

Appendix G. Seagrass Condition Monitoring Data Reduction Templates

Formulas:

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Quarter	Date	Site	Cross Transect	Quadrat number	Quadrat distance (m)	% cover	Field- density in 1/16 m ² quadrat	Reproductive shoots in 1/4 m ² quadrat	Grazing	Epiphyte	Wasting Disease	Canopy height (cm)
2	Jul2004	38200	DH	A	1	2	100	60	24	T	H	L	55
3	Jul2004	38200	DH	A	2	7	100	42	23	T	H	L	63
4	Jul2004	38200	DH	A	3	8	90	40	38	T	H	T	60
5	Jul2004	38200	DH	A	4	16	85	57	17	T	H	T	56
6	Jul2004	38200	DH	A	5	18	80	31	15	T	H	L	41
7	Jul2004	38200	DH	A	6	25	100	44	18	T	H	T	57
8	Jul2004	38200	DH	A	7	26	5	0	0	T	H	L	33
9	Jul2004	38200	DH	A	8	33	100	60	29	T	H	L	36
10	Jul2004	38200	DH	A	9	38	100	46	21	T	H	L	26
11	Jul2004	38200	DH	A	10	40	100	65	26	T	H	L	28
12	Jul2004	38200	DH	A	11	44	100	94	41	T	H	L	32
13	Jul2004	38200	DH	A	12	46	100	93	10	T	H	H	34

Appendix G. Seagrass Condition Monitoring Data Reduction Templates (continued)

Formulas (continued):

	N	O	P	Q
1	Core area (m ²)	Lab: meristems per core	Shoots/m ² from field density	Reproductive shoots/m ²
2	0.0037	5	=IF(ISBLANK(H2),"",H2*16)	=IF(ISBLANK(I2),"",I2*4)
3	0.0037	9	=IF(ISBLANK(H3),"",H3*16)	=IF(ISBLANK(I3),"",I3*4)
4	0.0037	9	=IF(ISBLANK(H4),"",H4*16)	=IF(ISBLANK(I4),"",I4*4)
5	0.0037	8	=IF(ISBLANK(H5),"",H5*16)	=IF(ISBLANK(I5),"",I5*4)
6	0.0037	6	=IF(ISBLANK(H6),"",H6*16)	=IF(ISBLANK(I6),"",I6*4)
7	0.0037	3	=IF(ISBLANK(H7),"",H7*16)	=IF(ISBLANK(I7),"",I7*4)
8	0.0037	7	=IF(ISBLANK(H8),"",H8*16)	=IF(ISBLANK(I8),"",I8*4)
9	0.0037	4	=IF(ISBLANK(H9),"",H9*16)	=IF(ISBLANK(I9),"",I9*4)
10	0.0037	6	=IF(ISBLANK(H10),"",H10*16)	=IF(ISBLANK(I10),"",I10*4)
11	0.0037	6	=IF(ISBLANK(H11),"",H11*16)	=IF(ISBLANK(I11),"",I11*4)
12	0.0037	9	=IF(ISBLANK(H12),"",H12*16)	=IF(ISBLANK(I12),"",I12*4)
13	0.0037	12	=IF(ISBLANK(H13),"",H13*16)	=IF(ISBLANK(I13),"",I13*4)

Appendix G. Seagrass Condition Monitoring Data Reduction Templates (continued)

Formulas (continued):

	R	S	T	U
1	Sample dry weight: Leaves (g)	Sample dry weight: Roots&Rhiz. (g)	Sample dry weight: Sheath (g)	Shoot : RR
2	0.6997	0.7319	0.0521	=IF(OR(ISBLANK(R2),ISBLANK(S2),R2=0,S2=0),"",(R2+T2)/S2)
3	2.2597	0.7414	0.1195	=IF(OR(ISBLANK(R3),ISBLANK(S3),R3=0,S3=0),"",(R3+T3)/S3)
4	1.5086	0.7235	0.0547	=IF(OR(ISBLANK(R4),ISBLANK(S4),R4=0,S4=0),"",(R4+T4)/S4)
5	1.6925	0.6358	0.0376	=IF(OR(ISBLANK(R5),ISBLANK(S5),R5=0,S5=0),"",(R5+T5)/S5)
6	1.1553	0.2036	0.018	=IF(OR(ISBLANK(R6),ISBLANK(S6),R6=0,S6=0),"",(R6+T6)/S6)
7	0.5269	0.8862	0.0238	=IF(OR(ISBLANK(R7),ISBLANK(S7),R7=0,S7=0),"",(R7+T7)/S7)
8	0.7431	0.4907	0.0337	=IF(OR(ISBLANK(R8),ISBLANK(S8),R8=0,S8=0),"",(R8+T8)/S8)
9	0.3012	0.6603	0.0094	=IF(OR(ISBLANK(R9),ISBLANK(S9),R9=0,S9=0),"",(R9+T9)/S9)
10	0.5386	0.4914	0.0207	=IF(OR(ISBLANK(R10),ISBLANK(S10),R10=0,S10=0),"",(R10+T10)/S10)
11	0.5662	0.739	0.0221	=IF(OR(ISBLANK(R11),ISBLANK(S11),R11=0,S11=0),"",(R11+T11)/S11)
12	0.6651	0.9246	0.0162	=IF(OR(ISBLANK(R12),ISBLANK(S12),R12=0,S12=0),"",(R12+T12)/S12)
13	1.8002	0.5884	0.064	=IF(OR(ISBLANK(R13),ISBLANK(S13),R13=0,S13=0),"",(R13+T13)/S13)

Appendix G. Seagrass Condition Monitoring Data Reduction Templates (continued)

Formulas (continued):

	V	W
1	Leaf : RR	total g/shoot
2	=IF(OR(ISBLANK(R2),ISBLANK(S2),R2=0,S2=0),"",R2/S2)	=IF(OR(ISBLANK(R2),ISBLANK(S2),ISBLANK(T2)),"",IF(OR(R2=0,S2=0),"",(R2+S2+T2)/O2))
3	=IF(OR(ISBLANK(R3),ISBLANK(S3),R3=0,S3=0),"",R3/S3)	=IF(OR(ISBLANK(R3),ISBLANK(S3),ISBLANK(T3)),"",IF(OR(R3=0,S3=0),"",(R3+S3+T3)/O3))
4	=IF(OR(ISBLANK(R4),ISBLANK(S4),R4=0,S4=0),"",R4/S4)	=IF(OR(ISBLANK(R4),ISBLANK(S4),ISBLANK(T4)),"",IF(OR(R4=0,S4=0),"",(R4+S4+T4)/O4))
5	=IF(OR(ISBLANK(R5),ISBLANK(S5),R5=0,S5=0),"",R5/S5)	=IF(OR(ISBLANK(R5),ISBLANK(S5),ISBLANK(T5)),"",IF(OR(R5=0,S5=0),"",(R5+S5+T5)/O5))
6	=IF(OR(ISBLANK(R6),ISBLANK(S6),R6=0,S6=0),"",R6/S6)	=IF(OR(ISBLANK(R6),ISBLANK(S6),ISBLANK(T6)),"",IF(OR(R6=0,S6=0),"",(R6+S6+T6)/O6))
7	=IF(OR(ISBLANK(R7),ISBLANK(S7),R7=0,S7=0),"",R7/S7)	=IF(OR(ISBLANK(R7),ISBLANK(S7),ISBLANK(T7)),"",IF(OR(R7=0,S7=0),"",(R7+S7+T7)/O7))
8	=IF(OR(ISBLANK(R8),ISBLANK(S8),R8=0,S8=0),"",R8/S8)	=IF(OR(ISBLANK(R8),ISBLANK(S8),ISBLANK(T8)),"",IF(OR(R8=0,S8=0),"",(R8+S8+T8)/O8))
9	=IF(OR(ISBLANK(R9),ISBLANK(S9),R9=0,S9=0),"",R9/S9)	=IF(OR(ISBLANK(R9),ISBLANK(S9),ISBLANK(T9)),"",IF(OR(R9=0,S9=0),"",(R9+S9+T9)/O9))
10	=IF(OR(ISBLANK(R10),ISBLANK(S10),R10=0,S10=0),"",R10/S10)	=IF(OR(ISBLANK(R10),ISBLANK(S10),ISBLANK(T10)),"",IF(OR(R10=0,S10=0),"",(R10+S10+T10)/O10))
11	=IF(OR(ISBLANK(R11),ISBLANK(S11),R11=0,S11=0),"",R11/S11)	=IF(OR(ISBLANK(R11),ISBLANK(S11),ISBLANK(T11)),"",IF(OR(R11=0,S11=0),"",(R11+S11+T11)/O11))
12	=IF(OR(ISBLANK(R12),ISBLANK(S12),R12=0,S12=0),"",R12/S12)	=IF(OR(ISBLANK(R12),ISBLANK(S12),ISBLANK(T12)),"",IF(OR(R12=0,S12=0),"",(R12+S12+T12)/O12))
13	=IF(OR(ISBLANK(R13),ISBLANK(S13),R13=0,S13=0),"",R13/S13)	=IF(OR(ISBLANK(R13),ISBLANK(S13),ISBLANK(T13)),"",IF(OR(R13=0,S13=0),"",(R13+S13+T13)/O13))

Appendix G. Seagrass Condition Monitoring Data Reduction Templates (continued)

Formulas (continued):

	X	Y
1	leaf g/shoot	above-ground g/shoot
2	=IF(OR(ISBLANK(R2),R2=0),"",R2/O2)	=IF(OR(ISBLANK(R2),ISBLANK(T2),R2=0),"",(R2+T2)/O2)
3	=IF(OR(ISBLANK(R3),R3=0),"",R3/O3)	=IF(OR(ISBLANK(R3),ISBLANK(T3),R3=0),"",(R3+T3)/O3)
4	=IF(OR(ISBLANK(R4),R4=0),"",R4/O4)	=IF(OR(ISBLANK(R4),ISBLANK(T4),R4=0),"",(R4+T4)/O4)
5	=IF(OR(ISBLANK(R5),R5=0),"",R5/O5)	=IF(OR(ISBLANK(R5),ISBLANK(T5),R5=0),"",(R5+T5)/O5)
6	=IF(OR(ISBLANK(R6),R6=0),"",R6/O6)	=IF(OR(ISBLANK(R6),ISBLANK(T6),R6=0),"",(R6+T6)/O6)
7	=IF(OR(ISBLANK(R7),R7=0),"",R7/O7)	=IF(OR(ISBLANK(R7),ISBLANK(T7),R7=0),"",(R7+T7)/O7)
8	=IF(OR(ISBLANK(R8),R8=0),"",R8/O8)	=IF(OR(ISBLANK(R8),ISBLANK(T8),R8=0),"",(R8+T8)/O8)
9	=IF(OR(ISBLANK(R9),R9=0),"",R9/O9)	=IF(OR(ISBLANK(R9),ISBLANK(T9),R9=0),"",(R9+T9)/O9)
10	=IF(OR(ISBLANK(R10),R10=0),"",R10/O10)	=IF(OR(ISBLANK(R10),ISBLANK(T10),R10=0),"",(R10+T10)/O10)
11	=IF(OR(ISBLANK(R11),R11=0),"",R11/O11)	=IF(OR(ISBLANK(R11),ISBLANK(T11),R11=0),"",(R11+T11)/O11)
12	=IF(OR(ISBLANK(R12),R12=0),"",R12/O12)	=IF(OR(ISBLANK(R12),ISBLANK(T12),R12=0),"",(R12+T12)/O12)
13	=IF(OR(ISBLANK(R13),R13=0),"",R13/O13)	=IF(OR(ISBLANK(R13),ISBLANK(T13),R13=0),"",(R13+T13)/O13)

Appendix G. Seagrass Condition Monitoring Data Reduction Templates (continued)

Formulas (continued):

	Z	AA
1	total g/m2 [individ shoot bio*dens]	leaf g/m2 [individ shoot bio*dens]
2	=IF(P2=0,0,IF(OR(P2="",W2=""), "",W2*P2))	=IF(P2=0,0,IF(OR(P2="",X2=""), "",X2*P2))
3	=IF(P3=0,0,IF(OR(P3="",W3=""), "",W3*P3))	=IF(P3=0,0,IF(OR(P3="",X3=""), "",X3*P3))
4	=IF(P4=0,0,IF(OR(P4="",W4=""), "",W4*P4))	=IF(P4=0,0,IF(OR(P4="",X4=""), "",X4*P4))
5	=IF(P5=0,0,IF(OR(P5="",W5=""), "",W5*P5))	=IF(P5=0,0,IF(OR(P5="",X5=""), "",X5*P5))
6	=IF(P6=0,0,IF(OR(P6="",W6=""), "",W6*P6))	=IF(P6=0,0,IF(OR(P6="",X6=""), "",X6*P6))
7	=IF(P7=0,0,IF(OR(P7="",W7=""), "",W7*P7))	=IF(P7=0,0,IF(OR(P7="",X7=""), "",X7*P7))
8	=IF(P8=0,0,IF(OR(P8="",W8=""), "",W8*P8))	=IF(P8=0,0,IF(OR(P8="",X8=""), "",X8*P8))
9	=IF(P9=0,0,IF(OR(P9="",W9=""), "",W9*P9))	=IF(P9=0,0,IF(OR(P9="",X9=""), "",X9*P9))
10	=IF(P10=0,0,IF(OR(P10="",W10=""), "",W10*P10))	=IF(P10=0,0,IF(OR(P10="",X10=""), "",X10*P10))
11	=IF(P11=0,0,IF(OR(P11="",W11=""), "",W11*P11))	=IF(P11=0,0,IF(OR(P11="",X11=""), "",X11*P11))
12	=IF(P12=0,0,IF(OR(P12="",W12=""), "",W12*P12))	=IF(P12=0,0,IF(OR(P12="",X12=""), "",X12*P12))
13	=IF(P13=0,0,IF(OR(P13="",W13=""), "",W13*P13))	=IF(P13=0,0,IF(OR(P13="",X13=""), "",X13*P13))

Appendix G. Seagrass Condition Monitoring Data Reduction Templates (continued)

Formulas (continued):

	AB
1	abovegrndg/m2 [individ shoot bio*dens]
2	=IF(P2=0,0,IF(OR(P2="",Y2=""), "",Y2*P2))
3	=IF(P3=0,0,IF(OR(P3="",Y3=""), "",Y3*P3))
4	=IF(P4=0,0,IF(OR(P4="",Y4=""), "",Y4*P4))
5	=IF(P5=0,0,IF(OR(P5="",Y5=""), "",Y5*P5))
6	=IF(P6=0,0,IF(OR(P6="",Y6=""), "",Y6*P6))
7	=IF(P7=0,0,IF(OR(P7="",Y7=""), "",Y7*P7))
8	=IF(P8=0,0,IF(OR(P8="",Y8=""), "",Y8*P8))
9	=IF(P9=0,0,IF(OR(P9="",Y9=""), "",Y9*P9))
10	=IF(P10=0,0,IF(OR(P10="",Y10=""), "",Y10*P10))
11	=IF(P11=0,0,IF(OR(P11="",Y11=""), "",Y11*P11))
12	=IF(P12=0,0,IF(OR(P12="",Y12=""), "",Y12*P12))
13	=IF(P13=0,0,IF(OR(P13="",Y13=""), "",Y13*P13))

Appendix G. Seagrass Condition Monitoring Data Reduction Templates (continued).

Sample Data:

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Quarter	Date	Site	Cross Transect	Quadrat number	Quadrat distance (m)	% cover	Field- density in 1/16 m ² quadrat	Reproductive shoots in 1/4 m ² quadrat	Grazing	Epiphyte	Wasting Disease	Canopy height (cm)
2	Jul2004	8/1/2004	DH	A	1	2	100	60	24	T	H	L	55
3	Jul2004	8/1/2004	DH	A	2	7	100	42	23	T	H	L	63
4	Jul2004	8/1/2004	DH	A	3	8	90	40	38	T	H	T	60
5	Jul2004	8/1/2004	DH	A	4	16	85	57	17	T	H	T	56
6	Jul2004	8/1/2004	DH	A	5	18	80	31	15	T	H	L	41
7	Jul2004	8/1/2004	DH	A	6	25	100	44	18	T	H	T	57
8	Jul2004	8/1/2004	DH	A	7	26	5	0	0	T	H	L	33
9	Jul2004	8/1/2004	DH	A	8	33	100	60	29	T	H	L	36
10	Jul2004	8/1/2004	DH	A	9	38	100	46	21	T	H	L	26
11	Jul2004	8/1/2004	DH	A	10	40	100	65	26	T	H	L	28
12	Jul2004	8/1/2004	DH	A	11	44	100	94	41	T	H	L	32
13	Jul2004	8/1/2004	DH	A	12	46	100	93	10	T	H	H	34

Appendix G. Seagrass Condition Monitoring Data Reduction Templates (continued).

Sample Data (continued):

	N	O	P	Q	R	S	T	U	V	W
1	Core area (m ²)	Lab: meristems per core	Shoots/m ² from field density	Reproductive shoots/m ²	Sample dry weight: Leaves (g)	Sample dry weight: Roots&Rhiz. (g)	Sample dry weight: Sheath (g)	Shoot : RR	Leaf : RR	total g/shoot
2	0.0037	5	960	96	0.6997	0.7319	0.0521	1.03	0.96	0.2967
3	0.0037	9	672	92	2.2597	0.7414	0.1195	3.21	3.05	0.3467
4	0.0037	9	640	152	1.5086	0.7235	0.0547	2.16	2.09	0.2541
5	0.0037	8	912	68	1.6925	0.6358	0.0376	2.72	2.66	0.2957
6	0.0037	6	496	60	1.1553	0.2036	0.0180	5.76	5.67	0.2295
7	0.0037	3	704	72	0.5269	0.8862	0.0238	0.62	0.59	0.4790
8	0.0037	7	0	0	0.7431	0.4907	0.0337	1.58	1.51	0.1811
9	0.0037	4	960	116	0.3012	0.6603	0.0094	0.47	0.46	0.2427
10	0.0037	6	736	84	0.5386	0.4914	0.0207	1.14	1.10	0.1751
11	0.0037	6	1040	104	0.5662	0.7390	0.0221	0.80	0.77	0.2212
12	0.0037	9	1504	164	0.6651	0.9246	0.0162	0.74	0.72	0.1784
13	0.0037	12	1488	40	1.8002	0.5884	0.0640	3.17	3.06	0.2044

Appendix G. Seagrass Condition Monitoring Data Reduction Templates (continued).

Sample Data (continued):

	X	Y	Z	AA	AB
1	leaf g/shoot	above-ground g/shoot	total g/m2 [individ shoot bio*dens]	leaf g/m2 [individ shoot bio*dens]	abovegrndg/m2 [individ shoot bio*dens]
2	0.1399	0.1504	284.8704	134.3424	144.3456
3	0.2511	0.2644	233.0048	168.7242667	177.6469333
4	0.1676	0.1737	162.6168889	107.2782222	111.168
5	0.2116	0.2163	269.7126	192.945	197.2314
6	0.1926	0.1956	113.8237333	95.5048	96.9928
7	0.1756	0.1836	337.1925333	123.6458667	129.2309333
8	0.1062	0.1110	0	0	0
9	0.0753	0.0777	233.016	72.288	74.544
10	0.0898	0.0932	128.8858667	66.06826667	68.60746667
11	0.0944	0.0981	230.0653333	98.14133333	101.972
12	0.0739	0.0757	268.3637333	111.1456	113.8528
13	0.1500	0.1554	304.1224	223.2248	231.1608