA	INCISA	INCISA	409
FRAGILARIA	CONSTRUENS	EXIGUA	146
EUNOTIA	(N)BIGIBBA		121
EPITHEMIA	SOREX	(GV)	112
NEIDIUM	BISULCATUM	BISULCATUM	286
SYNEDRA	ULNA	DANICA	421
PINNULARIA	LATA	LATA	343
GOMPHONEMA	ACUMINATUM	GENUINUM	167
NEIDIUM	AFFINE	AMPHIRHYNCHUS	263
MELOSIRA	(AUXOSPORE)		221
PINNULARIA	LATICEPS	SPHAEROCEPHALA	345
NAVICULA	NYASSENSIS	CAPITATA	250
MELOSIRA	GRANULATA		208
CYMBELLA	(N)DIFFERTA		80
CALONEIS	BACILLUM	(N)LANCETTULA	47
NAVICULA	PUPULA	MINUTA	258
CYCLOTELLA	GAMMA		63
AMPHORA	OVALIS	(1)	36
GOMPHONEMA	PARVULUM	(N)LAGENULA	167
GOMPHONEMA	(N)LANCEOLATUM		160
PINNULARIA	BREVICOSTATA	BREVICOSTATA	331
GOMPHONEMA	CONSTRICTUM	SUBCAPITATUM	177
STEPHANODISCUS	ASTRAEA		383
NITZSCHIA	SINUATA	TABELLARIA	314
PINNULARIA	MESOLEPTA	MESOLEPTA	349
HANTZSCHIA	ELONGATA		197
SYNEDRA	PULCHELLA	PULCHELLA	413
NAVICULA	SCUTIFORMIS	SCUTIFORMIS	267
SYNEDRA	TENERA	TENERA	418
CYMBELLA	HETEROPLEURA	MINOR	65
NEIDIUM	HERCYNICUM	SUBROSTRATUM	288
DESMOGONIUM	RABENHORSTIANUM	ELONGATUM	98
FRUSTULIA	SPP	(GV)	165
SURIRELLA	ANGUSTATA		389
GYROSIGMA	SPP	(GV)	195
STAURONEIS	SMITHII	SMITHII	379
NAVICULA	TUSCULA	CAPITATA	272
COCCONEIS	(1)		61
MELOSIRA	ITALICA	(1)	215
NAVICULA	MUTICA	MUTICA	249
EUNOTIA	PRAERUPTA	PRAERUPTA	134
SURIRELLA	TURGIDA		401
NITZSCHIA	(N)VERMICULARIS		317
ACHNANTHES	(N)THIENEMANNI		29
NAVICULA	(2)		260
ACHNANTHES	SUBLAEVIS	CRASSA	27
GOMPHONEMA	LONGICEPS	SUBCLAVATA	162
PINNULARIA	DIVERGENS		334
GOMPHONEMA	AUGUR	GAUTIERI	174
NITZSCHIA	LANCEOLATA		307
ACHNANTHES	BICAPITATA		2
NAVICULA	HUSTEDTII	HUSTEDTII	241
FRAGILARIA	LAPPONICA	LAPPONICA	151

ummary of the most abundant diatom taxa counted in each of the 56 lakes basin samples, where counts are normalized by sediment weight and summed over 125 fields.

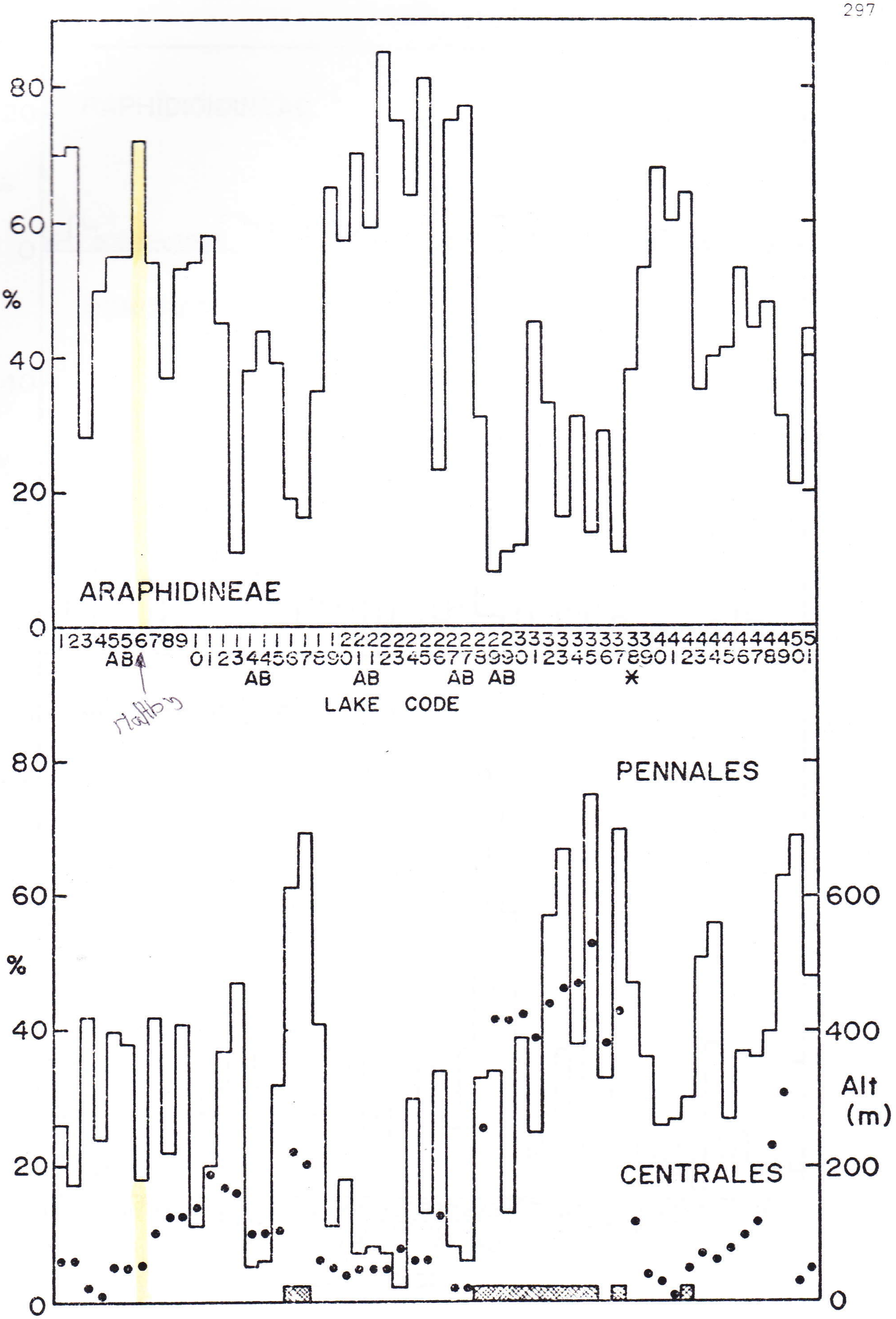
Table 37. Continued.

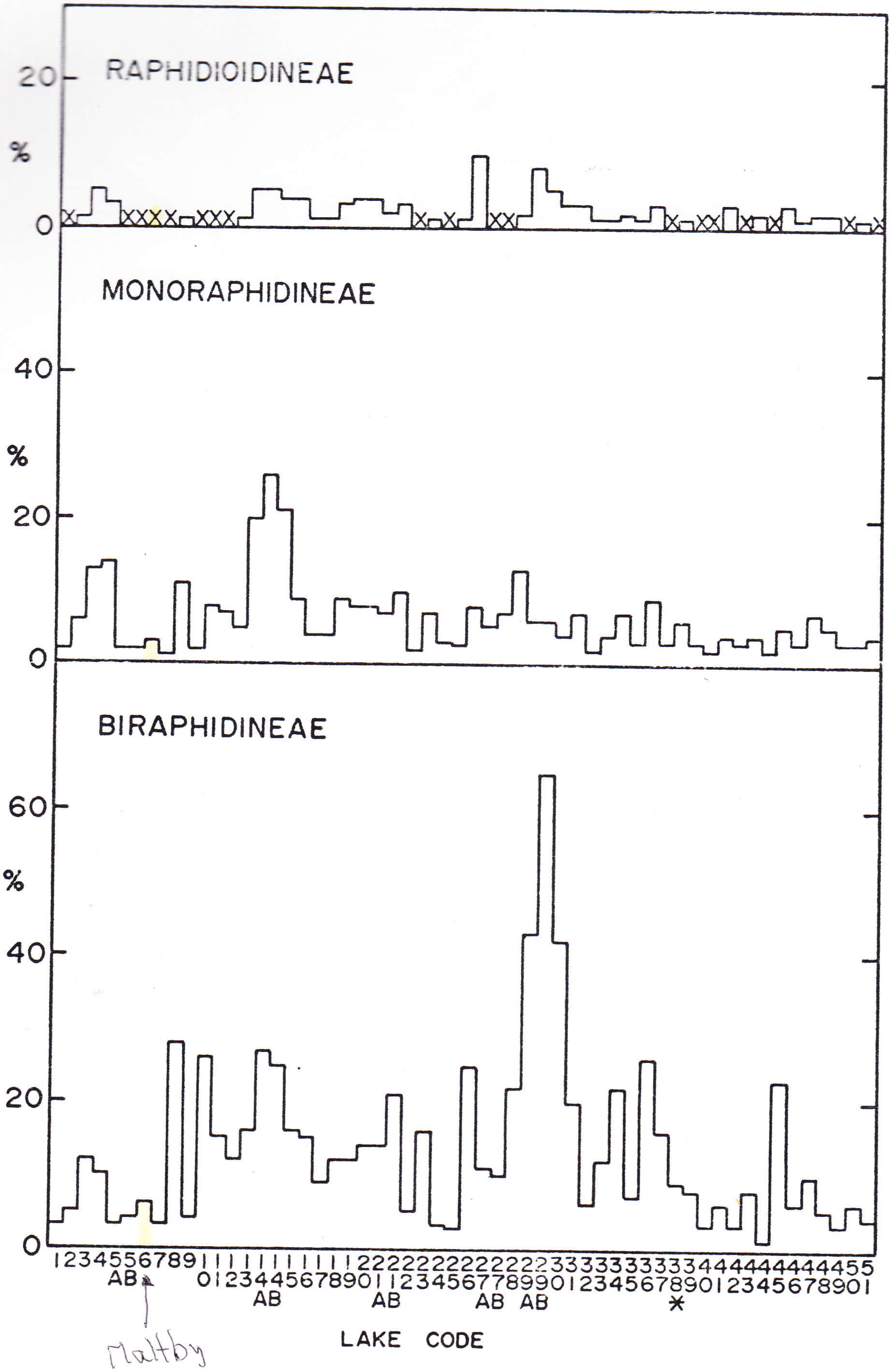
Rank	Seq Taxon Code	x/w	%	Cum %	Rank	Seq Taxon Code	x/w	%	Cum %
Maltby (14/02/73)					Killarney (09/09/72)				
1	153A	540.56	51.46	51.46	1	044A	199.48	42.37	42.37
2	068C	140.92	13.42	64.88	2	385C	75.98	16.14	58.50
3	044A	115.78	11.02	75.90	3	203C	53.66	11.40	69.90
4	142A	38.66	3.68	79.58	4	068C	29.98	6.37	76.27
5	213C	30.00	2.86	82.43	5	204C	19.95	4.24	80.51
6	150A	21.06	2.01	84.44	6	153A	15.93	3.38	83.89
123	Taxa	163.41	15.56	100	104	Taxa	75.87	16.11	100
		Σ1050.45	100				Σ470.82	100	
Heal (16/04/73)					Durrance (17/08/72)				
1	044A	40.86	16.33	16.33	1	153A	101.32	26.96	26.96
2	068C	37.99	15.18	31.51	2	044A	66.54	17.71	44.67
3	386C	17.30	6.91	38.43	3	068C	65.28	17.37	62.04
4	150A	13.68	5.47	43.89	4	064C	65.24	17.36	79.40
5	008M	10.77	4.30	48.20	5	062C	23.57	6.27	85.67
6	153A	7.94	3.18	51.37	6	146A	18.90	5.03	90.70
7	296B	6.99	2.79	54.16	7	141A	10.00	2.66	93.36
8	237B	6.69	2.68	56.84	77	Taxa	24.95	6.64	100
9	149A	5.77	2.31	59.14			Σ375.79	100	
10	297B	5.65	2.26	61.40					
11	316B	5.01	2.00	63.40					
103	Taxa	91.58	36.59	100					
		Σ250.22	100						
Pease (15/04/73)					Third (23/02/73)				
1	153A	80.50	35.74	35.74	1	153A	203.14	45.88	45.88
2	146A	14.90	6.61	42.35	2	068C	49.77	11.24	57.11
3	141A	10.14	4.50	46.85	3	146A	46.44	10.49	67.60
4	200C	9.56	4.24	51.10	4	213C	19.07	4.31	71.91
5	044A	8.29	3.68	54.78	5	030M	11.70	2.64	74.55
6	213C	6.87	3.05	57.83	6	279B	9.14	2.06	76.61
7	204C	6.83	3.03	60.86	107	Taxa	103.58	23.31	100
8	020M	5.14	2.28	63.14			Σ442.82	100	
9	310B	4.56	2.02	65.16					
130	Taxa	78.44	34.83	100					
		Σ225.23	100						

Table 38. Generic composition of diatom counts from profundal surface sediments of 56 lake basins on southern Vancouver Island and Saltspring Island. Lake codes are given in Table 20, and counts are normalized by sediment weight (except Shawnigan) and summed over 125 fields for each basin.

	ELK	1	BEAVER	2	BLENKINS	3	SWAN	4	PROSPECT	5A	PROSPECT	5B	MALTBY	6
GENUS	TAXA	X/W	TAXA	X/W	TAXA	X/W	TAXA	X/W	TAXA	X/W	TAXA	X/W	TAXA	X/W
ACHNANTHES	10	2.93	9	13.11	10	13.41	9	4.60	10	6.55	10	6.35	14	33.84
ACTINELLA	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
AMPHIPLEURA	0	0.0	1	0.12	0	0.0	0	0.0	1	0.07	1	0.02	0	0.0
AMPHIPRORA	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.07	1	0.10
AMPHORA	2	0.12	2	0.82	1	0.25	2	0.07	3	0.50	2	0.62	1	0.98
ANOMOEONEIS	0	0.0	0	0.0	1	0.05	0	0.0	1	0.09	1	0.09	2	1.63
ASTERIONELLA	1	15.83	1	28.11	1	24.51	1	38.65	1	39.82	1	30.64	1	115.78
CALONEIS	2	0.05	1	0.11	1	0.14	0	0.0	0	0.0	2	0.12	1	0.08
CAMPYLODISCUS	0	0.0	0	0.0	0	0.0	0	0.0	1	0.02	1	0.04	1	0.15
COCCONEIS	2	2.68	1	11.98	3	23.48	1	13.45	1	1.00	1	1.03	2	2.21
CYCLOTELLA	3	13.92	4	3.67	2	21.98	3	21.10	4	29.06	3	16.88	2	146.29
CYMATOPLEURA	0	0.0	0	0.0	0	0.0	0	0.0	1	0.02	0	0.0	0	0.0
CYMBELLA	8	0.47	9	1.32	5	0.76	2	0.18	10	1.12	9	0.93	7	4.96
DESMOGONIUM	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
DIATOMA	0	0.0	0	0.0	1	0.53	0	0.0	0	0.0	0	0.0	0	0.0
DIATOMELLA	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
DIPLONEIS	3	0.12	0	0.0	0	0.0	0	0.0	3	0.84	3	0.78	3	1.04
EPITHEMIA	5	0.72	4	2.66	5	3.57	3	0.44	4	1.30	4	0.94	3	1.38
EUNOTIA	2	0.28	5	3.34	7	14.39	5	3.20	1	0.34	3	0.35	7	5.10
FRAGILARIA	7	193.67	7	258.54	6	45.84	5	17.88	8	157.25	7	145.35	8	625.69
FRUSTULIA	0	0.0	0	0.0	0	0.0	1	0.03	1	0.02	1	0.02	2	0.31
GOMPHONEMA	2	0.44	5	1.93	7	4.40	8	1.84	4	1.45	5	1.09	6	3.68
GYROSIGMA	1	0.04	0	0.0	0	0.0	1	0.10	0	0.0	1	0.02	1	0.13
HANTZSCHIA	0	0.0	1	0.03	0	0.0	1	0.11	0	0.0	0	0.0	0	0.0
MASTOGLOIA	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
MELOSIRA	3	28.57	2	4.29	9	53.67	7	6.42	9	116.51	8	101.80	7	47.36
MERIDION	0	0.0	0	0.0	1	0.32	1	0.87	0	0.0	0	0.0	0	0.0
NAVICULA	21	3.02	16	4.28	12	14.27	11	3.29	18	2.88	22	2.86	22	20.75
NEIDIUM	1	0.02	1	0.41	1	0.10	0	0.0	2	0.05	2	0.04	4	0.59
NITZSCHIA	8	0.80	10	4.02	9	5.08	10	2.88	8	1.67	10	1.35	8	8.82
OPEPHORA	1	1.11	0	0.0	0	0.0	0	0.0	1	0.29	1	0.28	1	2.33
PINNULARIA	3	0.94	4	1.65	5	4.09	5	2.22	8	1.74	7	2.05	14	10.59
RHIZOSOLENIA	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
RHOICOSPHENIA	1	0.14	0	0.0	1	0.21	1	0.06	0	0.0	0	0.0	0	0.0
RHOPALODIA	1	0.41	1	1.21	1	0.47	1	0.03	1	0.39	1	0.70	1	1.69
SEMIORBIS	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
STAURONEIS	2	0.12	3	0.39	4	1.29	3	0.41	1	0.02	3	0.24	2	0.54
STENOPTEROBIA	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.54
STEPHANODISCUS	4	36.27	4	58.46	4	47.89	5	2.19	4	20.91	4	17.34	0	0.0
SURIRELLA	3	0.24	3	0.38	0	0.0	2	0.77	3	0.96	5	1.14	3	1.36
SYNEDRA	3	0.19	3	0.40	7	7.20	4	4.72	3	2.06	3	1.68	2	2.10
TABELLARIA	0	0.0	1	0.05	2	0.35	1	0.35	1	26.29	1	16.92	2	10.47
TETRACYCLUS	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTALS	99	303.10	98	401.51	106	292.26	93	125.88	113	413.23	123	351.75	129	1050.47

Figure 29. Taxonomic composition at the order and suborder level of profundal surface sediment diatoms from 56 lake basins on southern Vancouver Island and Saltspring Island. Lake codes are from Table 20; values are percent total cells where all but Shawnigan Lake (*) counts were normalized by sediment weight; shaded underline indicates values of total alkalinity were $\leq$15 mg/l $CaCO_3$ and Ca $\leq$5.2 mg/l; and ● indicates altitude.


ARAPHIDINEAE
%
80
60
40
20
0
LAKE CODE
Maltby
PENNALES
CENTRALES
Alt (m)
600
400
200
0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LAKE CODE
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