

Appendix A.2

Average transect length (Transect, in meters), buffer width (Buffer, in meters), percent canopy cover (Canopy), percent cover by trees (Trees), percent cover by shrubs (Shrubs), percent cover by herbs (Herbs) and percent bare (Bare).

Site code	Transect	Buffer	Canopy	Trees	Shrubs	Herbs	Bare
ALE-01	70	13	1	68	13	23	23
ALE-02	69	50	2	92	20	0	0
CHA-01	21	48	60	79	19	26	0
CHA-02	46	32	13	77	21	50	50
CHA-03	22	26	28	64	30	41	0
CYP-01	57	40	21	100	0	0	0
FAN-01	41	8	50	46	30	25	35
GAI-01	14	25	88	70	20	30	13
GAI-02	25	26	36	31	44	20	12
GUR-01	22	0	14	20	10	0	94
HOM-01	37	7	7	81	33	11	30
ICH-01	20	38	65	60	32	20	15
ICH-02	25	40	49	71	43	34	7
ICH-03	11	47	83	71	23	22	0
ICH-04	19	50	31	72	48	18	5
ICH-05	39	50	16	60	52	34	0
ICH-06	18	50	83	79	60	28	0
ICH-07	20	50	64	74	15	26	7
ICH-08	21	50	73	72	14	14	32
IND-01	27	7	40	66	0	0	85
JAC-01	77	4	0	49	0	0	60
JAC-02	175	27	0	89	15	40	10
JAC-03	200	26	1	87	18	10	9
JUN-01	17	2	66	50	20	45	65
JUN-02	19	4	96	53	40	38	0
JUN-03	8	50	90	63	21	36	0
JUN-04	26	48	2	40	33	22	26
LAF-01	18	1	70	20	14	0	66
LTR-01	26	1	0	34	10	17	52
MAD-01	16	1	72	28	0	10	66
MNT-01	32	10	63	72	0	0	47
PON-01	13	5	74	39	27	21	47
RAI-01	45	26	3	82	35	0	0
RAI-02	42	13	4	71	10	30	20
RAI-03	44	4	7	71	40	34	42
RAI-04	31	10	19	67	0	25	28
SGL-01	95	4	0	56	14	29	14
SLV-01	56	6	5	45	0	45	76
SLV-02	49	12	6	68	15	35	50
SLV-03	40	41	17	99	10	0	0
SLV-04	35	50	14	98	20	0	0
SLV-05	26	50	38	94	15	0	0
TRY-01	48	11	7	36	40	10	22
TUT-01	19	50	54	25	56	0	24
VOL-01	23	24	58	72	35	25	40
VOL-02	21	33	32	76	22	15	0
WAC-01	47	31	11	94	20	20	10
WAC-02	81	50	0	100	20	0	0

Site code	Transect	Buffer	Canopy	Trees	Shrubs	Herbs	Bare
WAC-03	29	35	35	90	20	0	6
WAK-01	76	10	0	84	10	50	23
WAK-02	73	50	0	90	20	0	0
WAK-03	78	50	0	90	20	0	0
WEK-01	33	1	10	33	20	36	60
WEK-02	35	4	16	50	26	31	30
WEK-03	13	35	32	44	45	25	0
WEK-04	20	10	29	35	15	8	48
WGT-01	31	40	25	40	43	10	40
WIL-01	11	12	100	76	24	0	0
WKW-01	26	1	25	60	25	30	65
WKW-02	54	50	5	90	20	0	0

Appendix A.3

Average current velocity (CV; 0 indicates 0-5 cm/s, 1 indicates 5-15 cm/s, 2 indicates 16-50 cm/s), average depth (Depth, in meters), number of boils encountered during sampling (Boils), and percent of points where high density of grazers was present (Grazers).

Site code	CV	Fall			CV	Spring		
		Depth	Boils	Grazers		Depth	Boils	Grazers
ALE-01	0.0	1.1	1	0.0	0.0	1.1	2	0.0
ALE-02	0.0	0.9	0	0.0	0.0	1.0	0	0.0
CHA-01	0.1	0.6	4	0.0	0.6	0.7	3	0.0
CHA-02	0.0	1.3	1	0.0	0.0	1.0	1	0.0
CHA-03	0.5	0.6	2	0.0	0.2	0.6	1	0.0
CYP-01	0.0	1.6	1	64.2				
FAN-01	0.0	2.1	1	0.0				
GAI-01	1.0	1.4	1	23.6	1.5	1.4	1	6.7
GAI-02	0.0	1.6	1	16.0	0.0	1.6	1	1.2
GUR-01	0.0	1.5	1	0.0				
HOM-01	0.0	1.1	0	0.0	0.6	0.6	0	0.0
ICH-01	0.2	1.4	1	0.0	0.3	1.1	1	0.0
ICH-02	0.8	1.4	1	0.0	0.2	1.4	1	0.0
ICH-03	1.4	1.3	0	6.2	1.2	1.3	0	23.5
ICH-04	0.6	1.1	2	1.2	1.2	1.0	1	0.0
ICH-05	0.7	1.2	6	2.5	1.0	1.1	2	0.0
ICH-06	0.5	0.6	0	0.0	0.5	1.3	0	1.2
ICH-07	1.4	1.5	0	0.0	0.5	2.2	0	3.7
ICH-08	1.0	0.9	1	19.8	0.4	1.7	1	0.0
IND-01	0.0	1.5	1	0.0				
JAC-01	0.3	1.7	1	0.0	0.3	1.9	1	0.0
JAC-02	0.0	1.8	0	0.0	0.0	2.0	0	0.0
JAC-03	0.0	2.0	0	0.0	0.0	2.2	0	0.0
JUN-01	0.5	1.2	5	0.0	0.3	1.2	2	0.0
JUN-02	0.0	1.6	11	0.0	0.0	1.3	12	0.0
JUN-03	1.2	0.6	0	0.0	1.3	0.5	0	0.0
JUN-04	1.3	0.3	0	0.0	1.2	0.3	0	0.0
LAF-01	0.5	1.7	1	0.0				
LTR-01	0.0	1.5	1	0.0				
MAD-01	1.5	1.8	1	0.0				
MNT-01	0.6	1.7	1	0.0				
PON-01	0.3	1.0	2	28.4	0.0	1.3	1	0.0
RAI-01	0.0	2.0	1	0.0	0.0	2.1	1	0.0
RAI-02	0.0	2.2	1	0.0	0.0	2.3	4	0.0
RAI-03	0.5	1.3	0	0.0	0.6	1.3	0	0.0
RAI-04	0.6	2.3	0	1.2	0.6	2.4	0	0.0
SGL-01	0.0	1.4	1	0.0	0.0	1.3	1	0.0
SLV-01	0.0	2.8	2	0.0		2.1	2	0.0
SLV-02	0.0	2.2	0	0.0	1.3	1.7	2	0.0
SLV-03	0.4	2.6	0	0.0	1.5	2.0	1	0.0
SLV-04	0.8	2.4	0	0.0	1.2	1.8	0	1.2
SLV-05	0.5	2.4	0	0.0	1.1	2.1	0	0.0
TRY-01	0.0	3.9	1	0.0				
TUT-01	0.0	1.7	1	0.0				
VOL-01	0.9	1.4	1	0.0	0.6	1.5	3	0.0
VOL-02	1.0	1.4	0	1.2	0.5	1.2	0	0.0
WAC-01	0.2	1.5	3	0.0	0.3	1.5	1	0.0

Site code	CV	Fall			CV	Spring		
		Depth	Boils	Grazers		Depth	Boils	Grazers
WAC-02	0.5	1.2	0	0.0	0.6	1.4	0	0.0
WAC-03	0.0	2.0	1	0.0	0.3	2.1	1	0.0
WAK-01	0.0	5.1	1	1.2	1.0	3.8	1	1.2
WAK-02	0.5	1.1	0	0.0		1.1	0	0.0
WAK-03	0.6	0.7	0	0.0		0.8	0	0.0
WEK-01	0.2	2.4	1	4.9	0.7	2.0	1	2.5
WEK-02	1.0	1.3	0	3.7	0.8	1.1	0	0.0
WEK-03	1.9	1.4	0	0.0	1.8	1.1	0	0.0
WEK-04	0.0	1.6	0	0.0	0.6	1.3	0	0.0
WGT-01	0.0	1.6	1	4.9				
WIL-01	0.7	0.9	1	8.6				
WKW-01	0.3	1.1	1	0.0	0.1	1.4	1	0.0
WKW-02	0.1	1.9	0	0.0	0.1	2.1	0	0.0

Appendix A.4

Percent of different substrata found in the fall and in the spring (C – coarse particular organic matter, F-fine particular organic matter, H- shells, L – gyttja, R – rock, S – sand, W – wood).

Site code	Fall						Spring						
	C	F	L	R	S	W	C	F	H	L	R	S	W
ALE-01	2	26	0	2	100	0	0	27	0	0	1	86	0
ALE-02	9	21	0	0	86	1	0	21	7	0	0	80	0
CHA-01	21	27	0	48	49	4	9	30	0	0	48	33	0
CHA-02	37	75	0	5	30	0	4	60	0	0	2	36	2
CHA-03	0	0	0	41	63	0	0	56	0	0	25	16	0
CYP-01	4	1	0	6	84	1							
FAN-01	40	2	0	5	95	0							
GAI-01	0	0	0	38	64	1	2	2	0	0	52	69	2
GAI-02	15	16	0	0	91	0	19	23	0	0	5	90	0
GUR-01	12	78	0	0	83	1							
HOM-01	16	9	0	0	98	0	0	14	0	0	0	100	0
ICH-01	5	20	0	5	95	1	42	27	0	0	4	68	2
ICH-02	0	80	0	2	54	2	19	70	0	0	2	56	0
ICH-03	9	17	0	11	88	0	0	13	0	0	31	71	0
ICH-04	17	37	0	11	65	0	0	60	0	0	21	47	1
ICH-05	7	64	0	2	56	0	0	85	0	0	2	77	0
ICH-06	74	9	0	12	65	6	11	52	0	6	0	68	0
ICH-07	5	16	1	1	83	7	14	80	1	0	1	49	4
ICH-08	22	11	0	43	49	5	40	23	21	0	23	1	1
IND-01	22	84	0	9	37	0							
JAC-01	4	1	0	4	100	0	0	0	0	0	4	100	0
JAC-02	1	93	0	0	100	0	0	100	0	0	0	0	0
JAC-03	0	100	0	0	100	0	0	0	0	100	0	100	0
JUN-01	10	1	0	2	95	2	1	0	0	0	21	77	2
JUN-02	35	33	2	0	75	4	17	33	0	0	0	63	1
JUN-03	37	30	0	0	84	6	20	22	0	0	0	78	5
JUN-04	6	22	0	0	100	0	7	6	0	0	0	96	0
LAF-01	30	16	0	20	80	1							
LTR-01	1	27	0	7	95	2							
MAD-01	9	0	1	75	33	4							
MNT-01	68	6	0	4	94	1							
PON-01	20	14	0	5	95	1	26	0	0	0	7	99	0
RAI-01	0	69	0	2	96	0	0	7	0	0	2	32	0
RAI-02	4	9	0	15	83	1	0	7	0	0	21	21	1
RAI-03	1	1	0	6	98	2	0	0	0	0	2	22	0
RAI-04	0	11	0	1	90	4	2	6	0	0	0	49	1
SGL-01	0	0	0	0	99	0	0	1	0	0	0	94	0
SLV-01	1	63	0	6	93	0	0	44	0	0	2	46	1
SLV-02	2	100	0	0	100	0	4	48	0	0	1	12	0
SLV-03	10	93	0	0	94	0	4	26	0	0	0	10	6
SLV-04	10	81	0	0	89	0	0	22	0	0	0	22	0
SLV-05	9	54	0	0	77	0	1	10	0	0	0	52	0
TRY-01	41	19	0	30	54	1							
TUT-01	51	31	4	5	62	12							
VOL-01	7	0	0	54	84	17	5	0	0	0	63	60	15
VOL-02	26	0	0	10	89	14	6	1	0	0	15	73	20
WAC-01	4	20	0	10	70	0	0	12	0	0	1	35	2
WAC-02	0	86	0	0	36	0	0	20	0	0	2	16	0

Site code	Fall						Spring						
	C	F	L	R	S	W	C	F	H	L	R	S	W
WAC-03	4	54	0	5	35	4	2	16	0	0	36	19	1
WAK-01	0	0	0	4	67	0	0	1	0	0	0	47	0
WAK-02	0	0	2	4	95	0	0	1	0	0	0	62	0
WAK-03	0	1	100	0	0	0	0	0	0	100	0	100	0
WEK-01	0	43	0	5	70	0	0	12	0	0	9	58	0
WEK-02	5	23	0	2	98	0	0	25	0	0	2	93	0
WEK-03	1	11	5	0	95	0	0	2	0	0	0	100	0
WEK-04	17	16	0	23	70	5	9	17	0	0	5	73	1
WGT-01	6	68	0	1	67	0							
WIL-01	14	11	0	2	88	5							
WKW-01	10	2	0	4	95	1	4	2	0	0	11	90	0
WKW-02	32	95	0	0	16	1	19	16	0	0	0	14	0

Appendix A.5

Water conductivity ($\mu\text{S/cm}$), DO (mg/L), pH and temperature ($^{\circ}\text{C}$) during fall and spring sampling.

Site code	Conductivity	Fall			Conductivity	Spring		
		DO	pH	Temperature		DO	pH	Temperature
ALE-01	1120.5	1.43	7.83	23.355	1018.5	5.71	7.965	23.62
ALE-02	549.62	2.84	8.01	23.34	1003	4.535	8.07	23.87
CHA-01	580	5.27	7.485	23.04	452	6.38	7.055	22.5
CHA-02	720.5	5.96	7.585	23.3	607.5	7.475	7.465	22.705
CHA-03	3872.5	5.205	7.56	23.26	3241.5	5.425	7.19	23.03
CYP-01	314	5.155	7.46	20.7				
FAN-01	481.5	2.045	7.13	22.38				
GAI-01	197	2.47	8.115	21.475	113	2.825	8.105	21.255
GAI-02	207.5	2.535	8.04	21.3	122	2.705	8.23	21.745
GUR-01	375	1.62	7.245	22.16				
HOM-01	2410	4.79	7.825	23.46	2394	4.99	7.335	23.34
ICH-01	323.5	3.765	7.56	21.68	183	4.29	7.525	21.55
ICH-02	304	1.875	7.7	21.635	174	2.2	7.65	21.63
ICH-03	315.5	3.345	7.755	21.44	179.5	4.725	7.645	21.965
ICH-04	319	0.61	7.665	21.64	325	2.935	7.55	21.84
ICH-05	322	1.785	7.725	21.655	340.5	2.63	7.535	22.2
ICH-06	378.5	0.63	7.675	21.81	369.5	4.315	7.735	22.265
ICH-07	326.5	5.48	7.74	21.615	340	4.275	7.47	20.39
ICH-08	306.5	4.265	7.83	22.005	263	3.26	7.48	21.64
IND-01	499	3.755	7.65	21.605				
JAC-01	424	7.585	7.535	20.615	235.5	7.585	7.41	20.56
JAC-02	248	9.985	7.93	22.255	244	8.615	7.69	21.175
JAC-03	246.5	8.35	7.885	23.23	245.5	10.27	8.06	16.875
JUN-01	113.5	7.425	8.335	21.855	110	8.995	8.585	22
JUN-02	142.5	5.96	8.16	21.87	112	6.55	8.3	21.74
JUN-03	124.5	7.19	7.75	21.5	114	7.67	8.185	21.995
JUN-04	1774.5	6.99	7.765	22.615	1624.5	7.745	7.875	22.35
LAF-01	447	1.12	7.13	21.39				
LTR-01	362.5	1.19	7.31	21.8				
MAD-01	287.5	2.03	7.56	21.005				
MNT-01	482.5	1.86	7.25	22.255				
PON-01	262.5	4.015	7.385	20.06	171	5.565	7.88	20.295
RAI-01	190.5	7.035	7.99	23.185	147.5	8.22	7.72	23.08
RAI-02	257.5	7.725	7.93	23.41	203.5	9.12	7.68	23.415
RAI-03	263.5	8.015	7.91	23.145	214.5	10.365	7.96	23.075
RAI-04	266	6.38	7.695	22.67	219	8.375	7.485	22.34
SGL-01	1925.5	3.55	8.03	23.1	1715	4.48	7.935	23.16
SLV-01	470	2.405	7.28	23.135	404.5	3.005	7.065	23.225
SLV-02	476.5	3.29	7.335	23.29	386	4.14	7.07	23.305
SLV-03	449	4.32	7.43	23.4				
SLV-04	448	5.025	7.44	23.305				
SLV-05	447	5.405	7.49	23.205				
TRY-01	373	0.27	7.3	21.175				
TUT-01	403.5	0.805	7.19	21.315				
VOL-01	1380	0.565	7.395	22.955	1075	0.855	7.28	22.86
VOL-02	1377.5	0.85	7.535	23.005	1061.5	2.045	7.315	22.9
WAC-01	258.5	3.02	7.485	20.895	213	3.835	7.705	20.31

Site code	Conductivity	Fall			Conductivity	Spring		
		DO	pH	Temperature		DO	pH	Temperature
WAC-02	257.5	8.11	7.985	22.535	220.5	5.525	7.585	20.885
WAC-03	326	1.83	7.425	20.74	259	2.32	7.465	20.25
WAK-01	308.5	2.33	7.47	20.68	243.5	3	7.55	20.435
WAK-02	308.5	4.44	7.645	20.54	244	5.845	7.58	20.445
WAK-03	301	9.49	7.945	20.7	244	4.765	7.615	20.46
WEK-01	311.5	2.225	7.825	23.62	199	2.63	7.335	23.6
WEK-02	310.5	2.39	7.815	23.65	195.5	3.04	7.625	23.795
WEK-03	310.5	4.74	7.72	23.675	191.5	6.97	7.75	24.685
WEK-04	530.5	5.365	7.855	23.685	374	7.09	7.93	24.01
WGT-01	201	3.335	7.96	20.71				
WIL-01	224	1.43	8.05	21.47				
WKW-01	343.5	0.62	7.39	23.705	308.5	1.045	7.26	23.59
WKW-02	340.5	1.67	7.46	23.93	293.5	1.855	7.28	23.365

Appendix A.6

Water chemistry measurements from fall sampling (all concentrations in mg/L).

Site code	Alkalinity	Ammonia-N	Calcium	Chloride	Iron	Magnesium	Kjeldahl N	NO _x	O-Phosphate-P	Silica	Sodium	Strontium	Sulfate	TOTALN	TOTALP
ALE-01	80	0.010	46.3	260.0	0.010	20.6	0.110	0.074	0.058	8.8	141.00	0.766	66.0	0.184	0.058
ALE-02	80	0.010	46.4	260.0	0.010	20.8	0.084	0.069	0.053	8.9	141.00	0.769	67.0	0.153	0.057
CHA-01	145	0.010	52.6	99.0	0.010	15.1	0.062	0.610	0.021	9.1	58.90	0.203	19.0	0.672	0.032
CHA-02	145	0.010	52.4	120.0	0.018	14.2	0.130	0.540	0.021	9.1	50.30	0.185	21.0	0.670	0.024
CHA-03	144	0.015	75.6	1100.0	0.189	78.5	0.130	0.620	0.021	9.0	589.00	0.721	150.0	0.750	0.029
CYP-01	103	0.010	34.9	4.3	0.010	4.9	0.060	0.340	0.026	9.6	3.17	0.046	1.4	0.400	0.027
FAN-01	189	0.010	83.8	11.0	0.011	6.0	0.060	5.600	0.065	6.4	5.07	0.091	22.0	5.660	0.063
GAI-01	52	0.010	17.5	2.8	0.026	2.5	0.060	0.230	0.015	5.5	1.55	0.047	2.5	0.290	0.020
GAI-02	55	0.010	18.6	3.5	0.010	3.1	0.060	0.200	0.012	5.9	1.86	0.048	2.2	0.260	0.020
GUR-01	174	0.010	70.8	6.9	0.161	4.1	0.076	1.200	0.010	5.4	3.31	0.166	7.5	1.276	0.027
HOM-01	106	0.011	51.5	630.0	0.110	49.0	0.140	0.540	0.025	8.4	357.00	0.465	92.0	0.680	0.026
ICH-01	154	0.010	56.7	4.1	0.010	6.1	0.060	0.780	0.026	7.1	2.39	0.164	8.5	0.840	0.022
ICH-02	146	0.010	54.0	4.9	0.010	5.5	0.060	0.660	0.054	9.7	3.24	0.095	5.0	0.720	0.047
ICH-03	148	0.010	52.0	5.0	0.010	5.3	0.060	0.650	0.048	9.4	3.14	0.090	5.0	0.710	0.047
ICH-04	148	0.010	52.5	6.2	0.010	7.2	0.060	0.440	0.060	12.0	4.38	0.150	11.0	0.500	0.057
ICH-05	146	0.010	51.7	6.3	0.010	7.0	0.060	0.430	0.059	12.0	4.21	0.143	11.0	0.490	0.055
ICH-06	146	0.010	57.6	9.3	0.010	10.4	0.060	0.220	0.057	13.0	6.04	0.383	37.0	0.280	0.055
ICH-07	148	0.010	54.2	6.3	0.068	7.1	0.060	0.430	0.081	11.0	4.02	0.181	14.0	0.490	0.062
ICH-08	135	0.010	51.5	3.6	0.010	4.8	0.060	0.590	0.028	6.1	2.15	0.092	10.0	0.650	0.029
IND-01	133	0.010	40.9	6.8	0.034	10.1	0.082	0.480	0.035	11.0	4.21	0.081	8.0	0.562	0.043
JAC-01	106	0.010	45.7	4.6	0.010	2.2	0.060	3.200	0.021	7.2	1.83	0.038	1.3	3.260	0.031
JAC-02	108	0.042	45.5	4.5	0.016	2.3	0.079	2.900	0.018	7.0	1.85	0.041	1.2	2.979	0.022
JAC-03	108	0.031	44.8	4.5	0.028	2.5	0.120	2.400	0.006	7.3	1.92	0.044	1.3	2.520	0.020
JUN-01	45	0.010	13.5	4.3	0.010	4.5	0.060	0.110	0.027	8.4	2.69	0.079	5.5	0.170	0.030
JUN-02	44	0.010	13.0	4.2	0.010	4.5	0.060	0.120	0.027	8.6	2.66	0.077	5.2	0.180	0.025
JUN-03	44	0.010	14.3	4.4	0.021	5.1	0.060	0.100	0.028	8.8	2.72	0.130	11.0	0.160	0.035
JUN-04	55	0.011	55.6	440.0	0.041	30.1	0.240	0.048	0.024	8.6	248.00	1.150	120.0	0.288	0.026
LAF-01	197	0.010	73.5	8.2	0.048	10.9	0.140	2.900	0.052	6.6	4.62	0.105	13.0	3.040	0.054
LTR-01	164	0.010	66.2	5.7	0.041	8.2	0.070	1.100	0.026	7.3	2.86	0.231	23.0	1.170	0.029
MAD-01	120	0.010	42.6	5.9	0.016	8.7	0.360	1.700	0.051	9.6	3.42	0.052	12.0	2.06	0.037
MNT-01	196	0.010	88.5	8.7	0.068	6.8	0.066	1.800	0.024	6.0	4.20	0.214	40.0	1.866	0.034
PON-01	104	0.010	31.6	2.6	0.031	7.7	0.060	0.280	0.048	9.3	1.69	0.053	2.7	0.340	0.024
RAI-01	63	0.010	24.1	4.2	0.010	3.7	0.060	1.300	0.039	6.8	2.45	0.058	4.6	1.360	0.041
RAI-02	109	0.010	41.8	5.5	0.010	5.2	0.060	1.100	0.046	6.9	2.90	0.150	13.0	1.160	0.039

Site code	Alkalinity	Ammonia-N	Calcium	Chloride	Iron	Magnesium	Kjeldahl N	NO _x	O-Phosphate-P	Silica	Sodium	Strontium	Sulfate	TOTALN	TOTALP
RAI-03	109	0.010	43.9	5.6	0.010	5.3	0.060	1.000	0.046	6.8	3.06	0.181	14.0	1.060	0.048
RAI-04	111	0.018	44.6	5.7	0.010	5.3	0.060	1.000	0.039	6.7	3.10	0.185	15.0	1.060	0.055
SGL-01	66	0.010	72.8	470.0	0.010	35.7	0.088	0.070	0.032	9.1	266.00	1.530	170.0	0.158	0.043
SLV-01	188	0.010	79.4	11.0	0.010	10.2	0.060	1.100	0.046	11.0	6.49	0.596	41.0	1.160	0.055
SLV-02	179	0.010	79.8	11.0	0.010	11.1	0.060	1.200	0.051	11.0	6.50	0.718	58.0	1.260	0.048
SLV-03	167	0.010	73.3	11.0	0.010	10.4	0.060	1.200	0.044	10.0	6.44	0.645	50.0	1.260	0.053
SLV-04	169	0.010	73.3	11.0	0.010	10.4	0.060	1.100	0.045	10.0	6.43	0.636	49.0	1.160	0.057
SLV-05	166	0.010	72.6	11.0	0.014	10.2	0.067	1.100	0.044	11.0	6.37	0.633	49.0	1.167	0.058
TRY-01	163	0.010	63.5	6.0	0.011	7.5	0.120	2.400	0.035	6.9	3.34	0.083	12.0	2.520	0.034
TUT-01	191	0.010	77.1	6.0	0.058	4.7	0.110	0.740	0.018	6.0	3.05	0.094	6.8	0.850	0.029
VOL-01	139	0.018	63.0	310.0	0.012	21.6	0.270	0.610	0.068	8.6	172.00	0.774	51.0	0.880	0.069
VOL-02	138	0.010	62.9	320.0	0.011	21.5	0.260	0.610	0.069	8.7	171.00	0.773	51.0	0.870	0.069
WAC-01	124	0.010	40.3	5.6	0.059	7.9	0.100	0.370	0.038	14.0	3.30	0.070	5.3	0.470	0.046
WAC-02	120	0.010	39.1	5.3	0.078	7.7	0.130	0.260	0.033	14.0	3.23	0.074	5.2	0.390	0.037
WAC-03	157	0.010	52.8	5.8	0.050	8.1	0.060	0.180	0.050	13.0	3.35	0.081	6.6	0.240	0.054
WAK-01	141	0.010	45.5	8.1	0.010	10.7	0.060	0.860	0.039	11.0	5.50	0.094	9.7	0.920	0.050
WAK-02	142	0.010	46.2	8.2	0.010	10.8	0.064	0.790	0.029	11.0	5.57	0.098	9.9	0.854	0.037
WAK-03	142	0.010	46.5	7.9	0.010	10.8	0.082	0.650	0.020	10.0	5.47	0.096	9.2	0.732	0.030
WEK-01	136	0.010	51.6	7.3	0.010	6.1	0.060	0.80	0.013	8.6	4.32	0.186	9.5	0.860	0.020
WEK-02	136	0.010	51.5	7.4	0.010	6.1	0.060	0.790	0.011	8.6	4.29	0.183	9.6	0.850	0.020
WEK-03	135	0.010	51.5	7.3	0.013	6.0	0.060	0.730	0.013	8.5	4.28	0.185	9.5	0.790	0.032
WEK-04	137	0.018	54.8	57.0	0.054	9.1	0.150	0.70	0.009	8.4	32.40	0.218	16.0	0.850	0.020
WGT-01	52	0.010	17.1	2.2	0.019	2.9	0.060	0.160	0.013	5.3	1.25	0.062	2.2	0.220	0.020
WIL-01	61	0.010	21.2	2.8	0.019	2.8	0.060	0.068	0.016	6.3	1.55	0.050	1.5	0.128	0.020
WKW-01	125	0.010	39.2	17.0	0.025	11.1	0.150	1.600	0.110	9.4	9.73	0.132	21.0	1.750	0.160

Water chemistry measurements from spring sampling (all concentrations in mg/L).

Site code	Alkalinity	Ammonia-N	Calcium	Chloride	Magnesium	Kjeldahl N	NOx	O-Phosphate-P	Silica	Sodium	Strontium	Sulfate	TOTAL N	TOTAL P	Potassium
ALE-01	81	0.014	49.6	280.0	22.2	0.160	0.037	0.051	9.5	151.00	0.803	70.0	0.197	0.073	4.40
ALE-02	82	0.011	49.0	260.0	22.0	0.120	0.024	0.045	9.4	148.00	0.802	69.0	0.144	0.063	4.30
CHA-01	149	0.023	51.2	79.0	13.7	0.060	0.510	0.015	9.7	45.70	0.180	18.0	0.570	0.032	1.60
CHA-02	149	0.010	52.1	120.0	16.0	0.120	0.420	0.018	9.6	67.80	0.200	23.0	0.540	0.040	2.40
CHA-03	152	0.041	79.6	1200.0	85.4	0.090	0.540	0.018	9.7	637.00	0.767	170.0	0.630	0.040	23.8
GAI-01	52	0.010	18.1	2.5	2.6	0.060	0.240	0.012	5.2	1.65	0.045	2.2	0.300	0.015	0.25
GAI-02	56	0.016	19.0	3.0	3.2	0.060	0.200	0.011	5.6	1.96	0.048	1.9	0.260	0.015	0.26
HOM-01	112	0.019	56.1	770.0	56.2	0.087	0.560	0.028	9.2	440.00	0.516	110.0	0.647	0.045	15.2
ICH-01	153	0.010	57.5	4.2	6.0	0.060	0.800	0.022	6.9	2.30	0.162	9.0	0.860	0.032	0.16
ICH-02	146	0.010	53.9	5.2	5.6	0.060	0.620	0.051	9.9	3.20	0.095	6.3	0.680	0.051	0.39
ICH-03	152	0.010	57.2	4.5	5.9	0.060	0.770	0.028	7.7	2.50	0.148	9.0	0.830	0.039	0.21
ICH-04	143	0.018	52.5	6.9	8.3	0.060	0.230	0.062	13.0	5.20	0.186	18.0	0.290	0.056	0.62
ICH-05	143	0.016	56.3	8.8	10.1	0.061	0.190	0.058	14.0	6.31	0.288	29.0	0.251	0.057	0.68
ICH-06	143	0.026	62.0	11.0	11.6	0.074	0.070	0.056	14.0	7.76	0.439	48.0	0.144	0.053	0.69
ICH-07	149	0.018	56.8	6.8	7.9	0.079	0.260	0.046	11.0	4.82	0.207	19.0	0.339	0.053	0.49
ICH-08	127	0.038	50.8	3.7	4.2	0.130	0.630	0.027	6.3	2.32	0.090	9.0	0.760	0.031	0.22
JAC-02	116	0.033	49.7	4.7	2.9	0.088	2.600	0.024	7.0	2.13	0.043	1.4	2.688	0.019	0.31
JUN-01	45	0.013	13.5	4.3	4.5	0.062	0.058	0.029	9.5	2.50	0.079	5.5	0.120	0.060	0.29
JUN-02	45	0.022	13.1	4.5	4.7	0.060	0.082	0.024	9.3	2.40	0.084	6.5	0.142	0.048	0.28
JUN-03	45	0.010	14.3	4.6	5.1	0.060	0.065	0.024	9.4	2.50	0.126	11.0	0.125	0.044	0.30
JUN-04	58	0.026	59.2	450.0	31.8	0.210	0.007	0.015	8.8	244.00	1.270	130.0	0.217	0.038	8.60
RAI-01	54	0.015	19.8	3.8	3.4	0.060	0.960	0.036	7.8	2.60	0.049	4.1	1.020	0.038	0.14
RAI-02	108	0.010	39.9	5.0	5.0	0.060	0.990	0.029	7.4	3.10	0.119	8.2	1.050	0.033	0.14
RAI-03	112	0.013	45.1	5.8	5.4	0.060	0.970	0.027	6.4	3.40	0.192	15.0	1.030	0.030	0.18
RAI-04	113	0.011	45.5	5.5	5.5	0.060	0.940	0.026	5.7	3.50	0.192	15.0	1.000	0.033	0.18
SGL-01	68	0.028	74.5	440.0	36.5	0.120	0.034	0.028	10.0	255.00	1.600	170.0	0.154	0.049	9.30
SLV-01	184	0.012	78.0	10.0	10.3	0.060	1.100	0.041	12.0	7.20	0.601	41.0	1.160	0.047	0.61
SLV-02	182	0.019	77.8	10.0	10.6	0.060	1.000	0.041	12.0	7.10	0.657	49.0	1.060	0.046	0.61
SLV-03	177	0.016	76.1	10.0	10.6	0.060	0.980	0.041	11.0	7.20	0.646	47.0	1.040	0.047	0.62
SLV-04	163	0.013	72.7	11.0	10.4	0.076	0.990	0.039	11.0	7.20	0.652	50.0	1.066	0.042	0.62
SLV-05	161	0.016	72.2	10.0	10.2	0.099	0.980	0.039	11.0	7.10	0.647	49.0	1.079	0.049	0.62
VOL-01	135	0.012	63.8	260.0	19.5	0.170	0.590	0.066	9.2	147.00	0.743	42.0	0.760	0.080	5.70
VOL-02	135	0.010	63.0	270.0	19.4	0.150	0.600	0.066	9.2	146.00	0.716	41.0	0.750	0.082	5.70
WAC-01	121	0.014	39.6	4.9	7.6	0.110	0.360	0.038	14.0	3.40	0.070	4.7	0.470	0.041	0.48
WAC-02	146	0.022	49.1	5.4	8.4	0.110	0.170	0.036	13.0	3.60	0.080	5.2	0.280	0.038	0.40

Site code	Alkalinity	Ammonia-N	Calcium	Chloride	Magnesium	Kjeldahl N	NOx	O-Phosphate-P	Silica	Sodium	Strontium	Sulfate	TOTALN	TOTALP	Potassium
WAC-03	159	0.015	54.6	5.5	8.3	0.060	0.160	0.047	13.0	3.60	0.078	5.9	0.220	0.050	0.45
WAK-01	138	0.018	46.6	7.5	9.7	0.085	0.600	0.032	11.0	5.50	0.104	9.5	0.685	0.030	0.54
WAK-02	139	0.018	46.3	7.6	9.6	0.072	0.580	0.034	11.0	5.40	0.103	9.3	0.652	0.030	0.53
WAK-03	140	0.024	46.9	7.8	9.6	0.110	0.580	0.031	11.0	5.50	0.104	9.4	0.690	0.033	0.53
WEK-01	144	0.019	52.1	7.5	5.9	0.060	0.800	0.009	9.2	4.00	0.175	9.1	0.860	0.029	0.38
WEK-02	145	0.019	52.6	7.5	6.1	0.060	0.810	0.009	9.3	4.10	0.180	9.0	0.870	0.030	0.36
WEK-03	140	0.025	53.1	7.5	6.0	0.120	0.710	0.009	9.2	4.10	0.176	9.0	0.830	0.034	0.33
WEK-04	140	0.027	55.9	100.0	12.3	0.160	0.670	0.007	9.0	59.00	0.242	23.0	0.830	0.030	2.30
WKW-01	124	0.010	41.8	16.0	11.7	0.110	1.300	0.120	11.0	9.10	0.146	20.0	1.410	0.130	1.70
WKW-02	133	0.011	41.8	16.0	11.6	0.100	1.200	0.120	10.0	9.20	0.141	20.0	1.300	0.150	1.70

Appendix A.7

Macroalgae percent cover and average cover thickness (cm). Blank indicates that site was not sampled.

Site code	Fall		Spring	
	Cover thickness	% cover	Cover thickness	% cover
ALE-01	7.1	74.1	4.0	45.7
ALE-02	3.9	67.9	5.7	35.8
CHA-01	3.2	48.1	4.5	64.2
CHA-02	33.1	88.9	35.1	91.4
CHA-03	2.0	2.5	20.0	16.0
CYP-01	0.0	0.0		
FAN-01	15.9	80.2		
GAI-01	6.8	6.9	2.3	11.1
GAI-02	9.2	54.3	4.2	58.0
GUR-01	12.6	85.2		
HOM-01	11.2	79.0	8.3	17.3
ICH-01	5.0	40.7	2.1	51.9
ICH-02	34.7	82.7	21.0	56.9
ICH-03	5.8	37.0	11.3	51.1
ICH-04	10.4	86.4	9.4	67.9
ICH-05	12.8	66.7	22.3	82.7
ICH-06	4.0	51.9	15.3	25.9
ICH-07	4.0	7.4	6.8	12.3
ICH-08	1.4	16.0	4.3	30.9
IND-01	13.1	87.7		
JAC-01	11.6	16.0	6.6	25.9
JAC-02	1.4	8.6	2.0	11.1
JAC-03	8.2	63.0	3.3	76.5
JUN-01	4.5	50.6	5.6	43.2
JUN-02	3.9	54.3	9.3	60.5
JUN-03	1.8	16.0	5.0	16.0
JUN-04	3.5	13.6	1.5	7.4
LAF-01	3.1	37.0		
LTR-01	1.3	4.9		
MAD-01	6.3	69.1		
MNT-01	17.6	93.8		
PON-01	7.6	17.3	8.6	12.3
RAI-01	6.1	24.7	3.4	40.7
RAI-02	3.0	19.8	2.8	23.5
RAI-03	8.9	80.2	17.2	98.8
RAI-04	19.0	75.3	12.0	90.1
SGL-01	30.4	74.1	39.1	82.7
SLV-01	14.6	33.3	4.5	18.5
SLV-02	19.7	70.4	19.1	50.6
SLV-03	7.8	54.3	18.4	34.6
SLV-04	2.6	54.3	18.9	39.5
SLV-05	2.7	45.7	14.0	18.5
TRY-01	0.5	16.0		
TUT-01	2.2	8.6		
VOL-01	9.7	76.5	7.9	86.4
VOL-02	15.6	80.2	14.8	87.7
WAC-01	1.8	23.5	3.8	24.7
WAC-02	7.3	29.6	1.4	6.2

Site code	Fall		Spring	
	Cover thickness	% cover	Cover thickness	% cover
WAC-03	10.4	64.2	21.8	32.1
WAK-01	8.8	50.6	12.7	40.7
WAK-02	4.6	12.3	11.9	45.7
WAK-03	9.4	18.5	7.8	19.8
WEK-01	55.1	86.4	28.4	74.1
WEK-02	11.7	58.0	18.0	38.3
WEK-03	6.7	37.0	3.5	35.8
WEK-04	3.3	38.3	3.0	40.7
WGT-01	5.3	32.1		
WIL-01	3.0	13.6		
WKW-01	6.8	60.5	1.6	75.3
WKW-02	5.0	39.5	5.7	23.5

Appendix A.8

Percent cover by different taxa of macroalgae based on presence in the sampling point in the fall. For taxa codes refer to table x

[illegible]

Site code	Ap	B	Br	C	Cg	Ch	Cm	D	E	Hd	L	Ls	O	Od	Ph	Po	Rh	S	U	V
RAI-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RAI-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SGL-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74.1	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0
SLV-01	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.7	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	21.0
SLV-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.0	0.0	14.8	0.0	0.0	0.0	0.0	2.5	0.0	12.3
SLV-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0
SLV-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.7	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	17.3
SLV-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.3
TRY-01	0.0	16.0	0.0	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
TUT-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.6
VOL-01	0.0	0.0	0.0	12.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.6	0.0	0.0	0.0	0.0	0.0	11.1	39.5
VOL-02	0.0	0.0	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.5	40.7	0.0	0.0	0.0	0.0	0.0	8.6	58.0
WAC-01	0.0	0.0	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	18.5	0.0	1.2
WAC-02	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	2.5	0.0	0.0	0.0	24.7	0.0	0.0
WAC-03	0.0	38.3	0.0	1.2	0.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	18.5	0.0	0.0
WAK-01	0.0	3.7	0.0	6.2	0.0	0.0	0.0	0.0	0.0	14.8	0.0	0.0	0.0	0.0	0.0	0.0	2.5	17.3	0.0	40.7
WAK-02	0.0	0.0	0.0	12.3	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
WAK-03	0.0	1.2	0.0	3.7	0.0	0.0	3.7	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	13.6	0.0	0.0
WEK-01	0.0	2.5	0.0	0.0	0.0	0.0	0.0	13.6	0.0	19.8	58.0	0.0	7.4	0.0	0.0	0.0	0.0	16.0	2.5	0.0
WEK-02	9.9	0.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0	4.9	27.2	0.0	0.0	0.0	0.0	0.0	0.0	17.3	0.0	12.3
WEK-03	0.0	0.0	0.0	17.3	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	0.0	11.1
WEK-04	0.0	1.2	0.0	0.0	27.2	0.0	0.0	1.2	0.0	0.0	8.6	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	7.4
WGT-01	0.0	0.0	0.0	22.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.9	1.2	0.0	0.0
WIL-01	0.0	0.0	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.2	11.1	0.0	2.5
WKW-01	24.7	0.0	0.0	3.7	0.0	2.5	0.0	0.0	0.0	1.2	19.8	0.0	4.9	0.0	0.0	0.0	4.9	30.9	0.0	17.3
WKW-02	14.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.9	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	17.3

Percent cover by different taxa of macroalgae based on presence in the sampling point in the spring. For taxa codes refer to table x

Site code	Ap	B	C	Cg	Ch	Cm	D	E	Hd	L	Ls	O	Ph	Po	Rh	S	Sh	T	U	V
ALE-01	1.2	1.2	2.5	0.0	0.0	0.0	0.0	0.0	25.9	11.1	12.3	1.2	0.0	0.0	0.0	4.9	0.0	0.0	0.0	0.0
ALE-02	2.5	1.2	6.2	0.0	0.0	0.0	0.0	0.0	0.0	13.6	0.0	8.6	0.0	0.0	0.0	9.9	0.0	0.0	0.0	0.0
CHA-01	0.0	27.2	9.9	2.5	0.0	1.2	0.0	0.0	0.0	9.9	0.0	0.0	0.0	4.9	24.7	4.9	0.0	0.0	0.0	27.2
CHA-02	0.0	3.7	3.7	0.0	2.5	72.8	0.0	4.9	0.0	87.7	0.0	0.0	0.0	0.0	0.0	9.9	0.0	0.0	0.0	87.7
CHA-03	0.0	0.0	0.0	0.0	16.0	0.0	0.0	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
GAI-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	3.7	0.0	0.0	0.0	0.0
GAI-02	0.0	0.0	48.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HOM-01	0.0	0.0	0.0	0.0	12.3	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
ICH-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.4	0.0	24.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.3
ICH-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.9	0.0	11.1	0.0	0.0	0.0	2.5	0.0	1.2	0.0	6.2
ICH-03	0.0	0.0	11.1	0.0	0.0	0.0	0.0	0.0	0.0	42.2	0.0	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.3
ICH-04	0.0	51.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.2	0.0	16.0	0.0	0.0	21.0	23.5	0.0	0.0	16.0	12.3
ICH-05	0.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.0	0.0	40.7	0.0	0.0	0.0	46.9	0.0	0.0	0.0	0.0
ICH-06	0.0	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.3	0.0	9.9
ICH-07	0.0	0.0	0.0	0.0	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	0.0	0.0	7.4
ICH-08	0.0	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0
JAC-01	0.0	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	1.2	22.2	0.0	0.0	0.0	0.0
JAC-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JAC-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.7	0.0	0.0	0.0	27.2	0.0	0.0	0.0	0.0
JUN-01	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.2	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0
JUN-02	0.0	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	16.0	0.0	0.0	0.0	44.4	0.0	0.0	0.0	0.0
JUN-03	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.6	0.0	0.0	0.0	0.0	0.0	8.6	0.0	0.0	0.0	0.0
JUN-04	0.0	1.2	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	6.2
PON-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.3	0.0	0.0	0.0	0.0	0.0	0.0	6.2	0.0	0.0	0.0	0.0
RAI-01	13.6	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RAI-02	0.0	0.0	23.5	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
RAI-03	0.0	12.3	93.8	0.0	0.0	0.0	0.0	0.0	0.0	23.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RAI-04	0.0	9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SGL-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	82.7	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLV-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.3	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	14.8
SLV-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.4	0.0	9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.3
SLV-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.3
SLV-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	4.9
SLV-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	16.0
VOL-01	0.0	29.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.7	0.0	0.0	0.0	0.0	0.0	0.0	17.3	82.7

Site code	Ap	B	C	Cg	Ch	Cm	D	E	Hd	L	Ls	O	Ph	Po	Rh	S	Sh	T	U	V
VOL-02	0.0	30.9	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.3	0.0	0.0	4.9	0.0	0.0	0.0	8.6	76.5
WAC-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.2	0.0	0.0	0.0	3.7
WAC-02	0.0	4.9	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	4.9	0.0	0.0	0.0	0.0
WAC-03	0.0	9.9	0.0	0.0	0.0	25.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.9	19.8	0.0	0.0	0.0	0.0
WAK-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.7
WAK-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.7
WAK-03	0.0	0.0	0.0	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	0.0	0.0	0.0	16.0
WEK-01	0.0	4.9	0.0	0.0	0.0	0.0	29.6	0.0	0.0	46.9	0.0	12.3	0.0	0.0	0.0	18.5	0.0	0.0	0.0	0.0
WEK-02	0.0	6.2	0.0	0.0	0.0	0.0	23.5	0.0	2.5	14.8	0.0	1.2	0.0	0.0	0.0	14.8	0.0	0.0	0.0	0.0
WEK-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.8
WEK-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	27.2
WKW-01	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.7	0.0	61.7	3.7	0.0	0.0	0.0	0.0	0.0	0.0	44.4
WKW-02	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.5	0.0	9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.5

Appendix A.9

Fall epiphyte, macroalgae and epipelon aerial dry mass (DM), ash free dry mass (AFDM), chlorophyll a (Chla) and pheophytin (Pheo) expressed in mg/cm² (Q next to site code refers to repeated sampling for QAQC). Blank indicates that sample was not collected due to absence of substratum or in case of epipelon samples sampling was not scheduled.

Site code	Epiphytes				Macroalgae				Epipelon			
	DM	AFDM	Chla	Pheo	DM	AFDM	Chla	Pheo	DM	AFDM	Chla	Pheo
ALE-01	1.566	0.901	0.0016	0.0008	54.834	20.634	0.2550	0.7233				
ALE-02	2.324	1.259	0.0140	0.0059	17.390	12.185	0.7144	0.2662				
CHA-01	1.462	0.851	0.0015	0.0017	14.136	10.489	0.9519	1.6608				
CHA-02	0.709	0.456	0.0015	0.0005	154.487	126.106	13.3785	0.5954				
CHA-03	6.758	1.929	0.0007	0.0033	12.324	6.507	0.3055	0.2164				
CYP-01	0.444	0.373	0.0001	0.0001					23.366	5.881	0.0106	0.0500
CYP-01Q	0.517	0.409	0.0000	0.0002					18.962	5.025	0.0099	0.0144
FAN-01	1.430	0.938	0.0052	0.0044	41.617	30.768	0.8342	0.4098	18.714	5.211	0.0050	0.0090
GAI-01	0.853	0.586	0.0003	0.0009	22.975	18.705	0.0670	0.0740				
GAI-02	0.275	0.230	0.0006	0.0007	37.693	22.668	0.1951	0.1916				
GUR-01	3.587	1.772	0.0017	0.0132	87.845	27.298	0.2107	0.0404	58.717	12.936	0.0137	0.0168
HOM-01	2.903	1.298	0.0017	0.0001	28.726	17.866	0.4661	1.0992				
ICH-01	0.437	0.238	0.0017	-0.0002	31.185	21.480	2.2325	0.1057	20.751	7.983	0.0134	0.0095
ICH-01Q	0.669	0.373	0.0013	0.0001	33.911	26.122	2.0042	0.7835	16.500	7.022	0.0219	0.0023
ICH-02	2.462	1.300	0.1033	0.0242	156.553	129.189	10.4792	2.0352				
ICH-03	1.246	0.717	0.0075	0.0000	35.702	24.181	2.3322	0.5640				
ICH-04	1.477	0.907	0.0002	0.0019	46.273	28.544	2.2903	1.7906				
ICH-05	4.113	2.242	0.0297	0.0110	77.730	38.186	2.2791	0.0000				
ICH-06	1.658	0.926	0.0105	0.0028	20.852	10.889	2.9056	0.1280				
ICH-07	0.808	0.565	0.0099	0.0008	8.550	6.420	1.1583	2.3938				
ICH-08	1.279	0.899	0.0075	0.0025	4.219	3.230	0.2342	0.2901				
IND-01					92.536	50.310	0.5355	0.7805	68.832	14.886		
JAC-01	1.152	0.632	0.0015	0.0006	23.836	21.411	0.1196	0.6600				
JAC-02	2.568	1.238	0.0013	0.0016	22.146	9.489	0.0842	0.0686	59.822	7.413	0.0075	0.0063
JAC-03	6.871	1.572	0.0051	0.0041	34.566	24.386	0.2345	0.6565				
JUN-01	0.694	0.389	0.0070	0.0022	27.533	20.719	0.8075	1.5577				
JUN-02	5.670	5.119	0.0036	0.0131	24.073	19.688	0.7234	0.9890				
JUN-03	0.702	0.471	0.0021	0.0000	24.132	15.222	0.7341	0.3290				
JUN-04	6.319	2.604	0.0100	0.0112	30.660	14.080	1.2625	2.1417				
LAF-01					49.024	16.104	0.2750	0.1027	31.347	7.584	0.0078	0.0093
LTR-01	1.547	0.730	0.0022	0.0101	11.881	4.081	0.0412	0.1510	157.683	31.591	0.0009	0.0201
MAD-01	1.860	0.721	0.0063	0.0070	382.713	26.710	0.3639	0.7719	12.006	4.289	0.0013	0.0144

Site code	Epiphytes				Macroalgae				Epipelon			
	DM	AFDM	Chla	Pheo	DM	AFDM	Chla	Pheo	DM	AFDM	Chla	Pheo
MNT-01	1.549	1.093	0.0009	0.0012	68.117	42.806	1.2759	0.7208	25.335	5.833	0.0048	0.0100
PON-01	0.307	0.216	0.0003	0.0001	11.676	5.969	0.0256	0.1355				
RAI-01	1.743	0.926	0.0009	0.0018	53.210	30.341	1.3722	4.0804				
RAI-02	1.472	0.769	0.0032	0.0009	20.334	12.349	0.4155	0.3940	18.533	9.741	0.0298	0.0220
RAI-03	1.202	0.766	0.0011	0.0040	53.836	38.905	1.5079	2.4626				
RAI-04	0.863	0.478	0.0016	0.0029	97.729	81.451	3.8597	0.0000				
SGL-01	0.376	0.252	0.0019	0.0024	251.905	192.979	4.5076	2.9527	8.097	4.177	0.0095	0.0177
SGL-01Q	0.303	0.208	0.0011	0.0042	170.729	131.962	1.1045	9.6227	8.971	4.852	0.0019	0.0055
SLV-01	1.438	0.780	0.0054	0.0017	96.229	58.152	8.0680	1.0327				
SLV-02	1.885	0.870	0.0086	0.0015	157.448	116.174	4.0343	0.3832	33.956	13.638	0.0038	0.0139
SLV-03	1.902	1.027	0.0041	0.0068	43.381	25.430	0.2852	7.0390				
SLV-04	1.574	0.753	0.0037	0.0017	17.175	8.649	0.9021	0.0916				
SLV-05	2.050	0.785	0.0050	0.0048	19.911	11.113	0.3429	0.5318				
TRY-01	1.894	1.076	0.0027	0.0012					26.853	6.537	0.0091	0.0082
TUT-01	0.592	0.375	0.0007	0.0018	8.126	4.694	0.0642	0.0521	54.628	12.684	0.0001	0.0085
VOL-01	2.876	1.338	0.0036	0.0008	32.059	28.020	7.2201	2.0823				
VOL-02	2.728	1.188	0.0029	0.0000	88.087	68.800	26.2709	3.1852				
WAC-01	3.031	1.761	0.0083	0.0092	5.466	4.255	0.0503	0.0278				
WAC-02	3.156	1.583	0.0024	0.0057	30.460	26.737	0.0364	0.9149				
WAC-03	3.019	1.482	0.0079	0.0023	53.447	23.740	0.1516	0.1551				
WAK-01	4.149	1.735	0.0000	0.0356	70.850	31.682	0.0399	0.2515				
WAK-02	1.899	0.969	0.0011	0.0073	17.336	6.696	0.0275	0.0595				
WAK-03	2.334	1.252	0.0042	0.0068	43.925	31.839	0.3903	0.3731				
WEK-01	0.597	0.535	0.0009	0.0010	236.103	191.782	30.6683	0.0000				
WEK-02	0.669	0.504	0.0009	0.0012	59.694	48.967	5.5244	3.8723				
WEK-03	0.963	0.516	0.0008	0.0018	22.813	16.381	2.6399	1.4771	5.403	3.624	0.0139	0.0199
WEK-04	1.930	0.989	0.0018	0.0014	12.280	8.372	0.5326	0.6910				
WGT-01	1.846	1.228	0.0010	0.0084	26.908	16.934	0.0508	0.0990	23.978	9.569	0.0185	0.0260
WIL-01	1.440	0.885	0.0026	0.0027	13.552	8.391	0.2981	0.2069	31.633	7.815	0.0088	0.0126
WKW-01	2.677	1.965	0.0029	0.0011	41.988	17.374	2.4011	1.1410				
WKW-02	0.990	0.719	0.0033	0.0000	30.332	18.459	1.6441	0.7504				

Spring epiphyte, macroalgae and epipelon aerial dry mass (DM), ash free dry mass (AFDM), chlorophyll a (Chla) and pheophytin (Pheo) expressed in mg/cm² (Q next to site code refers to repeated sampling for QAQC). Blank indicates that sample was not collected due to absence of substratum. Epipelon sample from SLV-03 was not collected due to very deep water and strong current. “No data” indicates that sample was lost.

Site code	Epiphytes				Macroalgae				Epipelon			
	DM	AFDM	Chla	Pheo	DM	AFDM	Chla	Pheo	DM	AFDM	Chla	Pheo
ALE-01	2.364	0.883	0.0031	0.0015	38.521	30.018	0.0238	0.0510	221.368	10.539	0.0129	0.0301
ALE-02	8.299	4.097	0.0353	0.0161	31.477	18.899	0.0652	0.1570	9.045	3.068	0.0000	0.0000
CHA-01	3.741	1.789	0.0126	0.0071	14.386	3.749	0.1451	0.1280	20.036	9.720	0.0018	0.0006
CHA-02	3.250	1.570	0.0261	0.0089	103.725	29.699	0.0722	0.2372	300.759	17.208	0.1034	0.5959
CHA-03	3.844	2.347	0.0169	0.0148	73.600	26.640	0.2176	0.3684	212.772	29.332	0.0051	0.0031
GAI-01	1.131	0.582	0.0010	0.0005	9.392	3.227	0.0314	0.0451	34.871	12.776	0.0025	0.0046
GAI-02	1.642	0.637	0.0077	0.0028	41.572	21.966	0.0568	0.2002	12.440	4.670	0.0079	0.0152
HOM-01	1.275	0.450	0.0014	0.0008	58.491	37.288	0.2127	0.0670	330.385	8.890	0.0172	0.0111
ICH-01	3.270	1.820	0.0213	0.0107	No data	No data	No data	No data	93.096	20.912	0.0034	0.0016
ICH-02	7.568	3.195	0.0766	0.0342	No data	No data	0.0927	0.5345	52.632	19.555	0.0418	0.0540
ICH-03	2.613	1.021	0.0044	0.0043	No data	No data	No data	No data	22.866	8.379	0.0002	0.0026
ICH-04	14.086	6.247	0.0418	0.0254	63.662	32.202	0.0897	0.4293	24.729	11.929	0.0048	0.0085
ICH-05	12.238	4.196	0.0214	0.0127	97.494	39.122	0.6712	0.3794	41.875	14.365	0.0118	0.0096
ICH-06	1.704	0.799	0.0090	0.0049	85.946	49.138	0.2835	0.8873	23.601	8.401	0.0011	0.0036
ICH-07	1.492	0.639	0.0079	0.0052	23.347	10.082	0.1340	0.0987	45.053	16.697	0.0070	0.0077
ICH-08	0.305	0.127	0.0008	0.0006	20.820	7.566	0.0898	0.1578	57.757	29.377	0.0047	0.0091
JAC-01	2.912	1.444	0.0203	0.0162	29.202	15.023	0.0128	0.1031	14.419	5.694	0.0113	0.0119
JAC-02	4.099	2.158	0.0086	0.0049	42.627	26.530	0.3799	0.1335	22.253	6.626	0.0054	0.0045
JAC-03	7.474	4.630	0.0000	0.0000	66.079	44.141	0.5201	0.6969	219.594	35.132	0.0210	0.0715
JUN-01	1.635	0.749	0.0066	0.0071	20.786	7.537	0.0820	0.0550	130.906	3.977	0.0143	0.0073
JUN-02					8.087	3.471	0.0146	0.0438	271.644	8.963	0.0013	0.0007
JUN-03	2.122	1.161	0.0195	0.0139	18.525	7.480	0.0221	0.0801	171.099	4.199	0.0034	0.0027
JUN-04	3.713	1.615	0.0055	0.0019	16.803	14.016	0.0193	0.0237	3.052	1.405	0.0017	0.0001
PON-01	0.855	0.346	0.0026	0.0016	23.019	8.973	0.0620	0.1256	13.798	4.105	0.0061	0.0077
RAI-01	2.950	1.503	0.0074	0.0063	11.954	2.980	0.0596	0.0375	379.351	12.516	0.0454	0.0387
RAI-02	1.887	0.982	0.0056	0.0045					127.863	6.682	0.0229	0.0236
RAI-03	4.684	2.532	0.0217	0.0119	104.236	55.317	0.0757	0.9271	242.306	20.232	0.0435	0.0281
RAI-04	3.166	1.660	0.0121	0.0065	64.277	41.158	0.1199	0.1325	52.488	13.377	0.0281	0.0319
SGL-01	4.667	2.157	0.0121	0.0062	184.557	68.257	0.7769	0.4529	6.118	1.992	0.0038	0.0040
SLV-01	5.506	2.971	0.0281	0.0178	25.204	16.856	0.0759	0.0637	62.959	14.035	0.0122	0.0178
SLV-02	4.765	2.351	0.0096	0.0054	88.338	46.868	0.4143	0.5275	21.458	10.146	0.0007	0.0022

Site code	Epiphytes				Macroalgae				Epipelon			
	DM	AFDM	Chla	Pheo	DM	AFDM	Chla	Pheo	DM	AFDM	Chla	Pheo
SLV-03	16.667	8.604	0.0271	0.0134	101.749	47.821	0.4929	0.6448				
SLV-04	10.705	5.458	0.0307	0.0256	54.590	22.309	0.2038	0.2228	130.867	43.581	0.0007	0.0017
SLV-05	9.925	5.259	0.0107	0.0746	45.038	22.946	0.1368	0.2178	448.756	66.042	0.0008	0.0015
VOL-01	1.377	0.588	0.0020	0.0009	102.747	90.460	0.1097	0.1074	190.526	12.013	0.0478	0.0268
VOL-02	0.746	0.321	0.0006	0.0006	98.519	64.405	0.0159	0.0614	108.808	10.074	0.0216	0.0393
WAC-01	0.916	0.426	0.0036	0.0037	4.604	0.389	0.0361	0.0184	1075.651	48.191	0.0018	0.0023
WAC-02	9.858	5.252	0.0133	0.0279	2.186	1.045	0.0036	0.0129	204.152	32.585	0.0007	0.0019
WAC-03	3.418	1.729	0.0154	0.0084	56.878	26.621	0.0845	0.0899	50.866	13.916	0.0080	0.0120
WAK-01	6.193	3.110	0.0277	0.0106	18.115	6.929	0.2648	0.1430	472.735	48.865	0.0189	0.0418
WAK-02	0.500	0.254	0.0010	0.0011	29.859	12.893	0.2583	0.3031	174.975	28.008	0.0065	0.0117
WAK-03	4.731	2.417	0.0018	0.0013	17.132	7.978	0.0460	0.1933	643.495	68.572	0.0039	0.0098
WEK-01					157.686	72.845	1.0833	0.8550	15.130	4.564	0.0055	0.0094
WEK-02					88.060	38.469	0.2997	0.5486	374.654	12.099	0.0251	0.0150
WEK-03	21.461	11.653	0.0379	0.0293	56.774	47.973	0.0765	0.0855	14.580	7.752	0.0026	0.0025
WEK-04	1.651	0.701	0.0018	0.0047	8.970	3.900	0.0388	0.0572	22.482	10.118	0.0043	0.0064
WKW-01	1.780	0.558	0.0065	0.0036	16.729	13.221	0.0236	0.0465	12.605	3.599	0.0134	0.0078
WKW-02	2.299	0.907	0.0159	0.0183	33.093	22.314	0.0823	0.0696	24.045	7.350	0.0259	0.0183

Appendix A.10

Mat TN and TP content in the fall and in the spring expressed in mg/Kg fresh mass and molar TN/TP ratio.

Site code	TN	Fall TP	TN/TP	TN	Spring TP	TN/TP
ALE-01	12000	1400	19	14000	1600	19
ALE-02	9900	1100	20			
CHA-01	10000	700	32			
CHA-02	15000	1100	30	13000	1200	24
CHA-03	5700	320	39			
CYP-01						
FAN-01	12000	670	40			
GAI-01	7500	200	83			
GAI-02	14000	1000	31	7200	290	55
GUR-01	8300	560	33			
HOM-01	6800	380	40	4100	190	48
ICH-01	820000	35000	52	7400	1100	15
ICH-02	620000	33000	42			
ICH-03	510000	69000	16			
ICH-04	510000	35000	32			
ICH-05	410000	52000	17			
ICH-06	350000	50000	15			
ICH-07	350000	51000	15			
ICH-08	430000	51000	19			
IND-01	4300	530	18			
JAC-01	1800	67	59	2500	120	46
JAC-02	10000	640	35	5400	480	25
JAC-03	3800	120	70	5600	370	33
JUN-01	17000	1500	25	7500	2200	8
JUN-02	2300	73	70			
JUN-03	15000	1200	28			
JUN-04	6800	830	18			
LAF-01	4600	420	24			
LTR-01	4500	520	19			
MAD-01	4800	490	22			
MNT-01	7300	1700	9			
PON-01	3000	380	17	3500	330	23
RAI-01	12000	1100	24	8200	770	24
RAI-02	8500	500	38			
RAI-03	19000	2600	16			
RAI-04	19000	1500	28			
SGL-01	12000	930	29	14000	1500	21
SLV-01	18000	1700	23	10000	1100	20
SLV-02	18000	1200	33			
SLV-03	12000	910	29			
SLV-04	7000	920	17			
SLV-05	14000	1100	28			
TRY-01						
TUT-01	5000	480	23			
VOL-01	22000	4300	11	2700	2500	2
VOL-02	24000	3000	18			
WAC-01	8300	400	46	11000	1400	17
WAC-02	3000	160	41			

Site code	TN	Fall TP	TN/TP	TN	Spring TP	TN/TP
WAC-03	4800	560	19			
WAK-01	6900	380	40	11000	1000	24
WAK-02	4500	470	21			
WAK-03	2100	100	46			
WEK-01	26000	1200	48	10000	590	37
WEK-02	7400	550	30			
WEK-03	8900	14000	1			
WEK-04	7800	660	26			
WGT-01	6500	580	25			
WIL-01	12000	620	43			
WKW-01	205500	66700	7	5000	5100	2
WKW-02	11000	3400	7			

Appendix A.11

Results of algae growth potential and algal limiting nutrient essays.

Spring	Site code	Algae Growth Potential (mg DM/L)	Algal Limiting Nutrient
Alexander	ALE-01	1.12	Nitrogen
Chassahowitzka	CHA-01	3.15	Phosphorus
Fanning	FAN-01	5.11	Phosphorus
Gainer	GAI-02	4.33	Co-limited
Guranato	GUR-01	1.87	Phosphorus
Homosassa	HOM-01	9.62	Phosphorus
Ichetucknee	ICH-02	13.5	Phosphorus
Indian	IND-01	0.355	Phosphorus
Jackson Blue	JAC-01	11.8	Phosphorus
Juniper/Fern Hammock	JUN-02	4.08	Nitrogen
Lafayette Blue	LAF-01	2.28	Phosphorus
Little River	LTR-01	1.56	Nitrogen
Madison Blue	MAD-01	18.6	Phosphorus
Manatee	MNT-01	0.209	Phosphorus
Ponce de Leon	PON-01	0.764	Phosphorus
Rainbow Spring	RAI-01	19.8	Co-limited
Silver Glen	SGL-01	1.92	Nitrogen
Silver Glen	SLV-01	0.269	Phosphorus
Troy	TRY-01	1.77	Phosphorus
Turtle	TUT-01	0.235	Phosphorus
Volusia Blue	VOL-01	23.2	Nitrogen
Wacissa	WAC-01	17.6	Nitrogen
Wakkulla	WAK-01	12.2	Phosphorus
Weeki Wachee	WEK-01	7.51	Undetermined
Washington	WGT-01	6.51	Co-limited
Willford	WIL-01	5.75	Co-limited
Wekiwa	WKW-01	47.9	Co-limited

Appendix A.12

Fall and spring epiphyte and epipelton thickness measured on x scale, where 0 indicates none, 0.5 indicates slimy, 1 tracks, 2 indicates 0.5-1 mm, 3 indicates 1-5 mm, 4 indicates 5-20 mm.

Site code	Fall		Spring	
	Epiphytes	Epipelton	Epiphytes	Epipelton
ALE-01	3.6		2.9	3.0
ALE-02	3.4	2.6	3.5	0.5
CHA-01	2.2	3.0	1.2	1.2
CHA-02	2.3		1.0	
CHA-03	4.4	4.1	4.0	0.5
CYP-01	0.7	2.9		
FAN-01	1.6	1.0		
GAI-01	1.2	1.8	1.5	2.4
GAI-02	1.1	1.9	1.0	0.5
GUR-01	2.8	2.0		
HOM-01	1.4	2.0	0.1	
ICH-01	1.2	2.2	1.5	1.4
ICH-02	3.0		3.1	3.0
ICH-03	2.1		2.2	1.8
ICH-04	2.2	4.0	3.9	
ICH-05	2.4	3.9	4.2	3.0
ICH-06	2.3	3.7	3.3	
ICH-07	2.2		2.4	3.0
ICH-08	1.6	0.7	1.6	
IND-01		3.8		
JAC-01	1.2	2.2	1.9	3.4
JAC-02	2.1		3.1	3.3
JAC-03	3.3		3.7	
JUN-01	3.1	1.8	3.2	2.0
JUN-02		3.0		2.0
JUN-03	2.3	2.1		2.2
JUN-04	2.4		2.7	1.0
LAF-01		2.5		
LTR-01	3.0	2.5		
MAD-01	3.0	3.5		
MNT-01	1.7			
PON-01	1.3	1.5	2.1	0.5
RAI-01	2.7	3.0	3.2	
RAI-02	2.5	3.2	3.5	3.0
RAI-03	2.1	2.7		
RAI-04	1.9		3.8	
SGL-01	2.7	2.3	2.8	
SLV-01	3.5	3.7	4.6	
SLV-02	3.0		4.3	
SLV-03	3.0	2.0	3.5	
SLV-04	2.8		4.2	
SLV-05	3.0		3.9	
TRY-01	2.0	2.7		
TUT-01		2.2		
VOL-01	2.6	3.4	3.0	1.3
VOL-02	2.9	3.0	3.0	1.0
WAC-01	2.1		1.2	
WAC-02	2.3		1.9	
WAC-03	3.2		1.5	3.0

Site code	Fall		Spring	
	Epiphytes	Epipelon	Epiphytes	Epipelon
WAK-01	3.1	2.5	1.0	
WAK-02	3.1		1.0	
WAK-03	2.5		1.4	
WEK-01	0.8		1.0	
WEK-02	1.0	2.0	0.6	
WEK-03	1.9		0.7	
WEK-04	2.2		1.9	2.6
WGT-01	1.0	1.9		
WIL-01	1.3	1.3		
WKW-01	2.7	2.9		0.5
WKW-02	1.2	3.0	1.0	

Appendix A.13

List of algal taxa found in the epiphyte samples.

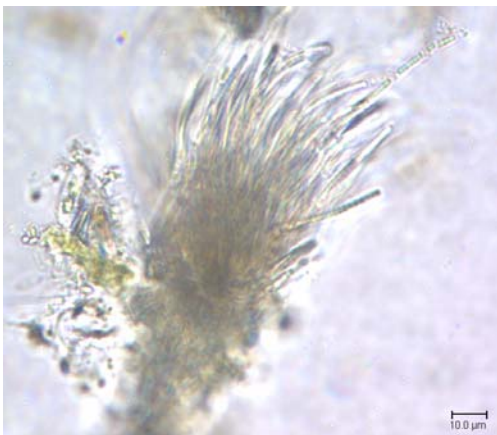
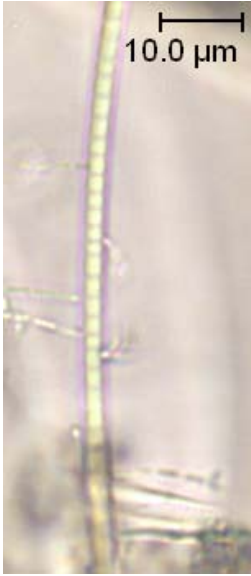
Taxon	Size	Unit counted	Reference
Anabaena affinis Lemmermann	4-7.6 wide x 2.8-5.1µm long	cells	Prescott (1982)
Chantransia stage of Audouinella violacea or Batrachospermum sp.	14x58µm	cells	Sheath (2003)
Aphanothece sp. Naegeli	3.5x1.5µm in mucilage	cells	Prescott (1982)
Asterococcus sp. Scherffel	15µm diameter	Cells	Prescott (1982)
Calothrix sp. big Agardh	3.5-5.6µm wide	10 µm	Prescott (1982)
Calothrix sp. small Agardh	7µm wide	10 µm	Prescott (1982)
Chamaesiphon sp. Braun & Grunow	2-2.2x2.2-7µm	cells	Prescott (1982)
Chroococcus sp. Naegeli	8x6µm	cells	Prescott (1982)
coccoid Cyanophyta 2-4 µm in diameter	2-4µm diameter	cells	
coccoid Cyanophyta 2 µm in diameter	2µm diameter	cells	
coccoid Cyanophyta 4-6 µm in diameter	4-6µm diameter	cells	
coccoid Chlorophyta 8 µm in diameter	8µm diameter	cells	
Chroococcidiopsis fissurarum (Ercegovic) Komarek et Anagnostidies	2-3µm diameter	cells	Komárek (1999)
Compsopogon sp. Montagne in Bory & St. Vincent et Durieaux	20x23µm	cells	Sheath (2003)
Cyanosarcina sp. Kovacik	3.2µm diameter	cells	Komárek (1999)
Euglena sp. Ehrenberg	20x14µm	cells	Prescott (1982)
Chlorophyta zoospore	15µm diameter	cells	
Gomphosphaeria sp. Kuetzing	3x3.7µm	cells	Prescott (1982)
Hydrococcus rivularis Kutz.	2-4µm diameter	cells	Komárek (1999)
Heteroleibleinia sp. (Geitler) L. Hoffmann	1.8µm wide	10 µm	Komárek (2003)
Homeothrix varians Geitler	1.6-2.2µm wide	10 µm	Starmach (1963)
Hydrocoleum sp. Kuetzing	5-6.9µm wide	10 µm	Komárek (2003)
Leibleinia sp. (Gomont) L. Hoffmann	1µm wide	10 µm	Komárek (2003)
Leptolyngbya sp. Anagnostidis et Komarek	2µm wide	10 µm	Komárek (2003)
Lyngbya majuscula Harvey	40-50µm wide	10 µm	Starmach (1963)
Lyngbya sp. Agardh	10.2µm wide	10 µm	Prescott (1982)
Microcystis aeruginosa Kuetzing of Geitler	4µm diameter	cells	Prescott (1982)
Mougeotia sp. (C.A. Agardh) Wittrock	9.6-10.7x39-91.7µm	cells	Prescott (1982)
Nodularia sp. Mertens	9.3-13.4µm wide	10 µm	Prescott (1982)
Oedogonium sp.1 Link	5.9-13x16-32	cells	Prescott (1982)
Oedogonium sp.2 Link	26-28x67-131	cells	Prescott (1982)
Oscillatoria_cf_terebriformis	3.4-4.1µm wide	10 µm	
Oscillatoria granulata Gardner (Phormidium granulatum)	3.5-4.8µm wide	10 µm	Prescott (1982)
Oscillatoria splendida Greville small pieces	2-2.3µm wide	10 µm	Prescott (1982)
Oscillatoria limosa (Roth) C. A. Agardh	11-15µm wide	10 µm	Prescott (1982)
Oscillatoria Mougeotii (Kuetzing) Forti	7.4µm wide	10 µm	Starmach (1963)
Oscillatoria nigra Vaucher	7-8µm wide	10 µm	Prescott (1982)
Oscillatoria simplicissima Gomont	8-8.8µm wide	10 µm	Starmach (1963)
Oscillatoria splendida Greville	2-2.3µm wide	10 µm	Prescott (1982)

Taxon	Size	Unit counted	Reference
Pediastrum tetras (Ehr.) Ralfs	4x6µm	cells	Prescott (1982)
Oscillatoria cf. tenuis C. A. Agardh	8µm wide	10 µm	Prescott (1982)
Oscillatoria cf. articulata (Phormidium cf. articulatum)	2.5µm wide	10 µm	Prescott (1982)
Oscillatoria minnesotensis (Phormidium minnesotense)	1.8-2µm wide	10 µm	Whitford & Schumacher (1984)
Polysiphonia subtilissima	70x107µm	cells	Sheath (2003)
Rhabdoderma sp. Schmidle & Lauterborn	2x10µm	cells	Prescott (1982)
Scenedesmus acutus Meyen	2x11µm	cells	Dillard (1989)
Scenedesmus bernardii G.M. Smith	6.3x21µm	cells	Dillard (1989)
Scenedesmus bijuga (Turp.) Lagerheim	3x11µm	cells	Prescott (1982)
Scenedesmus dispar (Brebisson) Rabenhorst	7x14.5µm	cells	Dillard (1989)
Scenedesmus ecornis (Ehrenberg) Chodat	2-2.8x4.1-7.2µm	cells	Dillard (1989)
Scenedesmus quadricauda var. quadrispina (Chodat) G.M. Smith	2.5x10µm	cells	Prescott (1982)
Scenedesmus soli Hortobagyi	5.5x11.8µm	cells	Dillard (1989)
Scytonematopsis sp. E. Kiseleva	18.7µm wide	10 µm	Komárek (2003)
Stigeoclonium tenue (Agardh) Kuetzing	8.7x14.4µm	cells	Prescott (1982)
Spirogyra sp. Link	25-37x86-103µm	cells	Prescott (1982)
Spirulina sp. Turpin	1µm wide	10 µm	Prescott (1982)
Tetraedron minimum (Braun) Hansgirg	3.5-4.3x4.7-6µm	cells	Prescott (1982)
Ulothrix sp. Kuetzing	17.4x29µm	cells	Prescott (1982)
Xenococcus sp. Thuret	4-7µm diameter	cells	Komárek (1999)
Xenococcus sp. Thuret	2µm diameter	cells	Komárek (1999)
Synechocystis aquatilis	2µm diameter	cells	Komárek (1999)
Synechocystis salina	2-3µm diameter	cells	Komárek (1999)

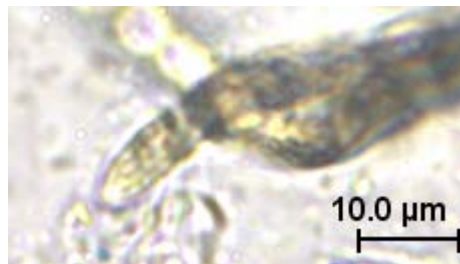
Anabaena affinis



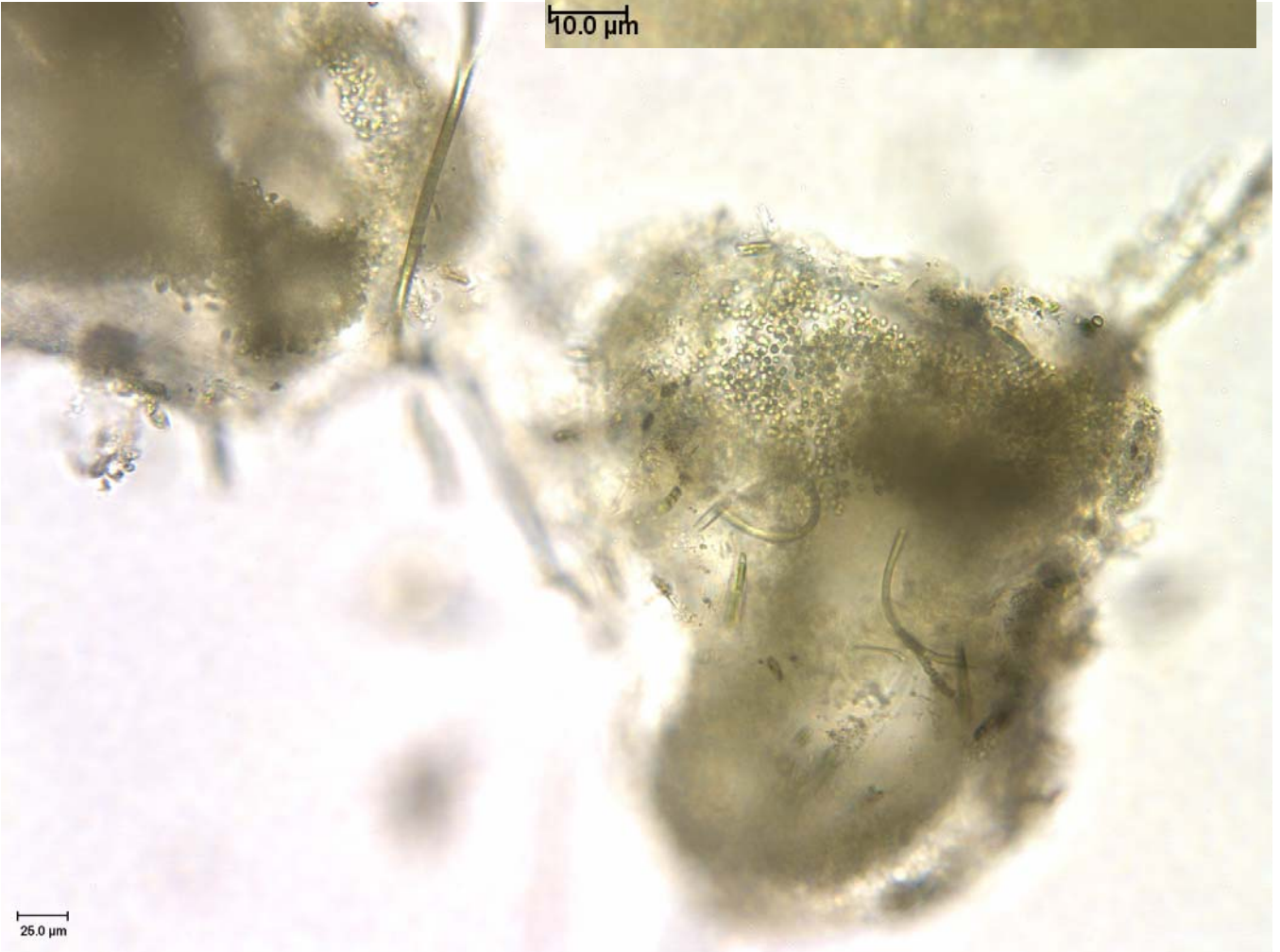
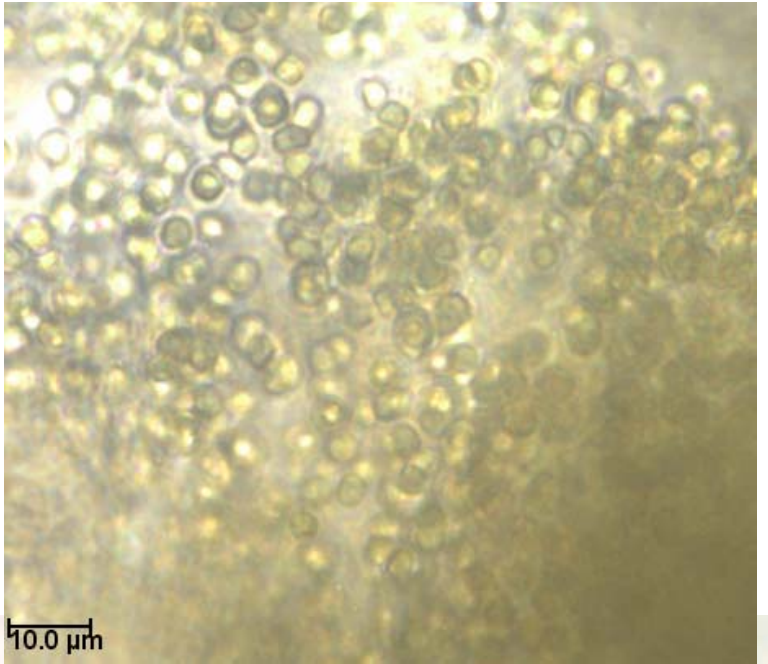
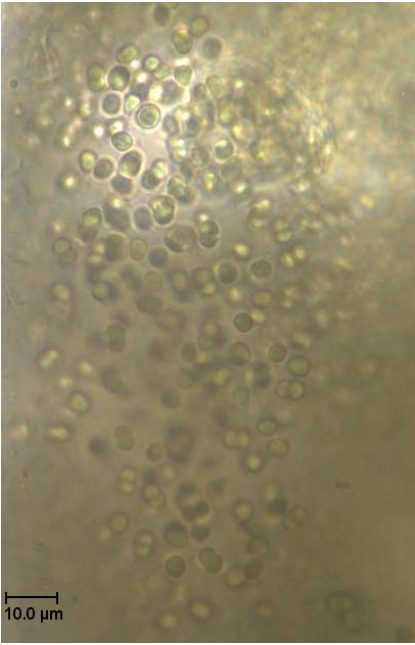
Homeothrix varians



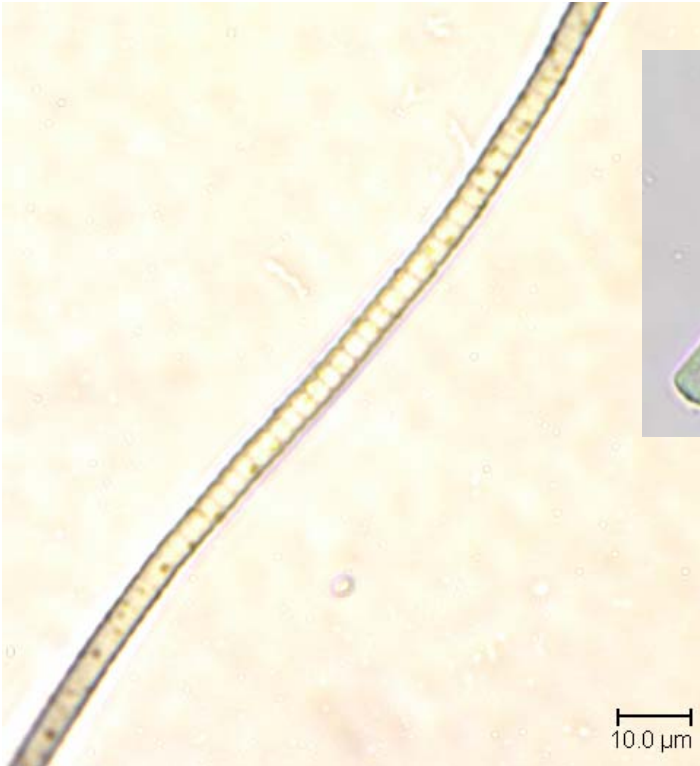
Hydrocoleum sp.



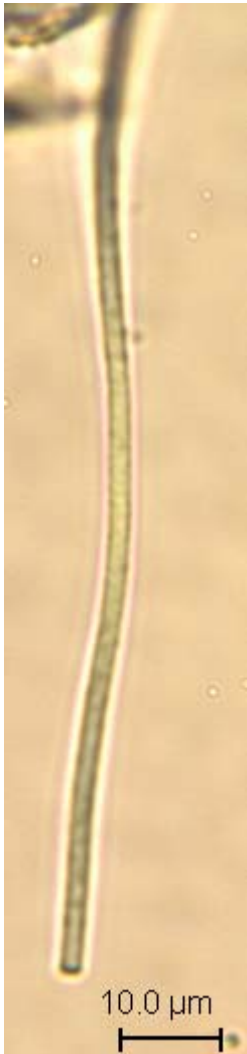
Microcystis aeruginosa



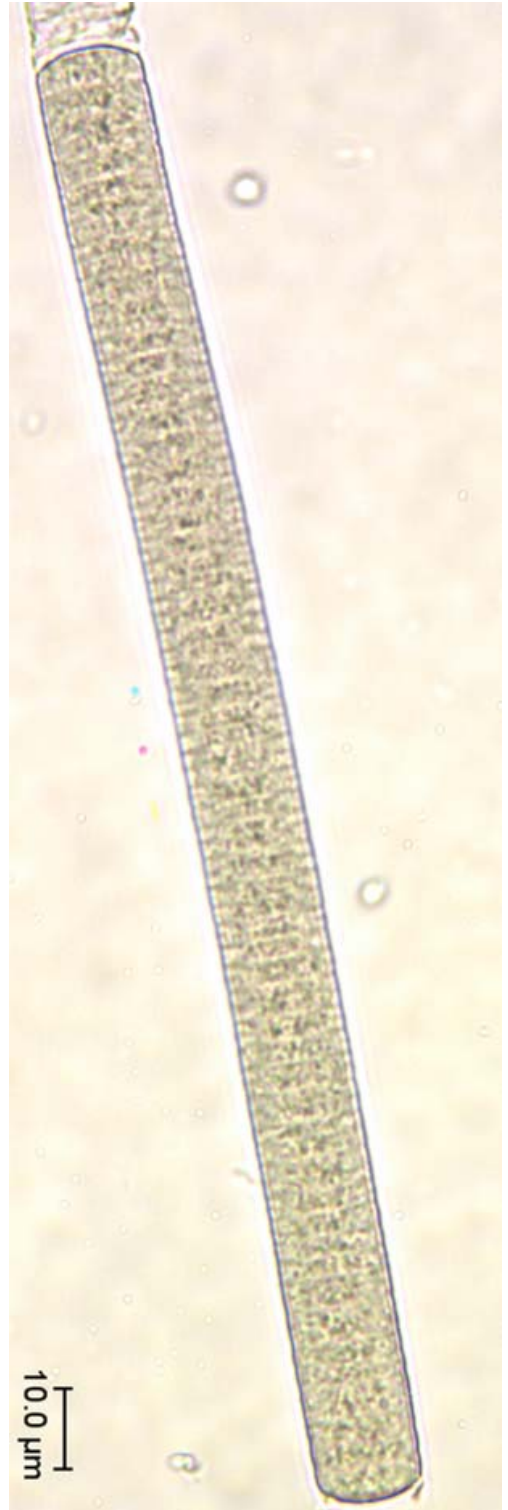
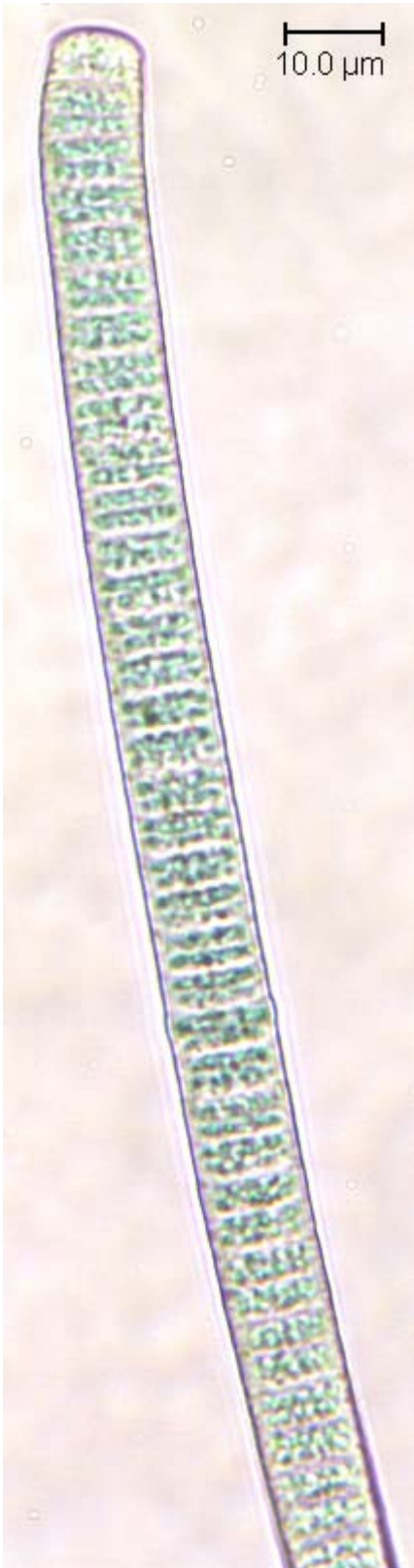
Oscillatoria granulata (Phormidium granulatum)



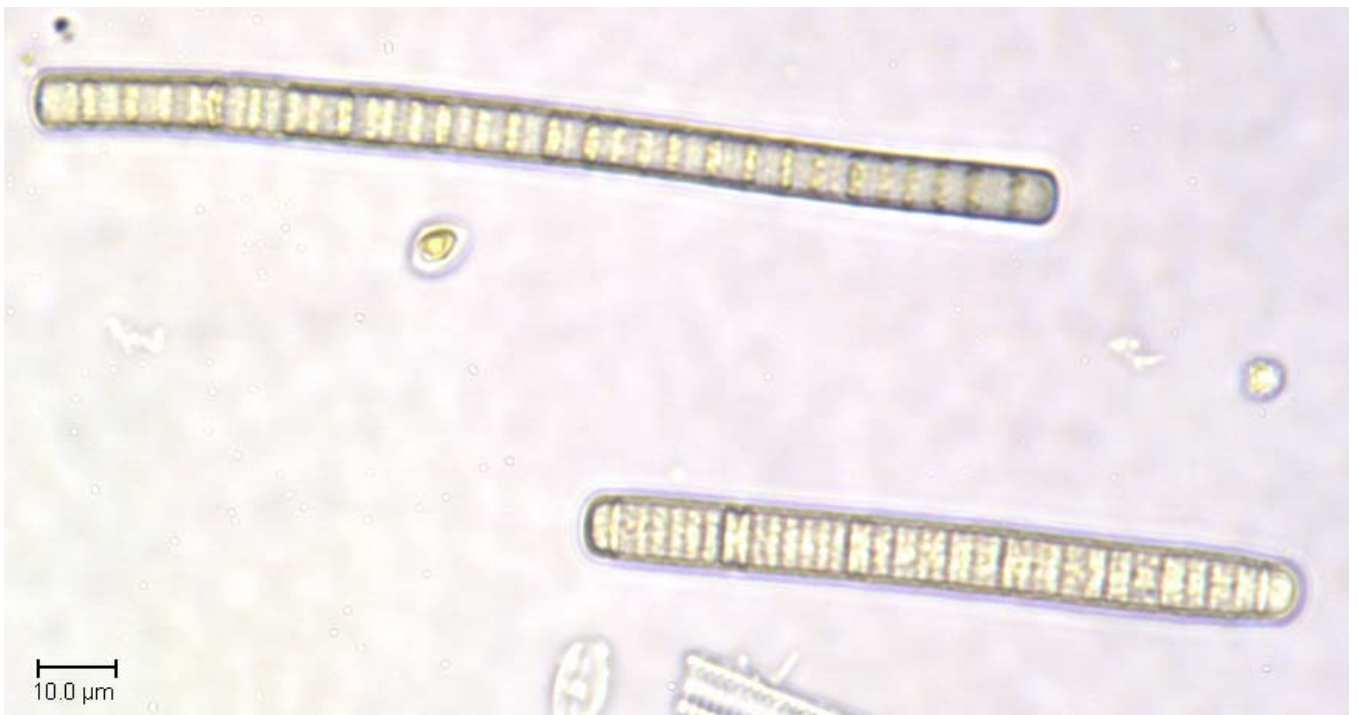
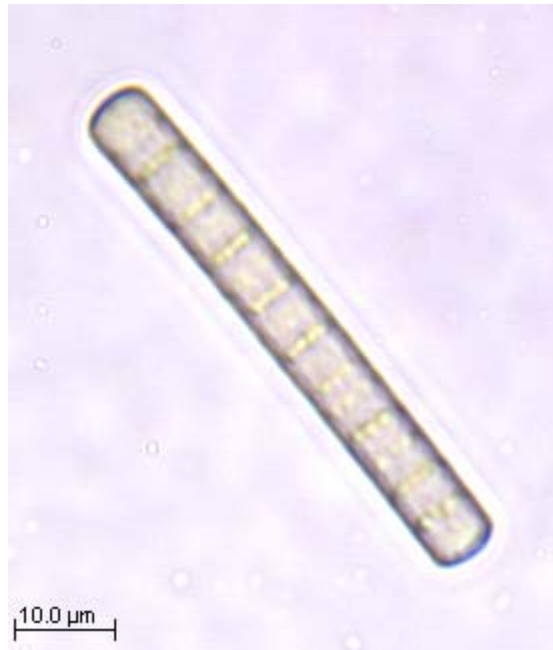
Oscillatoria splendida (Leptolyngbia splendida)



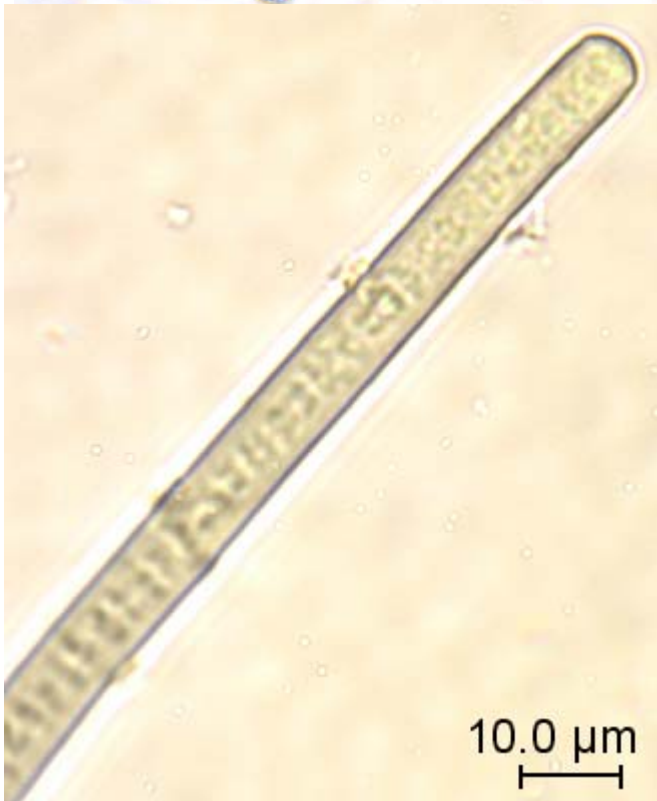
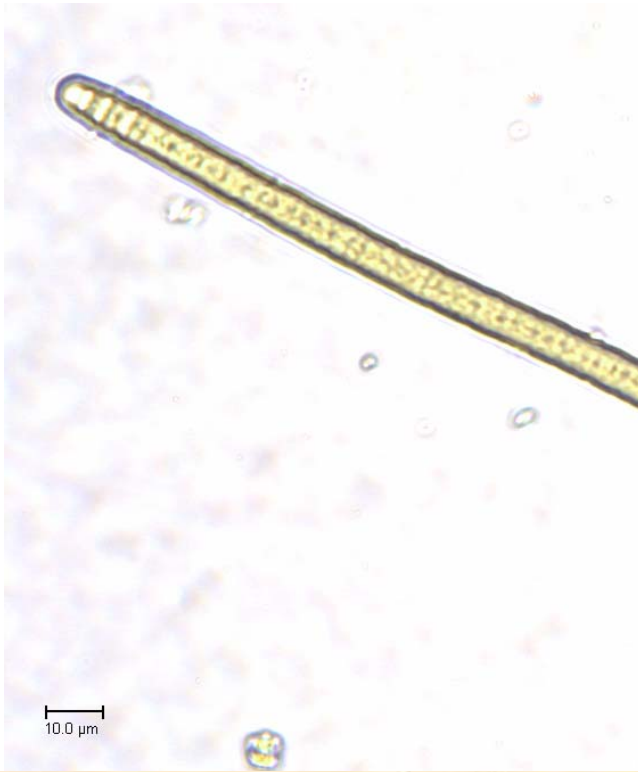
Oscillatoria limosa



Oscillatoria nigra



Oscillatoria simplicissima



Oscillatoria cf. articulata (Phormidium cf. articulatum)



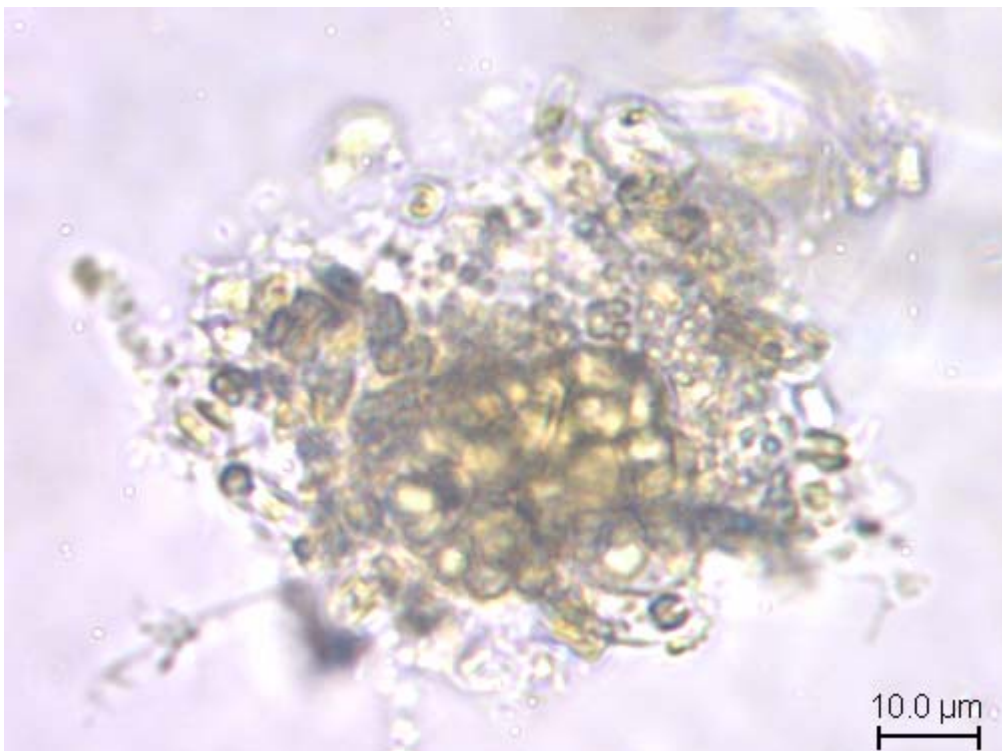
Oscillatoria minnesotensis (Phormidium minnesotense)



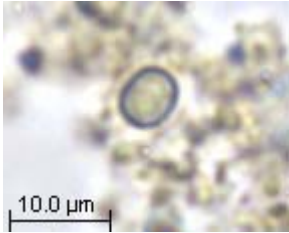
Polysiphonia subtilissima



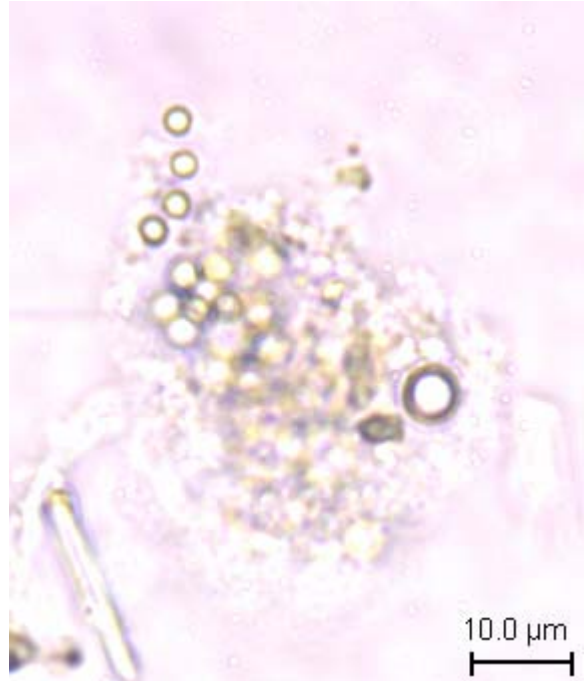
Xenococcus sp.



Synechocystis aquatilis



Synechocystis salina



Appendix A.15

Epiphytic algal cell or 10 µm long unit density per mm² of aquatic plant leaf surface area for spring and fall samples.

For type of unit counted refer to Appendix 14. Based on Access Epiphytes_soft_counts qryEpiphytes_with_TaxaNames_Cells_mm2.

Taxa	Long_site_code	Spring sampling							
		ALE-01-03283	ALE-02-03283	CHA-01-04013	CHA-02-04013	CHA-03-04013	GAI-01-04263	GAI-02-04263	HOM-01-04023
Anabaena affinis Lemmermann		3800	1404						
Aphanothece sp_ Naegeli									
Asterococcus sp_ Scherffel									
Calothrix sp_ big Agardh									
Calothrix sp_ small Agardh									
Chamaesiphon sp_ Braun & Grunow									
Chantransia stage of Audouinella violacea or Batrachospermum sp_ Chlorophyte zoospore									
Chroococcidiopsis fissurarum (Ercegovic) Komarek et Anagnostidis									
Chroococcus sp_ Naegeli									
coccoid Chlorophyta 8 µm in diameter									
coccoid Cyanophyta 2 µm in diameter				1331	471	2763			
coccoid Cyanophyta 2-4 µm in diameter									
coccoid Cyanophyta 4-6 µm in diameter									
Compsopogon sp_ Montagne in Bory & St_ Vincent et Durieaux									
Cyanosarcina sp_ Kovacik									
dead diatom		1358	2486	2810	2356	2619	207	467	213
Euglena sp_ Ehrenberg									
Gomphosphaeria sp_ Kuetzing									
Heteroleibleinia sp_ (Geitler) L_ Hoffmann									
Homeothrix varians Geitler		1807	3637		219	361		531	
Hydrococcus rivularis Kutz_									
Hydrocoleum sp_ Kuetzing									
Leibleinia sp_ (Gomont) L_ Hoffmann									
Leptolyngbya sp_ Anagnostidis et Komarek									
live diatom		3406	14066	7888	4746	4786	266	1331	512
Lyngbya majuscula Harvey									
Lyngbya sp_ Agardh									
Microcystis aeruginosa Kuetzing of Geitler									
Mougeotia sp_ (C_ A_ Agardh) Wittrock			23						
Oedogonium sp_1 Link									
Oedogonium sp_2 Link					50				
Oscillatoria cf_ articulata (Phormidium cf_ articulatum)									
Oscillatoria cf_ tenuis C_ A_ Agardh									
Oscillatoria granulata Gardner (Phormidium granulatum)					219		100		
Oscillatoria limosa (Roth) C_ A_ Agardh		11	4788				59	3549	
Oscillatoria minnesotensis (Phormidium minnesotense)		131	230		34			32	
Oscillatoria Mougeotii (Kuetzing) Forti									
Oscillatoria nigra Vaucher									
Oscillatoria simplicissima Gomont		920	2647					334	
Oscillatoria splendida Greville		690	1312			18	59		418
Oscillatoria splendida Greville small pieces									
Oscillatoria_cf_ terebriformis		624	207						
Pediastrum tetras (Ehr_) Ralfs			92						
Polysiphonia subtilissima									
Rhabdoderma sp_ Schmidle & Lauterborn									
Scenedesmus acutus Meyen									
Scenedesmus bernardii G_ M_ Smith									
Scenedesmus bijuga (Turp_) Lagerheim									
Scenedesmus dispar (Brebisson) Rabenhorst									
Scenedesmus ecornis (Ehrenberg) Chodat			92						
Scenedesmus quadricauda var_ quadrispina (Chodat) G_ M_ Smith									
Scenedesmus soli Hortobagyi									
Scytonematopsis sp_ E_ Kiseleva									
Spirogyra sp_ Link		153							
Spirulina sp_ Turpin									
Stigeoclonium tenue (Agardh) Kuetzing		405							
Synechocystis aquatilis									146
Synechocystis salina			1381	148					
Tetraedron minimum (Braun) Hansgirg									
Ulothrix sp_ Kuetzing									
Xenococcus sp_ Thuret		285	46	518	724	8110	24		

ICH-01-03163	ICH-02-03173	ICH-03-03173	ICH-04-04233	ICH-05-04233	ICH-06-04233	ICH-07-04243	ICH-08-04213	JAC-01-04193	JAC-02-04193	JAC-03-04183	JUN-01-03273	JUN-03-0327388	JUN-04-03263	PON-01-04263	RAI-01-04043	RAI-02-04043	RAI-03-04043
		298									805						
		595			456	288										202	
										4475	862						
			23361 1355667	74	2357	3455	49		3520 35	4556	10806 747632	292 598	25		476	555	659 1007
4994	1441	1950	22026	3673	1198	1484	292	7243	2962	11716	2644	1533	1730	106	4016	3227	5623
2983	3989	12330 3207	79761	2819 74	3536	5360	14	8691	13871	2237	26152	307		6	3094	2194	347
24581	4660	6116	82431	9646	4658	3788	597	44614	7075	17208	9426	3372	2378	296	7616	6758	11419
							14										
			9011	445													
									1324	1383							
	59	2711 33	3671 2336	3821 74	951				174	1587							
			19690	3190	380	443	2			1220 1302	3966	438	57		3659	227	382
	7721		21025	5120	1445				105 941					19		126	
							75 393		314		287			5	2082	706	1458
													172				
										325							
										488				92			
584						399		579									
									139	814 1220							
	474 1185		1335	482	152		17										
										41							
		1752	3671	185	418	1063	54	11153	139	81	517	2073	180	69	446	328	521

RAI-04-04043	SGL-01-03263 7699	SLV-01-04033	SLV-02-04033	SLV-03-04033	SLV-04-04033	SLV-05-04033	VOL-01-03293	VOL-02-03293	WAC-01-04073	WAC-02-04073	WAC-03-04073	WAK-01-04083	WAK-02-04083	WAK-03-04083	WEK-03-03243	WEK-04-04223 WKW-01-03303	
	12764		2751														
58				1772	376	1288			182							23	235
543		535	577				10	3 7	394	225 676	494	672	51	325	1078	40 62	17
2985	11751	10398	4570	20886	10895	14487	175	15	1668	7550	6921	5715	233	1085	4150	685	105
									182								
465	41736	1376	4304			2254	14			6761	395	560	67	5687	229	40	373
11726	36671	26759	11626	39873	32872	46037	666	69	9035	32680	29168	18938	428	2867	10293	1636	1169
																	13
698	31403	765	3195			805	153	7 2		6085	989	168				17	163
155	1418 7091	229 1606	710 932				118 6		152		1088					11	603 25
										225							
					939											17	4
			177	1013			16										
			355	506	376												
	810																
																	42 17
			5103 222	3924 253	376	1288										170	352
										1127			2				
601	203	841	3506	5696	5166	15936	24	4	212	451	1186			449	556	91	683

WKW-
02-
03303

1399

5920

9579

38424

323

1184

Long_site_code	Fall sampling									
	ALE-01-10293	ALE-02-10293	CHA-01-11023	CHA-02-110203	CHA-03-110203	CYP-01-09243	CYP-01Q-09243	FAN-01-10023	GAI-01-09253	GAI-02-09253
Anabaena affinis Lemmermann		270								
Aphanothece sp_ Naegeli							1			
Asterococcus sp_ Scherffel										
Calothrix sp_ big Agardh		225								
Calothrix sp_ small Agardh										
Chamaesiphon sp_ Braun & Grunow				1		2				
Chantransia stage of Audouinella violacea or Batrachospermum sp_										
Chlorophyte zoospore		7								
Chroococcidiopsis fissurarum (Ercegovic) Komarek et Anagnostidis										
Chroococcus sp_ Naegeli										
coccoid Chlorophyta 8 µm in diameter										
coccoid Cyanophyta 2 µm in diameter		22								
coccoid Cyanophyta 2-4 µm in diameter										
coccoid Cyanophyta 4-6 µm in diameter				31						
Compsopogon sp_ Montagne in Bory & St_ Vincent et Durieaux										
Cyanosarcina sp_ Kovacik										
dead diatom	324	855	386	205	715	16	10	938	119	65
Euglena sp_ Ehrenberg										
Gomphosphaeria sp_ Kuetzing										
Heteroleibleinia sp_ (Geitler) L_ Hoffmann										
Homeothrix varians Geitler		1552			2144	62	6		42	22
Hydrococcus rivularis Kutz_										
Hydrocoleum sp_ Kuetzing						15				
Leibleinia sp_ (Gomont) L_ Hoffmann										
Leptolyngbya sp_ Anagnostidis et Komarek										
live diatom	1083	3771	1008	342	2073	64	44	13342	389	587
Lyngbya majuscula Harvey										
Lyngbya sp_ Agardh										
Microcystis aeruginosa Kuetzing of Geitler						15	5			
Mougeotia sp_ (C_A_ Agardh) Wittrock										
Oedogonium sp_1 Link			10							
Oedogonium sp_2 Link		60	40	8						
Oscillatoria cf_ articulata (Phormidium cf_ articulatum)										
Oscillatoria cf_ tenuis C_ A_ Agardh										
Oscillatoria granulata Gardner (Phormidium granulatum)		705	3		55	2	1	256		
Oscillatoria limosa (Roth) C_ A_ Agardh	211	390								4
Oscillatoria minnesotensis (Phormidium minnesotense)		270	93	10		0				
Oscillatoria Mougeotii (Kuetzing) Forti										
Oscillatoria nigra Vaucher										
Oscillatoria simplicissima Gomont	403	15								
Oscillatoria splendida Greville	41	517	10	4	683					
Oscillatoria splendida Greville small pieces										
Oscillatoria_cf_terebriformis										
Pediastrum tetras (Ehr_) Ralfs										
Polysiphonia subtilissima										
Rhabdoderma sp_ Schmidle & Lauterborn										
Scenedesmus acutus Meyen										
Scenedesmus bernardii G_M_ Smith										
Scenedesmus bijuga (Turp_) Lagerheim										
Scenedesmus dispar (Brebisson) Rabenhorst										
Scenedesmus ecornis (Ehrenberg) Chodat			23			1				
Scenedesmus quadricauda var_ quadrispina (Chodat) G_M_ Smith										
Scenedesmus soli Hortobagyi										
Scytonematopsis sp_ E_ Kiseleva										
Spirogyra sp_ Link										
Spirulina sp_ Turpin										
Stigeoclonium tenue (Agardh) Kuetzing					39	2				
Synechocystis aquatilis										
Synechocystis salina										
Tetraedron minimum (Braun) Hansgirg										
Ulothrix sp_ Kuetzing										
Xenococcus sp_ Thuret	28			4	369	4	7		29	9

GUR-01- 10023	HOM-01- 11043	ICH-01- 11223	ICH-02- 11223	ICH-03- 11223	ICH-01Q 11223	ICH-04- 11093	ICH-05- 11093	ICH-06- 11093	ICH-07- 11083	ICH-08- 11083	JAC-01- 09243	JAC-02- 09233	JAC-03- 09233	JUN-01- 10313	JUN-02- 10313	JUN-03- 10313	JUN-04- 10313
							191	152		145		284					
									905								
													271				
							509		1736			344	3455		485	702	
												90	283		249		69
2096 237	65	335	2084	1972	656	843	1399 4260	3272	709 856	805	719	867 15	1674	1757	1141	1502	101 597
			74 7928	448		2970	2353		2347	2705	2372	5068	495	2960	760	1599	37
														3219			
395																	
12339	178	2043	6923	12952	3757	5615	17423	23587	5868	3285	4457	2795	3290	3644	3960	3028	881
													83 318		105		
475 316 989	12 5		2903			192	445 64	2511	1002		359	852 314 90			2124		
							6422				230	703	271				45
40						767			122	483							4
		25									115	15		55		121	
158								763					94 71				
							862										
									147								
													24				
158	4		4578	986	36	479	318		1149	1079		194	83	2664		1514	16

LTR-01-09283	MAD-01-09293	MNT-01-10033	PON-01-09223	RAI-01-11123	RAI-02-11123	RAI-03-11123	RAI-04-11123	SGL-01-10303796	SGL-01Q-10303190	SLV-01-11133	SLV-02-11133	SLV-03-11133	SLV-04-11133	SLV-05-11123	TRY-01-09293	TUT-01-09303	VOL-01-11203
	12		2					304101									
					304		90	62			667	446	620	67			
		48	13	200	262	21		39	36	138	56	30		34	17		81
396	706	328	46	5140	3066	821	690	655	470	1652	1557	2557	2359	2053	407	204	187
83	151		16	4439	1781	95	265	1358	1658	2395	1575	1472	1080	292	262	171	302
3037	3902	2966	187	9412	5593	1605	1975245	156978	994	7846	4281	4401	9276	4027	1701	1038	984
														22			44
	764463																
1919			13							138	1557			2234		47	
			2	1001				8			315	74		34	162	149	34
			3	100200	124				527		816	59				80138	6256
										28							
			2				16								17		
89								23									146
			3		28	8	35	117	68	303	56		120			25	12

VOL-02- 11203	WAC-01- 09273	WAC-02- 09273	WAC-03- 09273	WAK-01- 10013	WAK-02- 10013	WAK-03- 10013	WEK-01- 11053	WEK-02- 11053	WEK-03- 11043	WEK-04- 11053	WGT-01- 09263	WIL-01- 09253	WKW- 01- 11213	WKW- 02- 11213
			67					17	8				20	
103							143	153	41	118		19	34	
								84	68	152	1044	31	61	19
117	1512	2635	784	4045	2137	2489	103	101	195	1686	651	182	437	273
6		788	42	1146	765	172	5	50	2	928	2020	10	362	88
451	9202	6773	3533	32694	7491	6480	204	114	435	4789	2940	23 405	1815	1143
49						129 107				34	22		34	
		1084 25					10				79	101		28
	2349	1921	413	3303	112									100
14		714	17 481	809			24	4		270	191		82	66 336
					1416									
					270						135 45			
						180		69						
526													498	
										135				47
12	193					172	30	55		84				

Appendix A.16

Average aquatic plant percent cover in the fall and in the spring. Blank indicates site was not sampled.

Site code	Fall % cover	Spring % cover
ALE-01	21.0	23.5
ALE-02	58.0	58.0
CHA-01	37.0	60.5
CHA-02	23.5	65.4
CHA-03	79.0	82.7
CYP-01	16.0	
FAN-01	13.6	
GAI-01	18.1	18.5
GAI-02	56.8	67.9
GUR-01	32.1	
HOM-01	56.8	61.7
ICH-01	55.6	55.6
ICH-02	87.7	84.0
ICH-03	91.4	82.2
ICH-04	93.8	96.3
ICH-05	70.4	80.2
ICH-06	69.1	85.2
ICH-07	86.4	88.9
ICH-08	79.0	96.3
IND-01	0.0	
JAC-01	51.9	58.0
JAC-02	77.8	72.8
JAC-03	63.0	39.5
JUN-01	37.0	37.0
JUN-02	1.2	0.0
JUN-03	4.9	1.2
JUN-04	7.4	6.2
LAF-01	0.0	
LTR-01	4.9	
MAD-01	3.7	
MNT-01	3.7	
PON-01	19.8	16.0
RAI-01	86.4	80.2
RAI-02	71.6	66.7
RAI-03	82.7	84.0
RAI-04	63.0	85.2
SGL-01	27.2	27.2
SLV-01	79.0	79.0
SLV-02	80.2	72.8
SLV-03	76.5	65.4
SLV-04	86.4	84.0
SLV-05	80.2	79.0
TRY-01	1.2	
TUT-01	2.5	
VOL-01	9.9	2.5
VOL-02	13.6	4.9
WAC-01	93.8	88.9
WAC-02	91.4	92.6
WAC-03	53.1	71.6

Site code	Fall % cover	Spring % cover
WAK-01	70.4	51.9
WAK-02	77.8	50.6
WAK-03	63.0	25.9
WEK-01	7.4	1.2
WEK-02	25.9	9.9
WEK-03	28.4	27.2
WEK-04	32.1	55.6
WGT-01	30.9	
WIL-01	51.9	
WKW-01	7.4	4.9
WKW-02	32.1	13.6

Appendix A.17 Fall

Aquatic plants percent cover of individual taxa in the fall. For plant taxa codes refer to Table 1.3.

Site code	A	Br	Ce	Ch	Cj	Ct	Ed	H	Hy	Le	Lu	M	Mo	N	N2	Nu	Pi	Pn	Ps	R	Sg	Sk	Sl	Sm	St	T	Tr	U	Val	W	Y	Z	
ALE-01	0	0	2	0	0	0	0	0	1	1	0	0	1	0	10	4	0	2	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0
ALE-02	0	0	2	0	0	0	0	0	1	2	0	0	0	0	49	0	2	1	0	0	0	0	0	0	0	0	1	0	0	2	6	0	0
CHA-01	0	0	0	0	0	0	0	27	0	0	0	0	4	10	0	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0	0	0
CHA-02	0	0	0	0	0	0	0	15	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	1	1	0
CHA-03	0	0	0	0	1	0	0	0	0	0	0	7	0	20	0	0	0	0	0	0	0	0	36	4	0	0	0	2	0	19	0	2	0
CYP-01	0	0	0	10	0	0	0	0	4	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FAN-01	0	0	0	2	0	0	0	0	0	0	10	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GAI-01	0	0	4	8	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
GAI-02	0	0	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GUR-01	31	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOM-01	0	0	0	0	0	0	0	9	0	0	0	0	0	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ICH-01	0	0	0	4	0	0	0	0	21	2	21	0	7	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	20
ICH-02	0	0	0	1	0	0	0	0	0	6	4	0	1	0	0	0	0	0	0	0	0	84	0	0	0	0	0	0	0	0	0	0	1
ICH-03	0	0	0	4	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	73	0	0	0	0	0	0	0	0	0	0	20
ICH-04	0	0	1	0	0	0	0	0	0	23	1	0	0	0	0	0	0	0	4	0	86	0	0	0	0	0	0	0	0	0	0	0	4
ICH-05	0	0	0	1	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	59	0	0	0	0	0	0	0	0	0	0	0	1
ICH-06	0	0	1	0	0	0	0	0	0	20	0	0	6	5	0	0	4	0	0	0	51	0	0	0	0	0	0	0	0	4	0	0	0
ICH-07	0	0	0	16	0	0	0	0	0	1	0	0	2	0	0	0	5	0	0	0	38	1	0	0	0	0	0	0	0	53	0	0	0
ICH-08	0	0	0	5	0	0	0	1	1	4	0	0	30	0	0	0	7	0	0	0	36	0	0	0	0	0	0	0	0	9	0	0	0
IND-01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAC-01	0	0	32	0	0	0	0	4	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0
JAC-02	0	0	28	0	0	0	0	0	2	23	0	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	46	0	0	0
JAC-03	0	0	1	0	0	0	0	0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0
JUN-01	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	36	0	0	0
JUN-02	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
JUN-03	0	0	0	0	0	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
JUN-04	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	4	0	0	1	0	0	0
LAF-01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LTR-01	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
MAD-01	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
MNT-01	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
PON-01	0	0	0	6	0	0	0	0	0	0	5	0	5	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RAI-01	0	0	0	0	0	0	0	23	0	0	0	5	0	2	0	0	0	15	0	0	62	0	0	0	0	0	4	32	35	0	0	0	0

Site code	A	Br	Ce	Ch	Cj	Ct	Ed	H	Hy	Le	Lu	M	Mo	N	N2	Nu	Pi	Pn	Ps	R	Sg	Sk	Sl	Sm	St	T	Tr	U	Val	W	Y	Z
RAI-02	0	0	12	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	60	0	0	0	0	1	0	0	0	0	1
RAI-03	0	0	7	0	0	0	0	14	0	0	0	0	0	2	0	0	0	0	0	0	0	63	0	0	0	0	0	0	12	0	0	0
RAI-04	0	0	10	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	0	0	0
SGL-01	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	5	0	0	0	0	0	0	0	22	0	0	0
SLV-01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	0	0	0	0	0	0	28	0	0	0
SLV-02	0	0	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	79	0	0	0	0	0	0	0	0	0	0
SLV-03	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	0	0	0	0	0	0	11	0	0	0
SLV-04	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	4	2	0	0	0	0	80	0	0	0	0	0	0	9	0	0	0
SLV-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	1	0	0	0	0	75	0	0	0	0	0	0	5	0	0	0	
TRY-01	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
TUT-01	1	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	1	0	0
VOL-01	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VOL-02	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WAC-01	0	0	35	0	0	0	0	77	0	5	0	0	0	5	0	6	1	0	0	0	0	1	0	2	0	0	0	0	1	2	1	0
WAC-02	0	0	0	0	0	0	67	28	0	1	0	0	0	2	0	0	4	0	4	0	0	2	0	1	0	0	0	0	5	0	0	0
WAC-03	0	0	14	0	0	0	0	42	0	11	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
WAK-01	0	0	0	0	0	0	0	69	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	9	0
WAK-02	0	2	0	2	0	2	10	70	0	19	0	0	0	1	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0
WAK-03	0	0	0	36	0	0	0	38	0	5	0	0	0	0	0	0	0	5	0	0	0	10	0	0	0	0	0	0	0	0	0	0
WEK-01	0	0	0	1	0	0	0	0	0	0	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WEK-02	0	0	0	7	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0	0	0
WEK-03	0	0	0	0	0	0	0	14	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
WEK-04	0	0	1	0	0	0	0	14	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0
WGT-01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WIL-01	0	0	20	30	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WKW-01	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WKW-02	0	0	0	0	0	0	0	15	17	0	0	0	2	11	2	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix A.17 Spring

Aquatic plants percent cover of individual taxa in the spring. For plant taxa codes refer to Table 1.3.

Site_code	A	Ce	Ch	Cj	Co	Ct	Ed	H	Hp	Hy	Le	Lu	M	Mo	N	N2	Nu	Pi	Pl	Pn	Pp	Ps	Pu	R	Rc	Sg	Sk	Sl	Sm	St	T	Tr	U	Val	W	Y	Z	
ALE-01	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	15	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	5	0	0	0
ALE-02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4	0	0	0
CHA-01	0	0	0	0	0	0	0	51	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0
CHA-02	0	1	0	0	0	0	0	33	1	0	1	0	12	0	5	0	0	0	0	0	17	0	0	0	0	0	0	0	1	0	0	0	0	0	6	1	0	0
CHA-03	0	0	0	0	0	0	0	0	0	0	0	0	16	0	4	0	1	0	0	0	33	0	0	0	0	0	0	1	0	0	0	2	0	51	0	0	0	
GAI-01	0	0	13	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	
GAI-02	0	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
HOM-01	0	0	0	0	0	0	0	0	0	0	2	0	0	0	33	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ICH-01	0	0	0	0	0	0	0	0	0	7	5	17	0	14	2	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	23
ICH-02	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	84	0	0	0	0	0	0	0	0	0	0	
ICH-03	0	0	20	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	56	0	0	0	0	0	0	0	0	0	2	
ICH-04	0	4	6	0	0	0	0	0	0	0	21	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	67	0	0	0	0	0	0	0	0	0	20	
ICH-05	0	0	5	0	0	0	0	0	0	0	20	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	53	0	0	0	0	0	0	0	0	0	20	
ICH-06	0	0	2	0	0	0	0	0	0	1	1	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	67	0	0	0	0	0	0	0	0	0	11	
ICH-07	0	0	15	0	0	0	0	0	0	7	2	0	2	1	0	0	0	2	0	0	0	0	0	0	0	0	64	1	0	0	0	0	0	19	0	0	2	
ICH-08	0	0	6	0	0	0	0	0	16	0	11	11	1	14	0	0	0	11	0	0	0	0	0	0	0	0	51	1	0	0	0	0	0	14	0	0	1	
JAC-01	0	43	0	0	0	0	0	0	0	0	10	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	0	0	0	
JAC-02	0	4	1	0	0	0	0	9	0	0	37	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	0	0	0	
JAC-03	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	30	0	0	0	
JUN-01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	0	0	0	
JUN-02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
JUN-03	0	0	0	0	0	0	0	0	0	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	
JUN-04	2	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	0	0	
PON-01	0	0	7	0	0	0	0	0	0	0	0	2	0	4	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
RAI-01	0	1	0	0	0	0	0	22	0	0	0	0	0	0	2	0	0	1	16	0	0	0	0	0	0	0	65	0	0	0	0	1	12	15	0	0	0	
RAI-02	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	60	0	0	0	0	1	0	4	0	0	0	
RAI-03	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	0	0	0	0	0	0	17	0	0	1	
RAI-04	0	12	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	2	0	63	0	0	0	
SGL-01	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	4	0	0	0	0	0	0	0	22	0	0	0	
SLV-01	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	79	0	0	0	
SLV-02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73	0	0	0	
SLV-03	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	57	0	0	0		
SLV-04	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79	0	0	0	

[illegible]