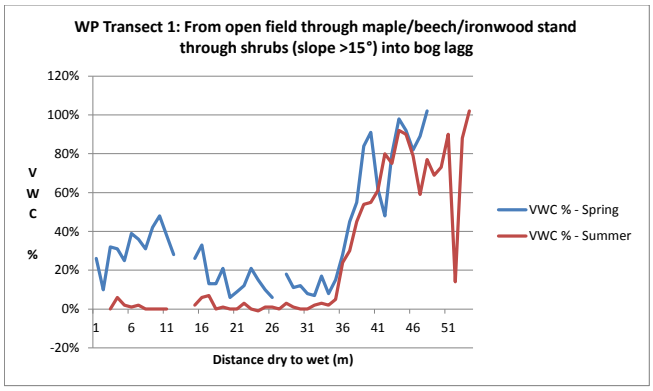
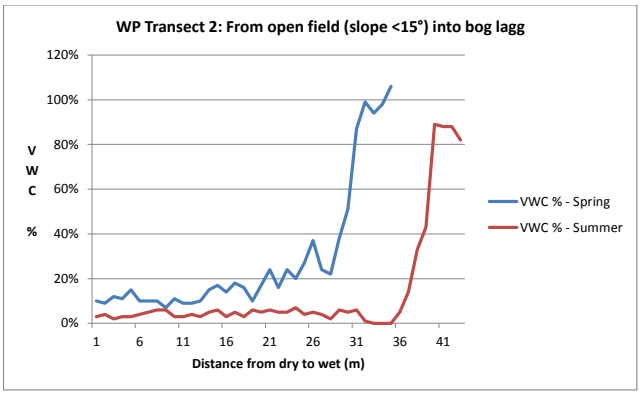
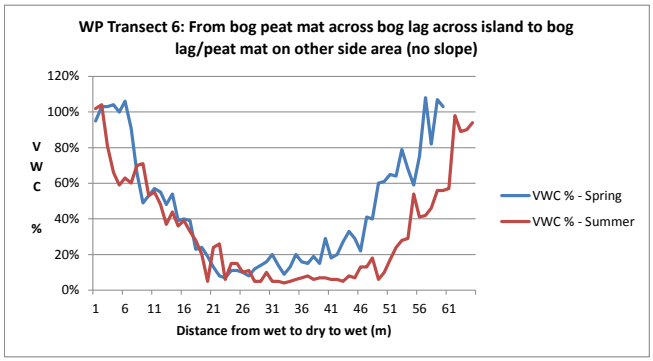
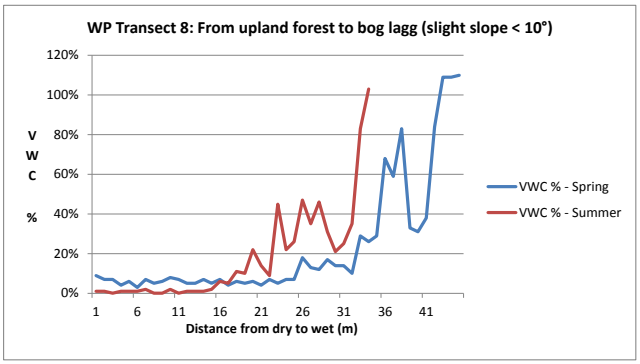
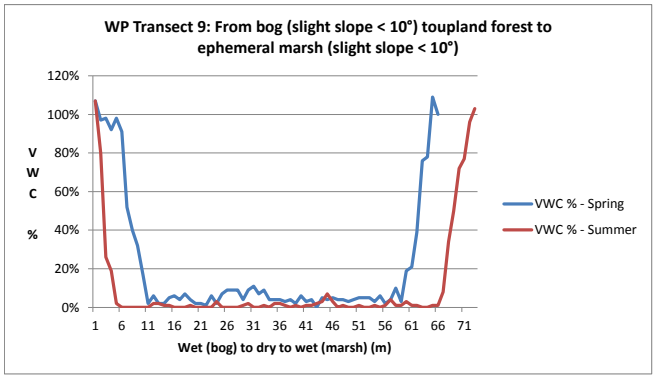
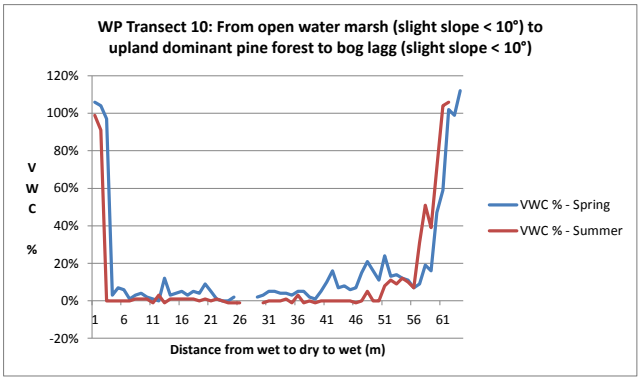

WP Transect 1: From open field through maple/beech/ironwood stand through shrubs (slope >15°) into bog lagg
VWC %
120%
100%
80%
60%
40%
20%
0%
-20%
1 6 11 16 21 26 31 36 41 46 51
Distance dry to wet (m)
VWC % - Spring
VWC % - Summer

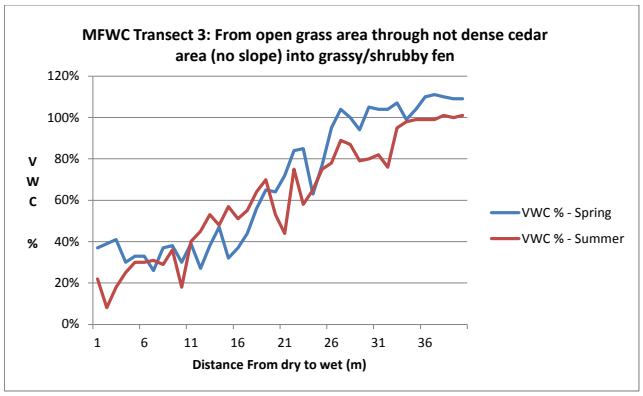

WP Transect 2: From open field (slope <15°) into bog lagg
VWC %
120%
100%
80%
60%
40%
20%
0%
1 6 11 16 21 26 31 36 41
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

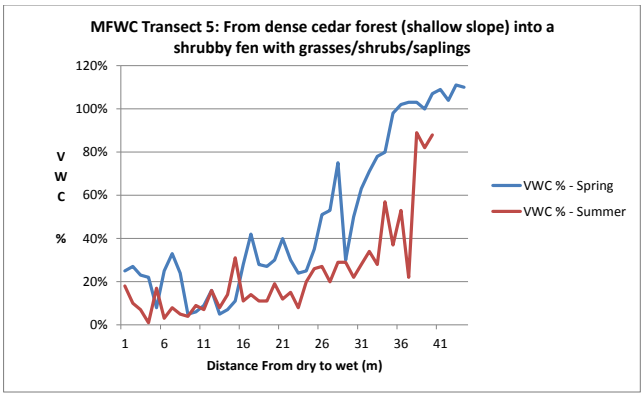

WP Transect 6: From bog peat mat across bog lag across island to bog lag/peat mat on other side area (no slope)
VWC %
120%
100%
80%
60%
40%
20%
0%
1 6 11 16 21 26 31 36 41 46 51 56 61
Distance from wet to dry to wet (m)
VWC % - Spring
VWC % - Summer

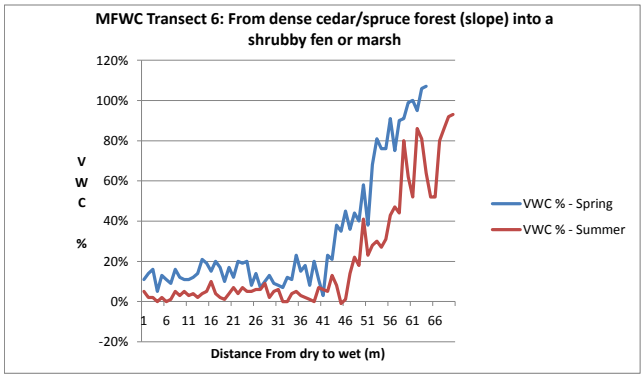

WP Transect 8: From upland forest to bog lagg (slight slope < 10°)
VWC %
120%
100%
80%
60%
40%
20%
0%
1 6 11 16 21 26 31 36 41
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

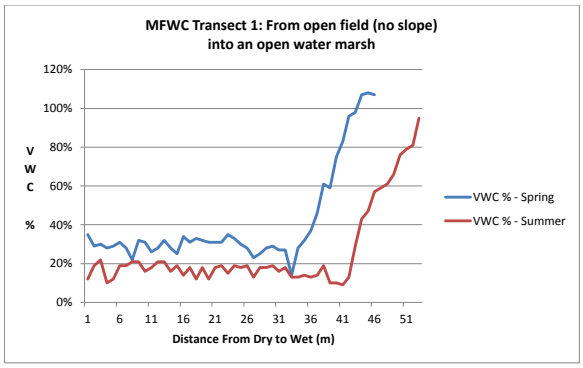

WP Transect 9: From bog (slight slope < 10°) toupland forest to ephemeral marsh (slight slope < 10°)
VWC %
120%
100%
80%
60%
40%
20%
0%
1 6 11 16 21 26 31 36 41 46 51 56 61 66 71
Wet (bog) to dry to wet (marsh) (m)
VWC % - Spring
VWC % - Summer

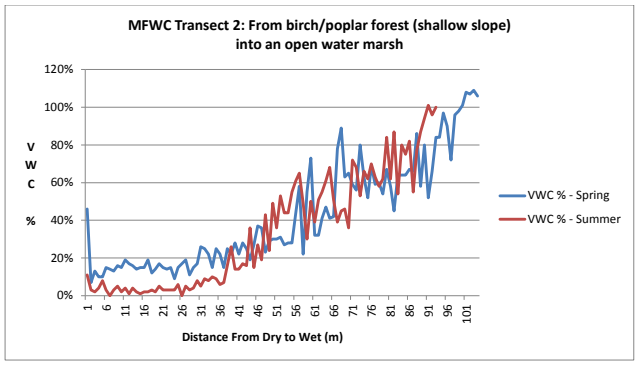

WP Transect 10: From open water marsh (slight slope < 10°) to upland dominant pine forest to bog lagg (slight slope < 10°)
VWC %
120%
100%
80%
60%
40%
20%
0%
-20%
1 6 11 16 21 26 31 36 41 46 51 56 61
Distance from wet to dry to wet (m)
VWC % - Spring
VWC % - Summer

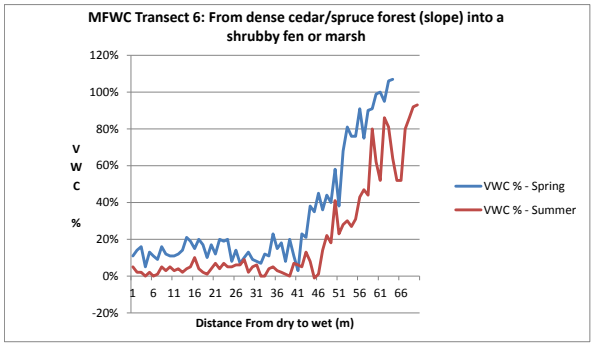

MFWC Transect 3: From open grass area through not dense cedar area (no slope) into grassy/shrubby fen
120%
100%
80%
60%
40%
20%
0%
VWC %
1
6
11
16
21
26
31
36
Distance From dry to wet (m)
VWC % - Spring
VWC % - Summer

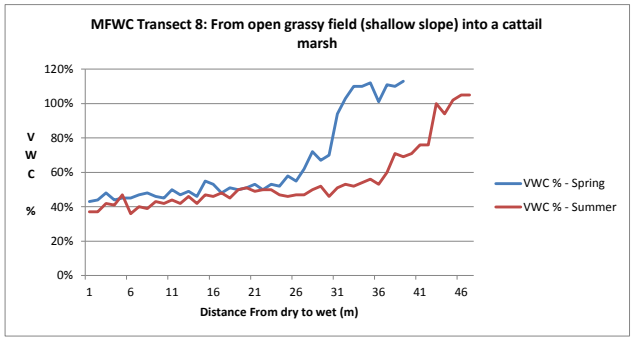

MFWC Transect 5: From dense cedar forest (shallow slope) into a shrubby fen with grasses/shrubs/saplings
120%
100%
80%
60%
40%
20%
0%
VWC %
1
6
11
16
21
26
31
36
41
Distance From dry to wet (m)
VWC % - Spring
VWC % - Summer

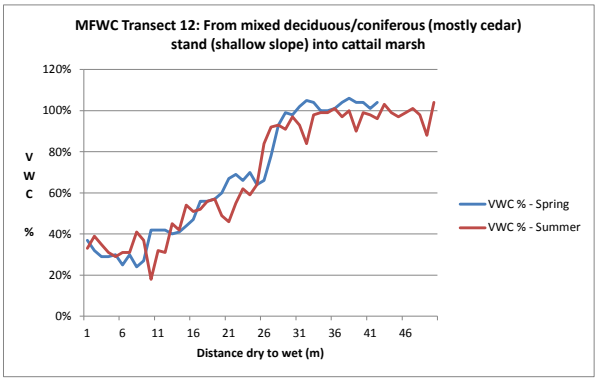

MFWC Transect 6: From dense cedar/spruce forest (slope) into a shrubby fen or marsh
120%
100%
80%
60%
40%
20%
0%
-20%
VWC %
1 6 11 16 21 26 31 36 41 46 51 56 61 66
Distance From dry to wet (m)
VWC % - Spring
VWC % - Summer

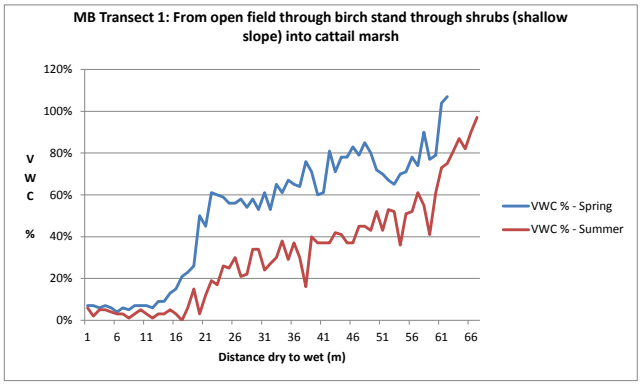

MFWC Transect 1: From open field (no slope) into an open water marsh
VWC %
Distance From Dry to Wet (m)
VWC % - Spring
VWC % - Summer

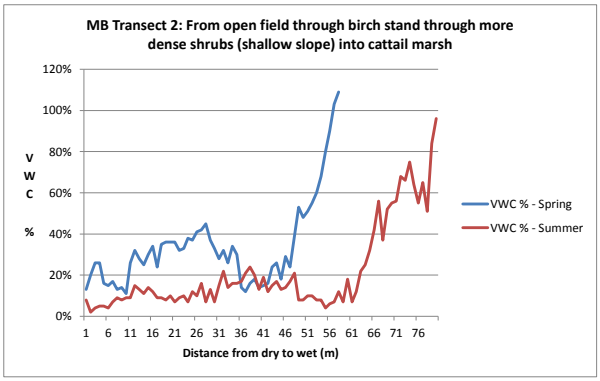

MFWC Transect 2: From birch/poplar forest (shallow slope) into an open water marsh
VWC %
Distance From Dry to Wet (m)
VWC % - Spring
VWC % - Summer

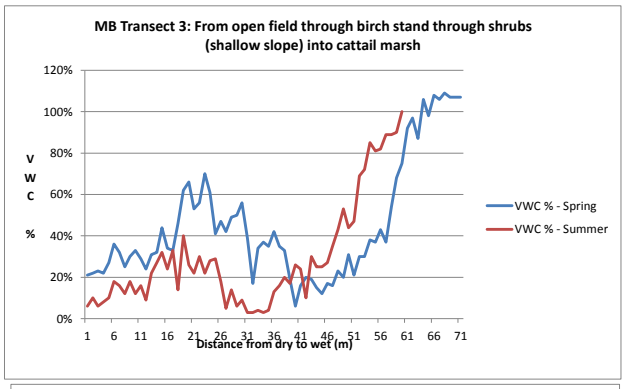

MFWC Transect 6: From dense cedar/spruce forest (slope) into a shrubby fen or marsh
VWC %
Distance From dry to wet (m)
VWC % - Spring
VWC % - Summer

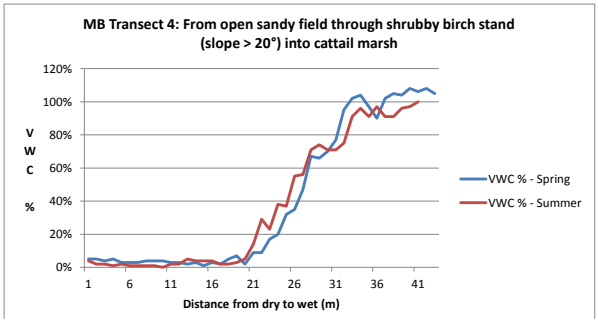

MFWC Transect 8: From open grassy field (shallow slope) into a cattail marsh
VWC %
Distance From dry to wet (m)
VWC % - Spring
VWC % - Summer

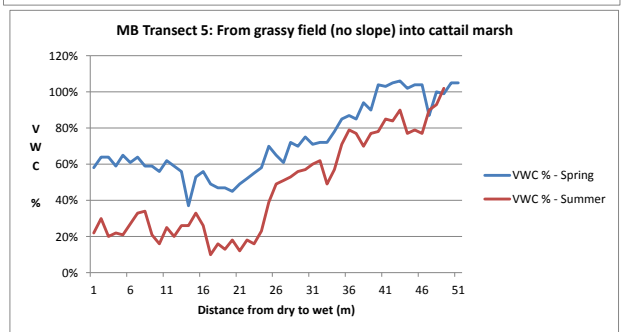

MFWC Transect 12: From mixed deciduous/coniferous (mostly cedar) stand (shallow slope) into cattail marsh
VWC %
Distance dry to wet (m)
VWC % - Spring
VWC % - Summer

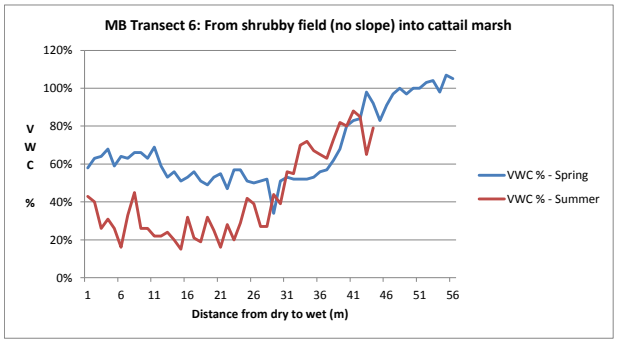

MB Transect 1: From open field through birch stand through shrubs (shallow slope) into cattail marsh
VWC %
Distance dry to wet (m)
VWC % - Spring
VWC % - Summer

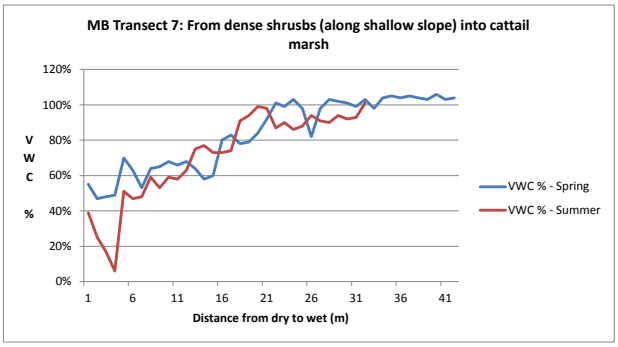

MB Transect 2: From open field through birch stand through more dense shrubs (shallow slope) into cattail marsh
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

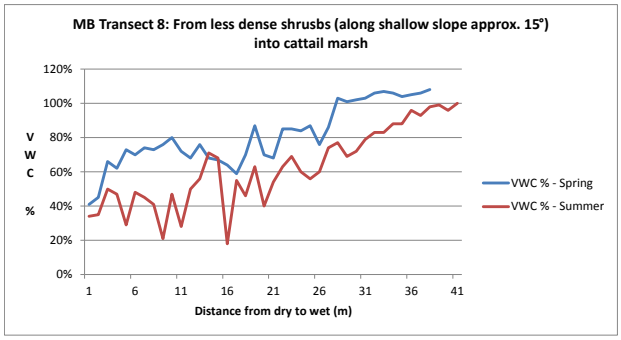

MB Transect 3: From open field through birch stand through shrubs (shallow slope) into cattail marsh
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

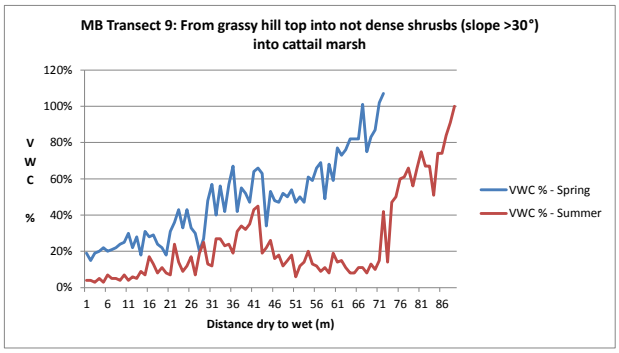

MB Transect 4: From open sandy field through shrubby birch stand (slope > 20°) into cattail marsh
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

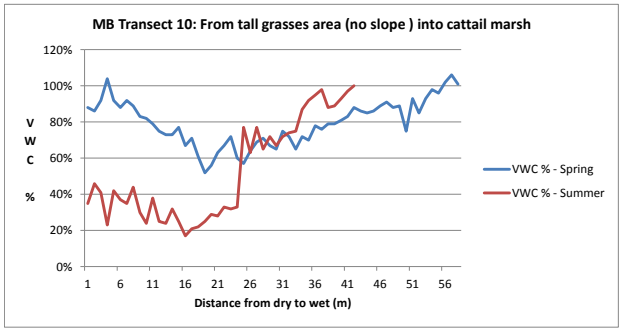

MB Transect 5: From grassy field (no slope) into cattail marsh
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

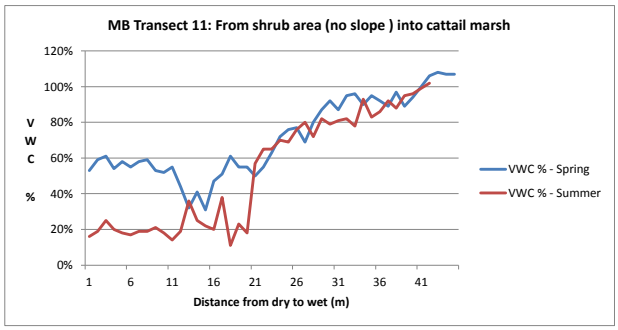


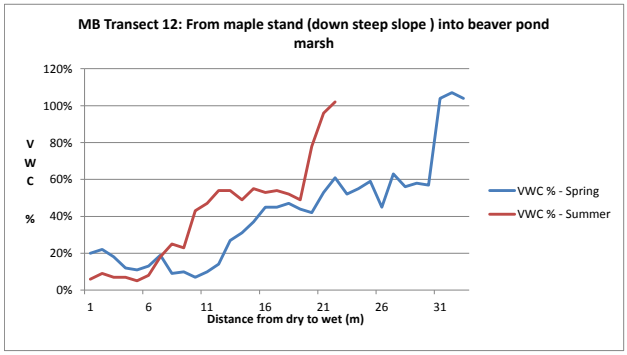


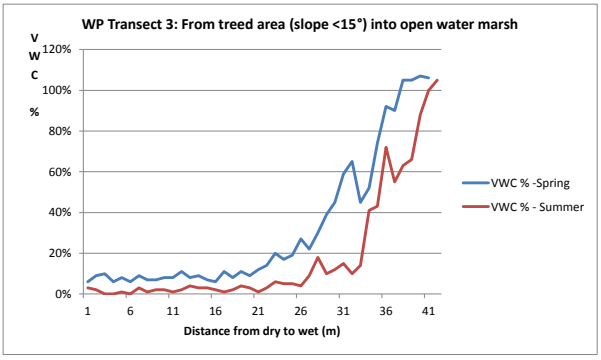


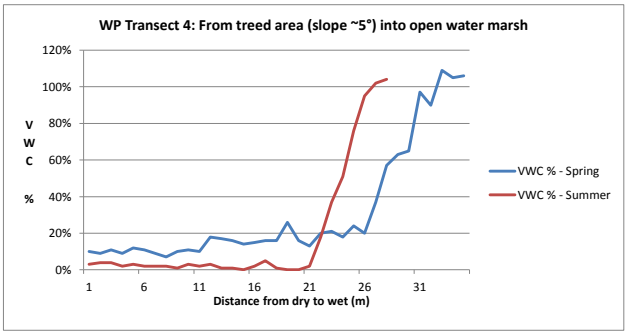


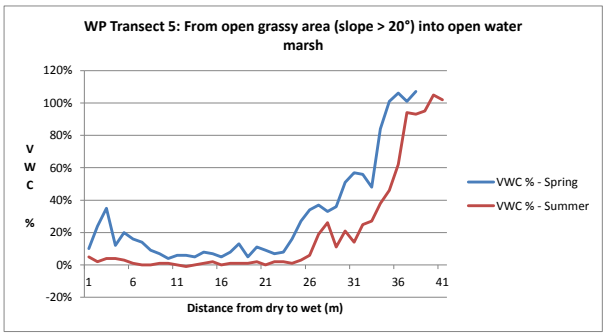






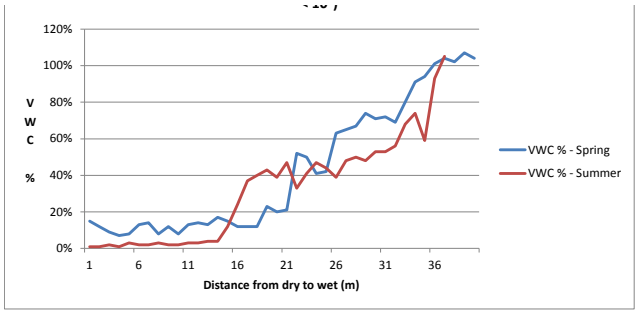


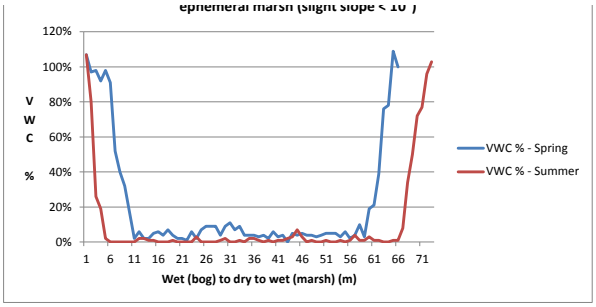


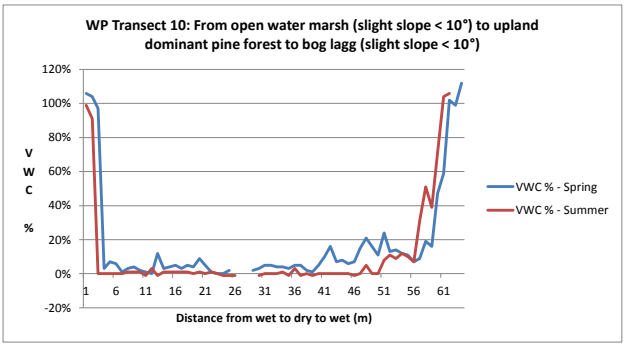


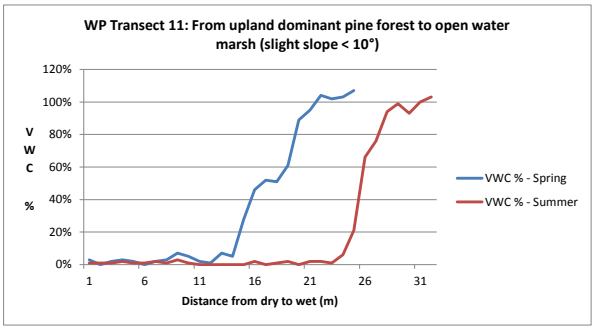
WP Transect 7: From upland forest to grassy open water marsh (slight slope < 10°)

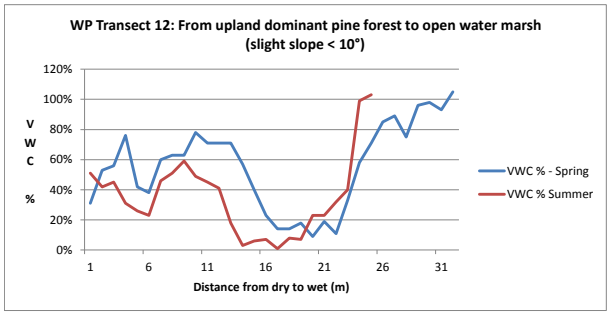
WP Transect 9: From bog (slight slope < 10°) toupland forest to ephemeral marsh (slight slope < 10°)

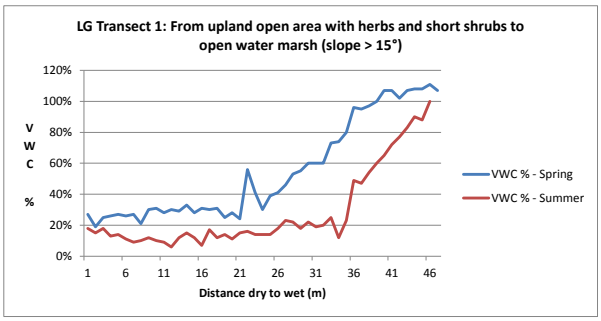

VWC %
120%
100%
80%
60%
40%
20%
0%
1 6 11 16 21 26 31 36
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

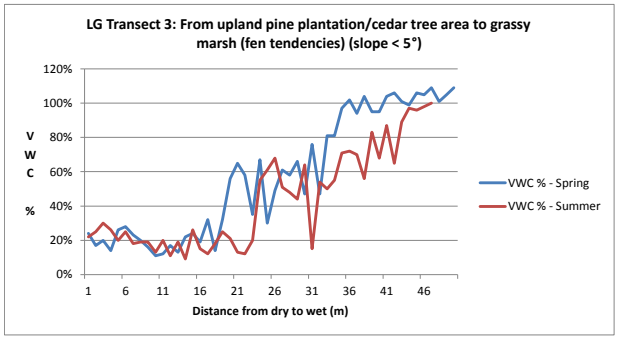

VWC %
120%
100%
80%
60%
40%
20%
0%
1 6 11 16 21 26 31 36 41 46 51 56 61 66 71
Wet (bog) to dry to wet (marsh) (m)
VWC % - Spring
VWC % - Summer

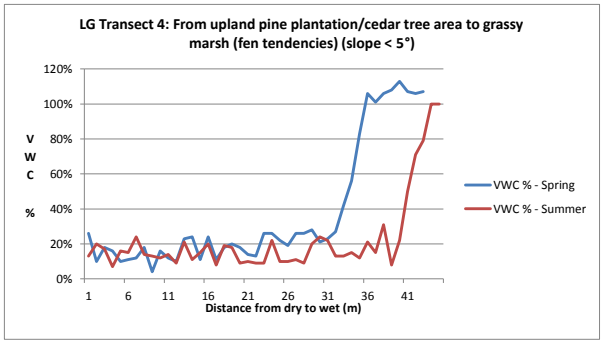

WP Transect 10: From open water marsh (slight slope < 10°) to upland dominant pine forest to bog lagg (slight slope < 10°)
VWC %
120%
100%
80%
60%
40%
20%
0%
-20%
1 6 11 16 21 26 31 36 41 46 51 56 61
Distance from wet to dry to wet (m)
VWC % - Spring
VWC % - Summer

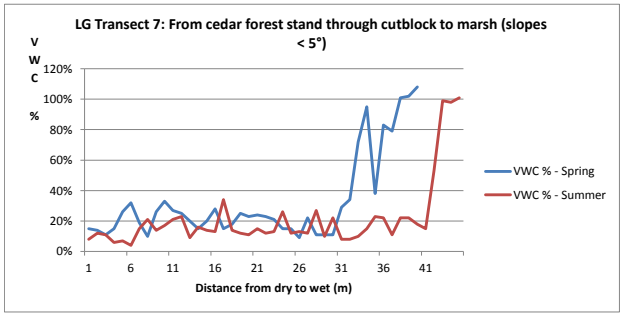

WP Transect 11: From upland dominant pine forest to open water marsh (slight slope < 10°)
VWC %
120%
100%
80%
60%
40%
20%
0%
1 6 11 16 21 26 31
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

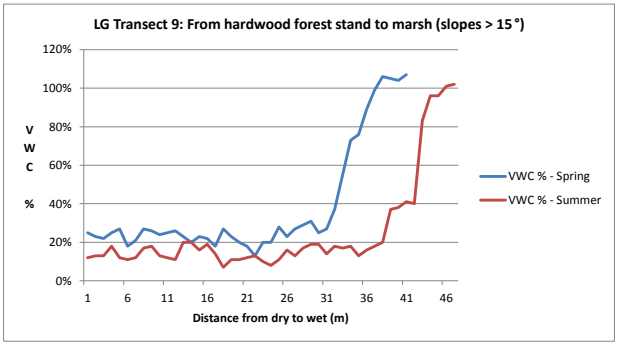

WP Transect 12: From upland dominant pine forest to open water marsh (slight slope < 10°)
VWC %
120%
100%
80%
60%
40%
20%
0%
1 6 11 16 21 26 31
Distance from dry to wet (m)
VWC % - Spring
VWC % Summer

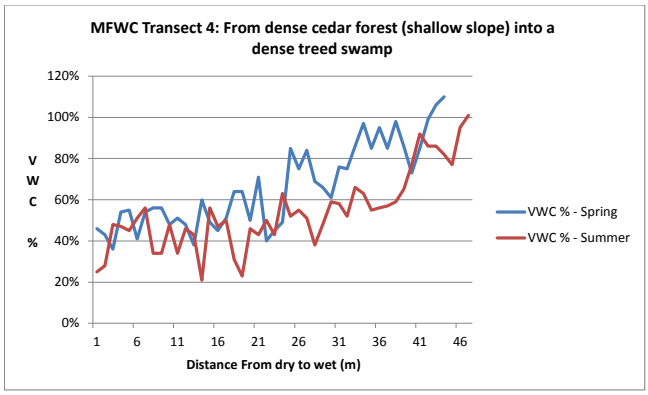

LG Transect 1: From upland open area with herbs and short shrubs to open water marsh (slope > 15°)
VWC %
120%
100%
80%
60%
40%
20%
0%
1 6 11 16 21 26 31 36 41 46
Distance dry to wet (m)
VWC % - Spring
VWC % - Summer

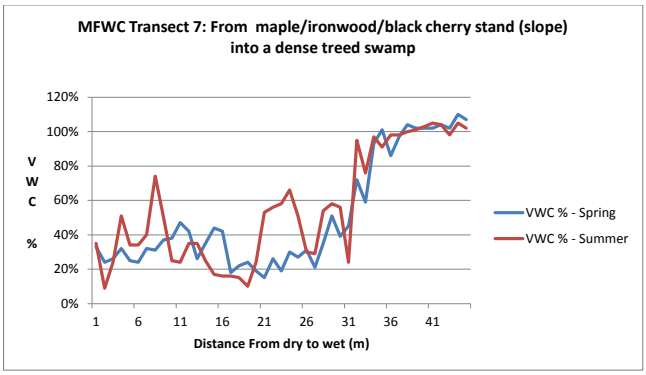

LG Transect 3: From upland pine plantation/cedar tree area to grassy marsh (fen tendencies) (slope < 5°)
VWC %
120%
100%
80%
60%
40%
20%
0%
1 6 11 16 21 26 31 36 41 46
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

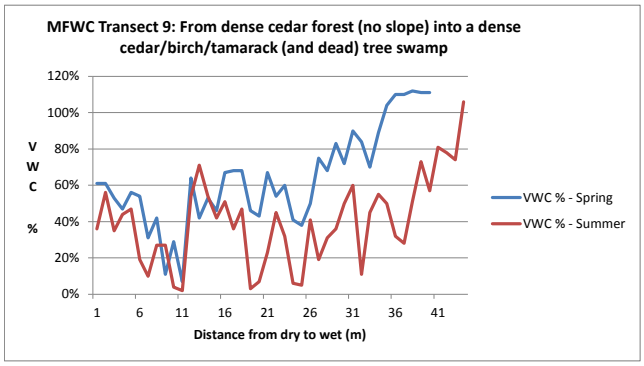

LG Transect 4: From upland pine plantation/cedar tree area to grassy marsh (fen tendencies) (slope < 5°)
VWC %
120%
100%
80%
60%
40%
20%
0%
1 6 11 16 21 26 31 36 41
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

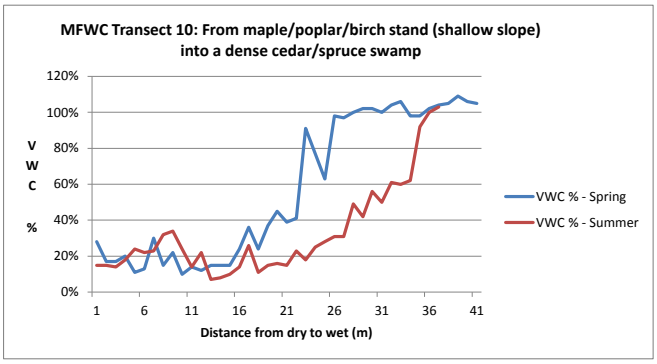

LG Transect 7: From cedar forest stand through cutblock to marsh (slopes < 5°)
VWC %
120%
100%
80%
60%
40%
20%
0%
1 6 11 16 21 26 31 36 41
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

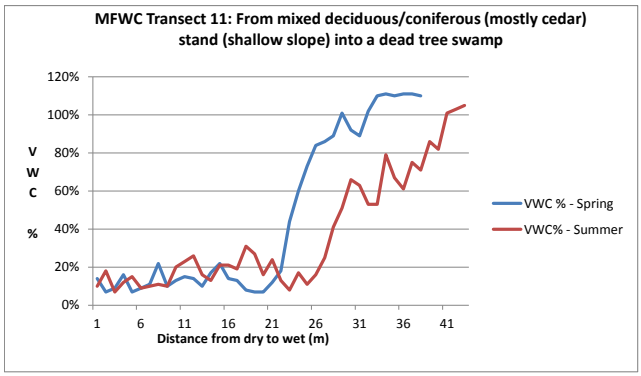

LG Transect 9: From hardwood forest stand to marsh (slopes > 15°)
VWC %
120%
100%
80%
60%
40%
20%
0%
1 6 11 16 21 26 31 36 41 46
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

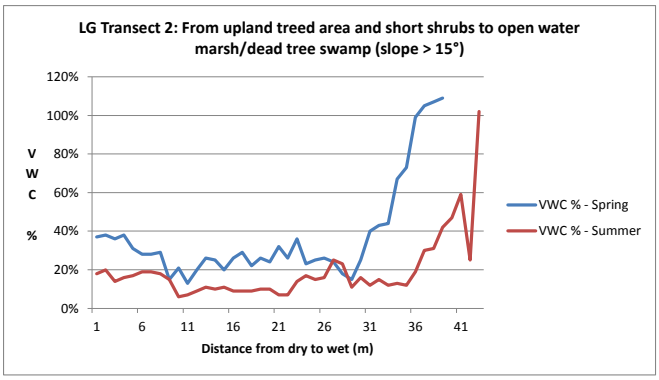

MFWC Transect 4: From dense cedar forest (shallow slope) into a dense treed swamp
VWC %
Distance From dry to wet (m)
VWC % - Spring
VWC % - Summer

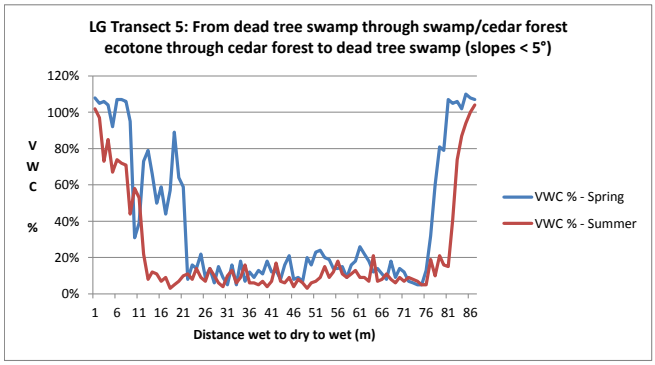

MFWC Transect 7: From maple/ironwood/black cherry stand (slope) into a dense treed swamp
VWC %
Distance From dry to wet (m)
VWC % - Spring
VWC % - Summer

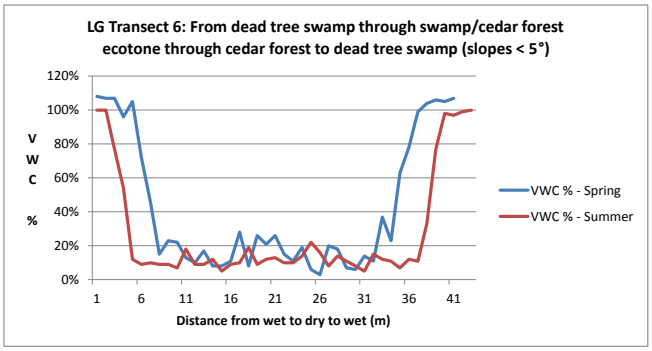

MFWC Transect 9: From dense cedar forest (no slope) into a dense cedar/birch/tamarack (and dead) tree swamp
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

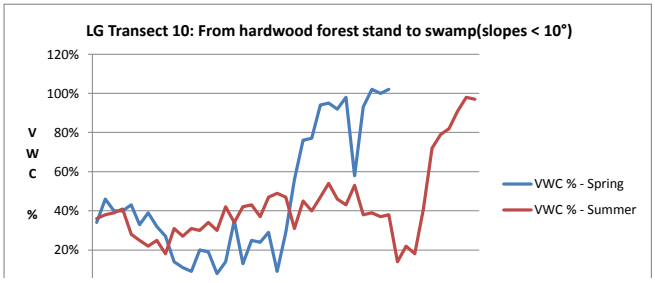

MFWC Transect 10: From maple/poplar/birch stand (shallow slope) into a dense cedar/spruce swamp
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

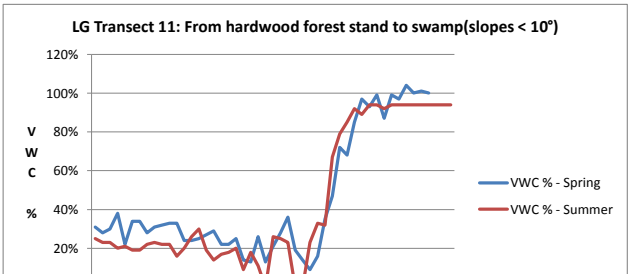

MFWC Transect 11: From mixed deciduous/coniferous (mostly cedar) stand (shallow slope) into a dead tree swamp
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC% - Summer

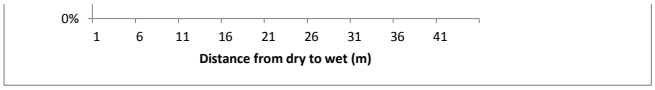

LG Transect 2: From upland treed area and short shrubs to open water marsh/dead tree swamp (slope > 15°)
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

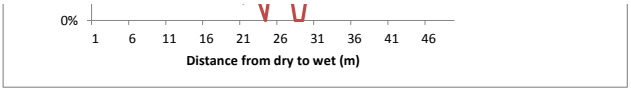

LG Transect 5: From dead tree swamp through swamp/cedar forest ecotone through cedar forest to dead tree swamp (slopes < 5°)
VWC %
Distance wet to dry to wet (m)
VWC % - Spring
VWC % - Summer

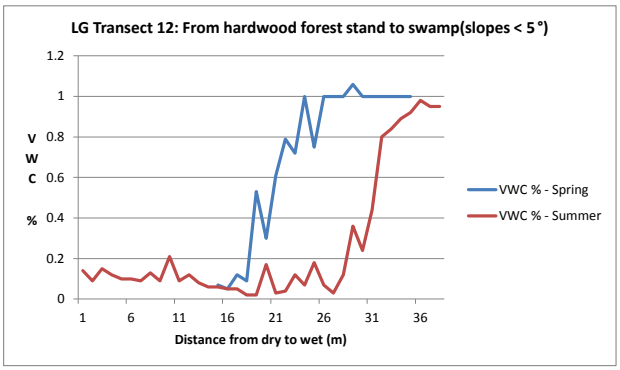

LG Transect 6: From dead tree swamp through swamp/cedar forest ecotone through cedar forest to dead tree swamp (slopes < 5°)
VWC %
Distance from wet to dry to wet (m)
VWC % - Spring
VWC % - Summer

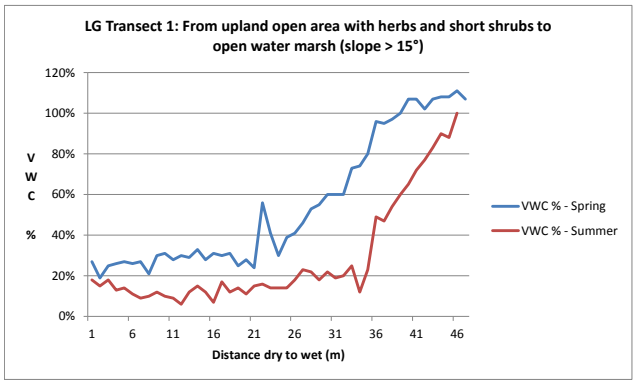

LG Transect 10: From hardwood forest stand to swamp(slopes < 10°)
VWC %
VWC % - Spring
VWC % - Summer

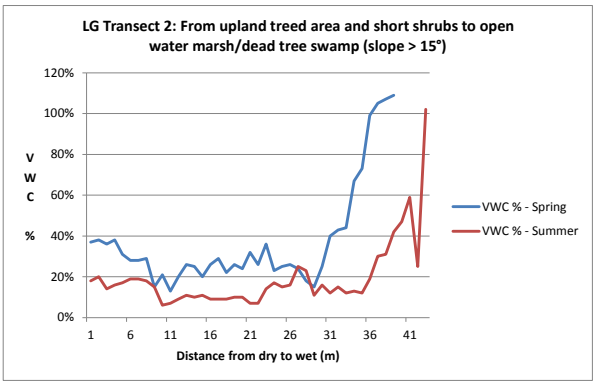

LG Transect 11: From hardwood forest stand to swamp(slopes < 10°)
VWC %
VWC % - Spring
VWC % - Summer

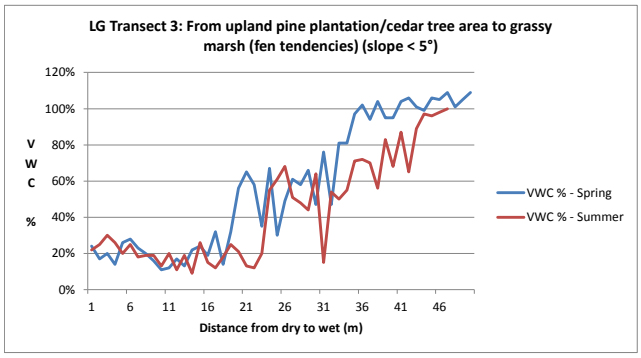

0%
1
6
11
16
21
26
31
36
41
Distance from dry to wet (m)

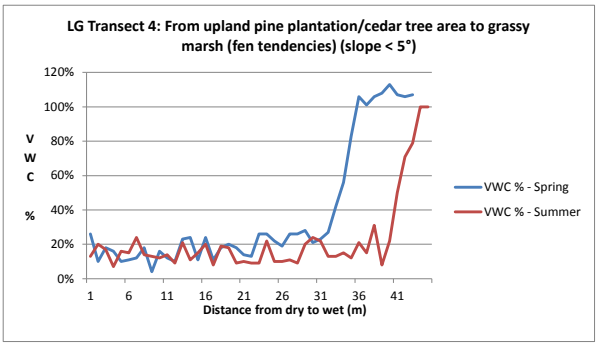

0%
1
6
11
16
21
26
31
36
41
46
Distance from dry to wet (m)

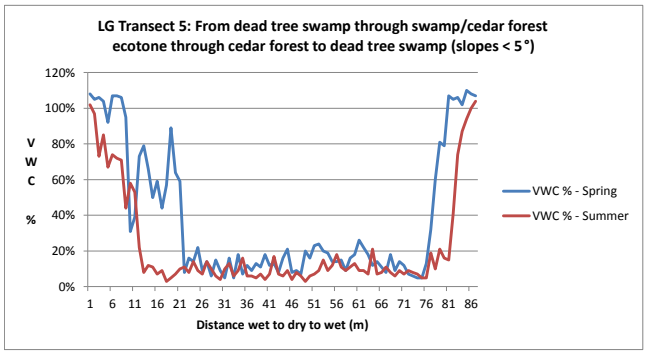

LG Transect 12: From hardwood forest stand to swamp(slopes < 5 °)
VWC %
1.2
1
0.8
0.6
0.4
0.2
0
1
6
11
16
21
26
31
36
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

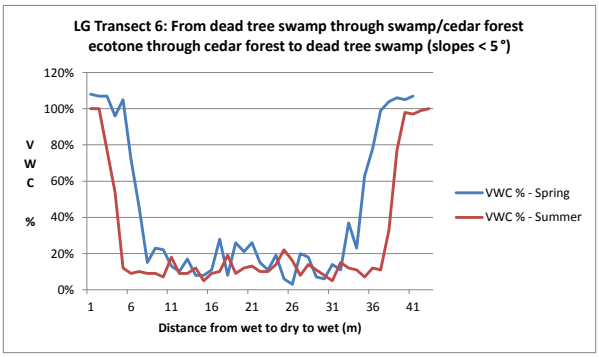

LG Transect 1: From upland open area with herbs and short shrubs to open water marsh (slope > 15°)
VWC %
120%
100%
80%
60%
40%
20%
0%
1 6 11 16 21 26 31 36 41 46
Distance dry to wet (m)
VWC % - Spring
VWC % - Summer

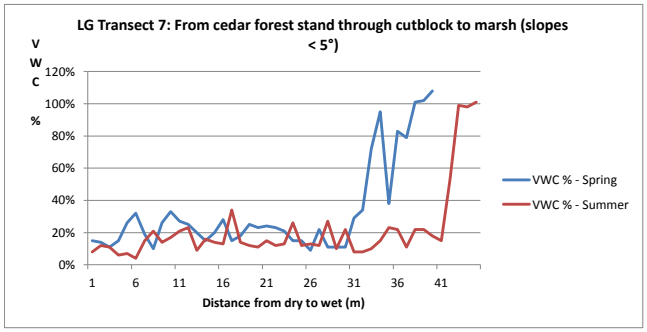

LG Transect 2: From upland treed area and short shrubs to open water marsh/dead tree swamp (slope > 15°)
VWC %
120%
100%
80%
60%
40%
20%
0%
1 6 11 16 21 26 31 36 41
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

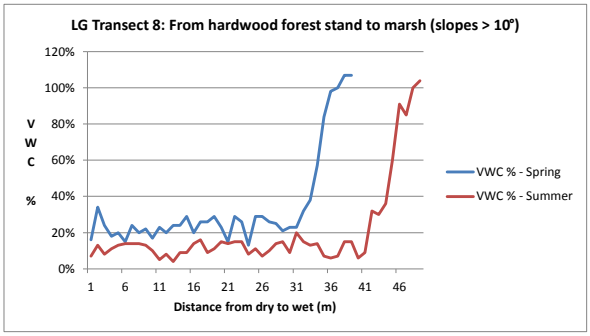

LG Transect 3: From upland pine plantation/cedar tree area to grassy marsh (fen tendencies) (slope < 5°)
VWC %
120%
100%
80%
60%
40%
20%
0%
1 6 11 16 21 26 31 36 41 46
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

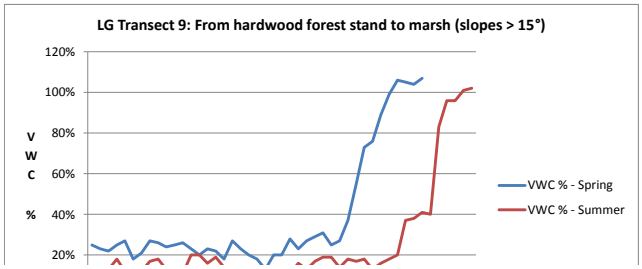

LG Transect 4: From upland pine plantation/cedar tree area to grassy marsh (fen tendencies) (slope < 5°)
VWC %
120%
100%
80%
60%
40%
20%
0%
1 6 11 16 21 26 31 36 41
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

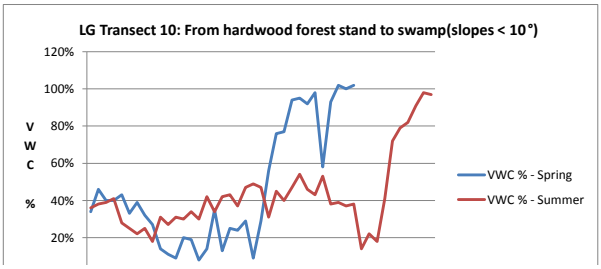

LG Transect 5: From dead tree swamp through swamp/cedar forest ecotone through cedar forest to dead tree swamp (slopes < 5°)
VWC %
120%
100%
80%
60%
40%
20%
0%
1 6 11 16 21 26 31 36 41 46 51 56 61 66 71 76 81 86
Distance wet to dry to wet (m)
VWC % - Spring
VWC % - Summer

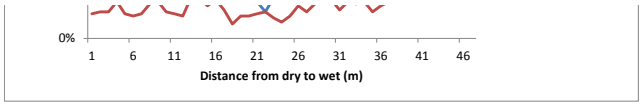

LG Transect 6: From dead tree swamp through swamp/cedar forest ecotone through cedar forest to dead tree swamp (slopes < 5°)
VWC %
120%
100%
80%
60%
40%
20%
0%
1 6 11 16 21 26 31 36 41
Distance from wet to dry to wet (m)
VWC % - Spring
VWC % - Summer

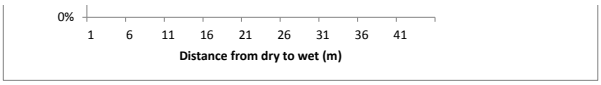

LG Transect 7: From cedar forest stand through cutblock to marsh (slopes < 5°)
VWC %
120%
100%
80%
60%
40%
20%
0%
1 6 11 16 21 26 31 36 41
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

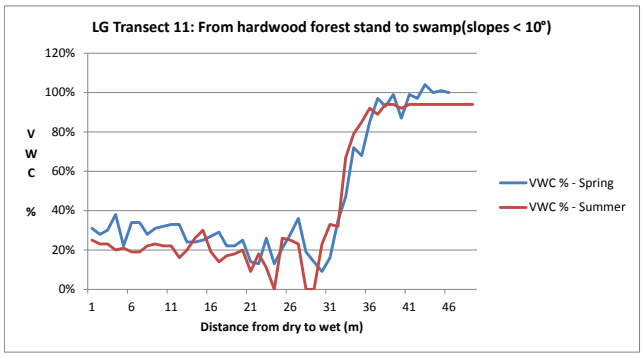

LG Transect 8: From hardwood forest stand to marsh (slopes > 10°)
VWC %
120%
100%
80%
60%
40%
20%
0%
1 6 11 16 21 26 31 36 41 46
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

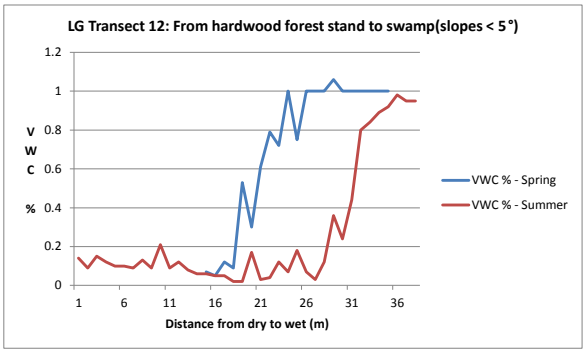

LG Transect 9: From hardwood forest stand to marsh (slopes > 15°)
VWC %
120%
100%
80%
60%
40%
20%
VWC % - Spring
VWC % - Summer

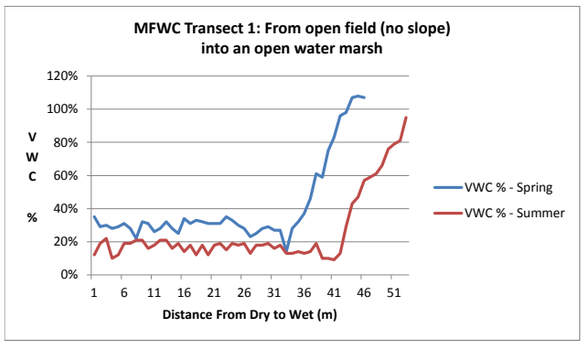

LG Transect 10: From hardwood forest stand to swamp(slopes < 10°)
VWC %
120%
100%
80%
60%
40%
20%
VWC % - Spring
VWC % - Summer

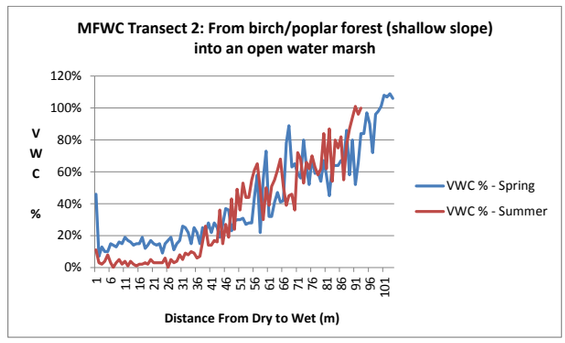

0%
1 6 11 16 21 26 31 36 41 46
Distance from dry to wet (m)

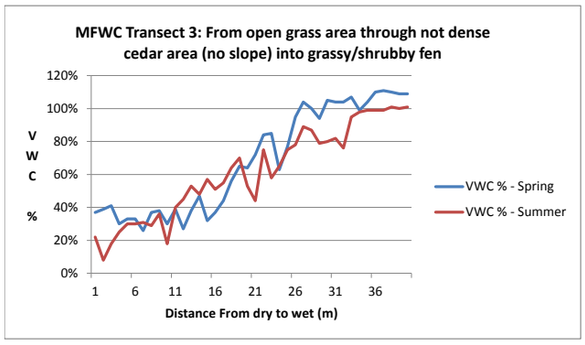

0%
1 6 11 16 21 26 31 36 41
Distance from dry to wet (m)

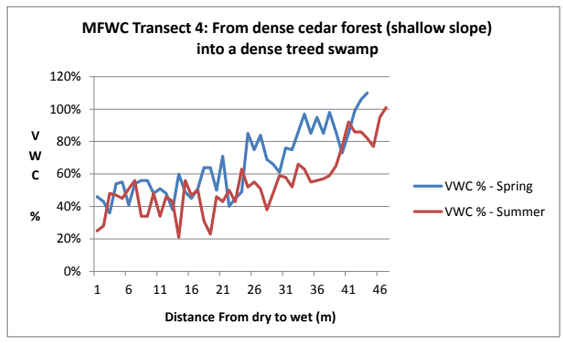

LG Transect 11: From hardwood forest stand to swamp(slopes < 10°)
120%
100%
80%
60%
40%
20%
0%
VWC %
1 6 11 16 21 26 31 36 41 46
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

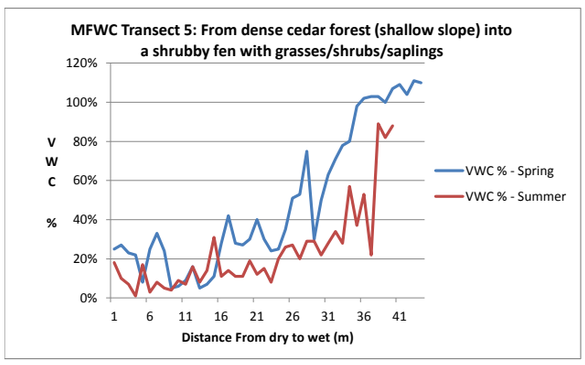

LG Transect 12: From hardwood forest stand to swamp(slopes < 5°)
1.2
1
0.8
0.6
0.4
0.2
0
VWC %
1 6 11 16 21 26 31 36
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

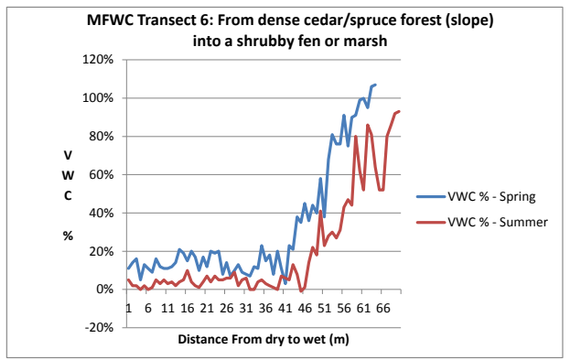

MFWC Transect 1: From open field (no slope) into an open water marsh
VWC %
Distance From Dry to Wet (m)
VWC % - Spring
VWC % - Summer

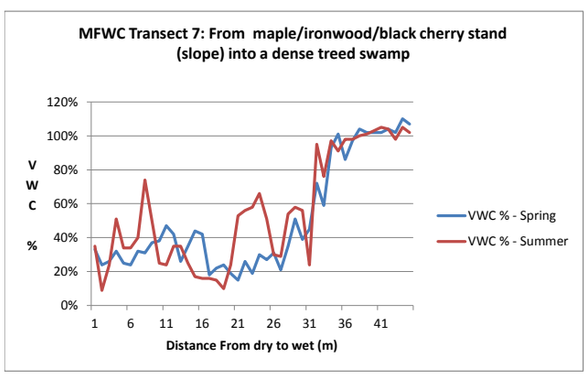

MFWC Transect 2: From birch/poplar forest (shallow slope) into an open water marsh
VWC %
Distance From Dry to Wet (m)
VWC % - Spring
VWC % - Summer

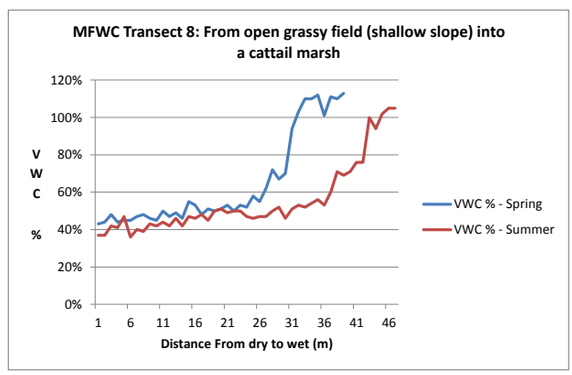

MFWC Transect 3: From open grass area through not dense cedar area (no slope) into grassy/shrubby fen
VWC %
Distance From dry to wet (m)
VWC % - Spring
VWC % - Summer

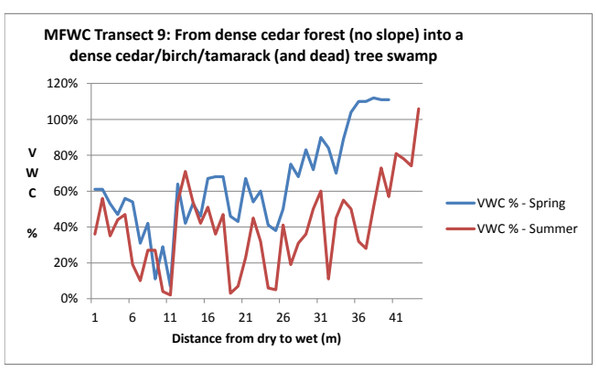

MFWC Transect 4: From dense cedar forest (shallow slope) into a dense treed swamp
VWC %
Distance From dry to wet (m)
VWC % - Spring
VWC % - Summer

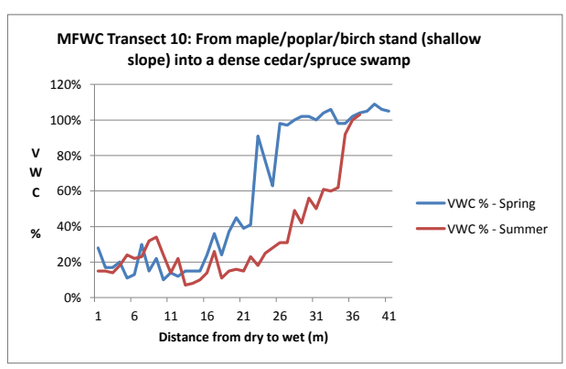

MFWC Transect 5: From dense cedar forest (shallow slope) into a shrubby fen with grasses/shrubs/saplings
VWC %
Distance From dry to wet (m)
VWC % - Spring
VWC % - Summer

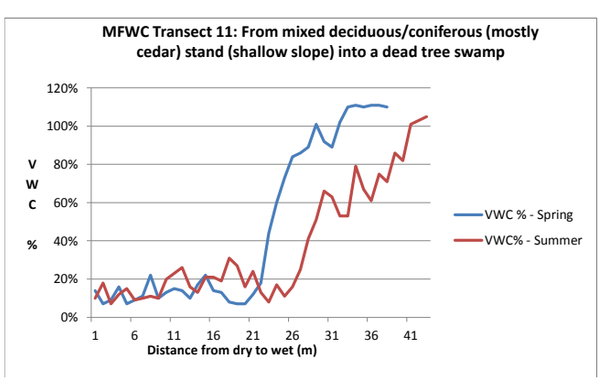

MFWC Transect 6: From dense cedar/spruce forest (slope) into a shrubby fen or marsh
VWC %
Distance From dry to wet (m)
VWC % - Spring
VWC % - Summer

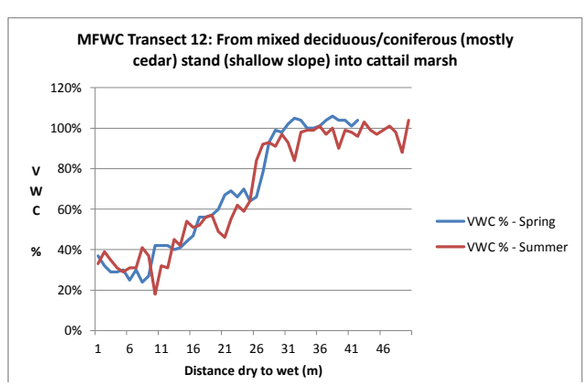

MFWC Transect 7: From maple/ironwood/black cherry stand (slope) into a dense treed swamp
VWC %
Distance From dry to wet (m)
VWC % - Spring
VWC % - Summer

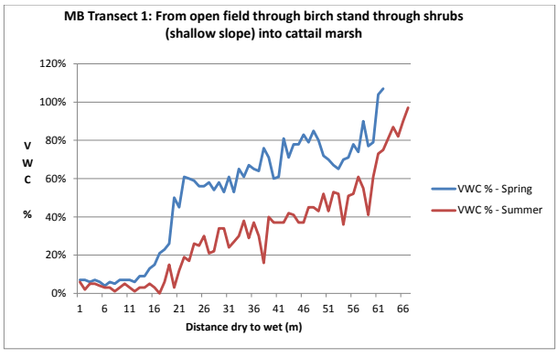

MFWC Transect 8: From open grassy field (shallow slope) into a cattail marsh
VWC %
Distance From dry to wet (m)
VWC % - Spring
VWC % - Summer

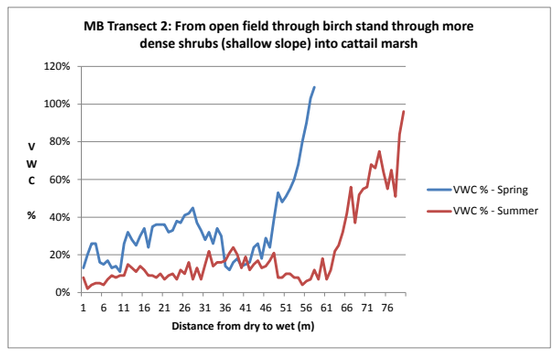

MFWC Transect 9: From dense cedar forest (no slope) into a dense cedar/birch/tamarack (and dead) tree swamp
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

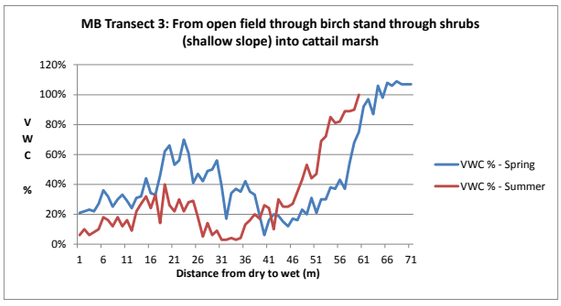

MFWC Transect 10: From maple/poplar/birch stand (shallow slope) into a dense cedar/spruce swamp
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

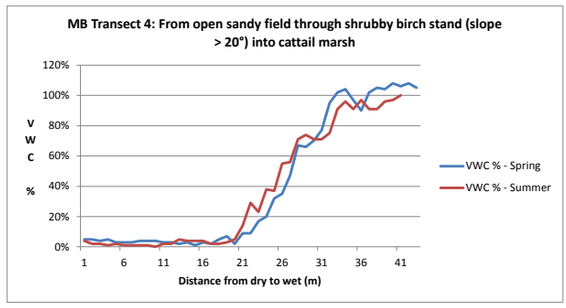

MFWC Transect 11: From mixed deciduous/coniferous (mostly cedar) stand (shallow slope) into a dead tree swamp
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC% - Summer

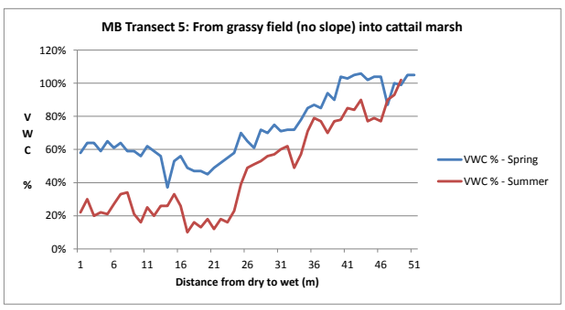

MFWC Transect 12: From mixed deciduous/coniferous (mostly cedar) stand (shallow slope) into cattail marsh
VWC %
Distance dry to wet (m)
VWC % - Spring
VWC % - Summer

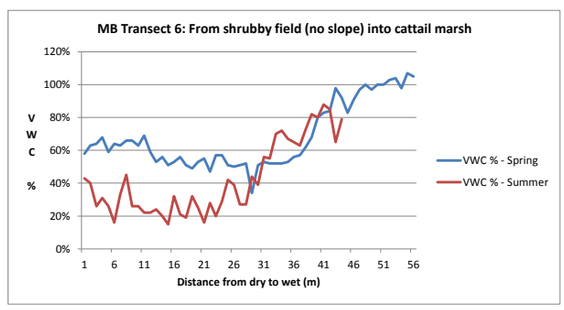

MB Transect 1: From open field through birch stand through shrubs (shallow slope) into cattail marsh
VWC %
Distance dry to wet (m)
VWC % - Spring
VWC % - Summer

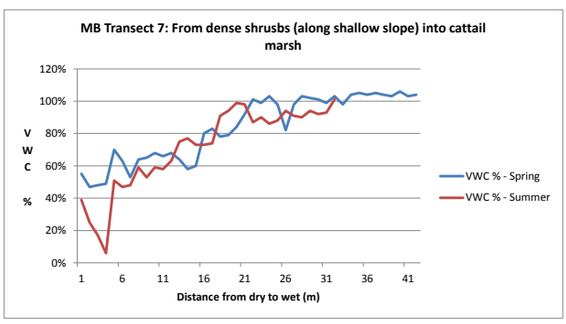

MB Transect 2: From open field through birch stand through more dense shrubs (shallow slope) into cattail marsh
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

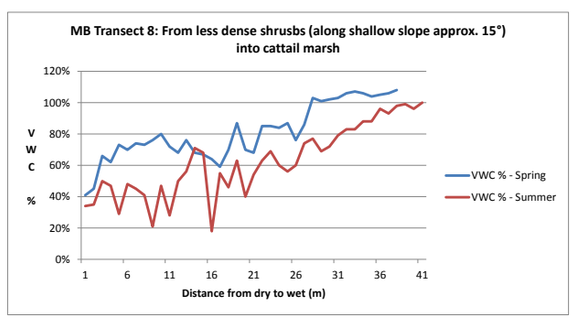

MB Transect 3: From open field through birch stand through shrubs (shallow slope) into cattail marsh
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

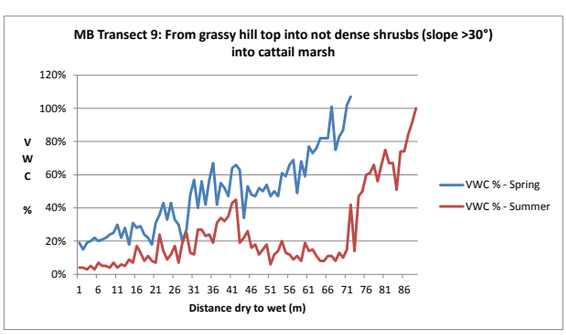

MB Transect 4: From open sandy field through shrubby birch stand (slope > 20°) into cattail marsh
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

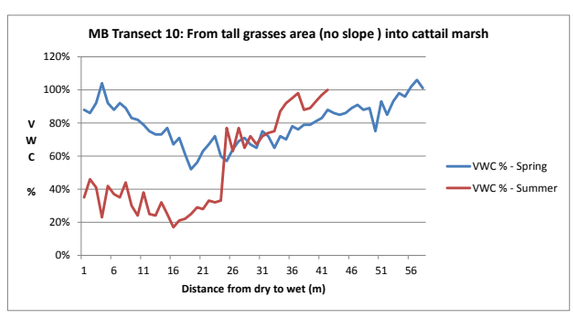

MB Transect 5: From grassy field (no slope) into cattail marsh
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

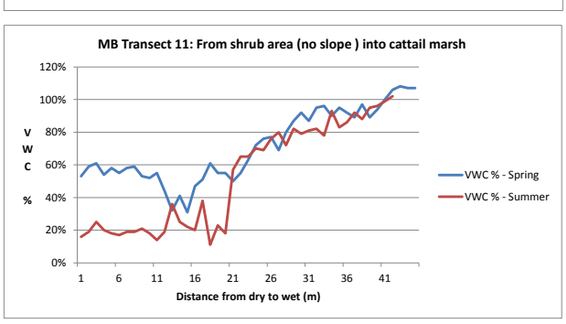

MB Transect 6: From shrubby field (no slope) into cattail marsh
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

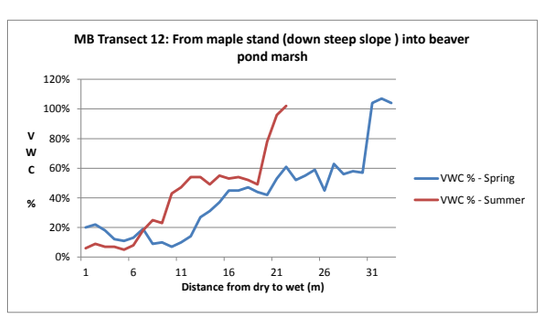

MB Transect 7: From dense shrusbs (along shallow slope) into cattail marsh
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

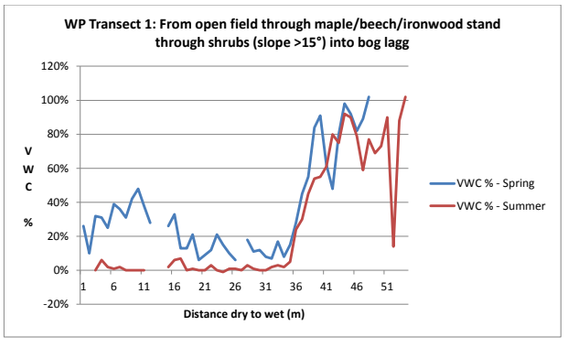

MB Transect 8: From less dense shrusbs (along shallow slope approx. 15°) into cattail marsh
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

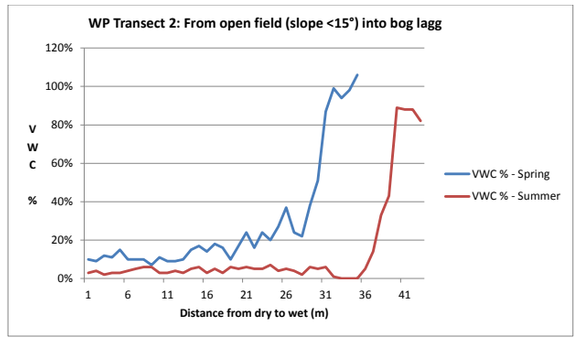

MB Transect 9: From grassy hill top into not dense shrusbs (slope >30°) into cattail marsh
VWC %
Distance dry to wet (m)
VWC % - Spring
VWC % - Summer

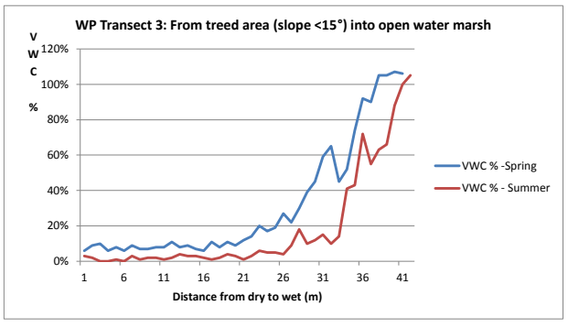

MB Transect 10: From tall grasses area (no slope) into cattail marsh
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

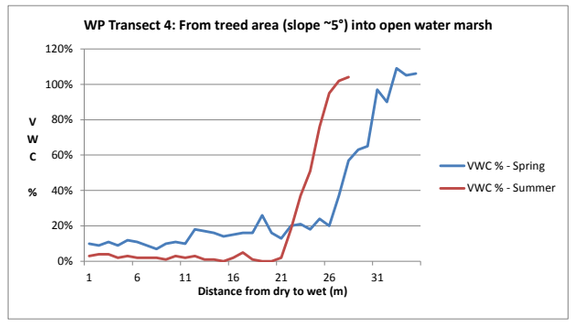

MB Transect 11: From shrub area (no slope) into cattail marsh
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

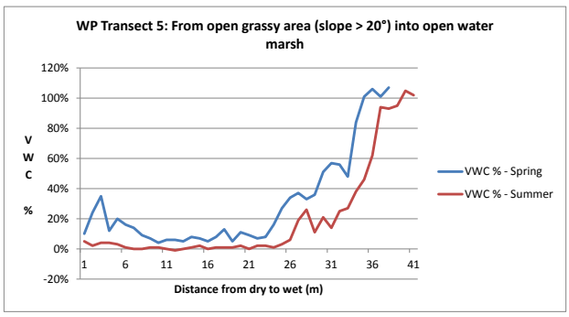

MB Transect 12: From maple stand (down steep slope) into beaver pond marsh
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

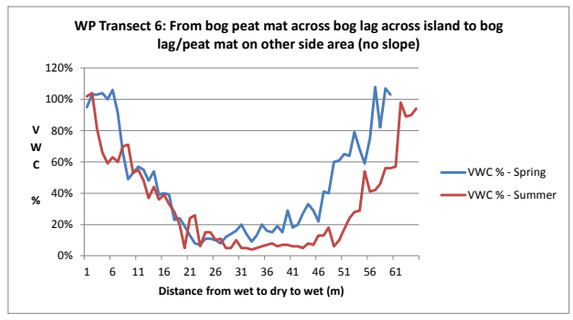

WP Transect 1: From open field through maple/beech/ironwood stand through shrubs (slope >15°) into bog lagg
VWC %
Distance dry to wet (m)
VWC % - Spring
VWC % - Summer

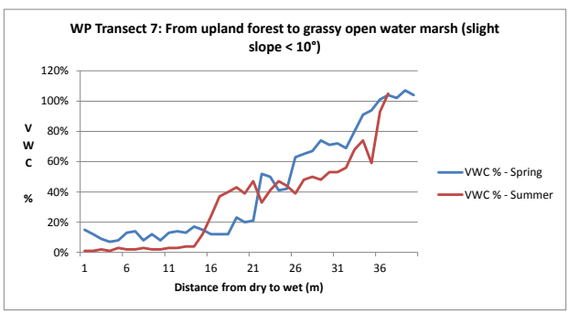

WP Transect 2: From open field (slope <15°) into bog lagg
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

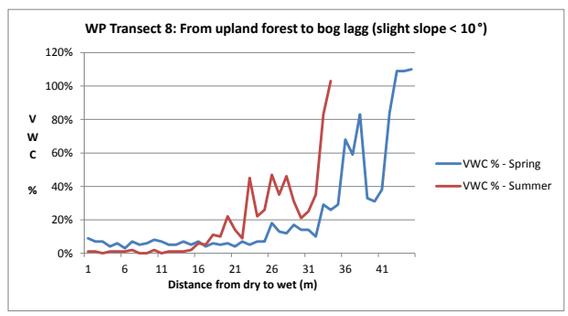

WP Transect 3: From treed area (slope <15°) into open water marsh
VWC %
Distance from dry to wet (m)
VWC % -Spring
VWC % - Summer

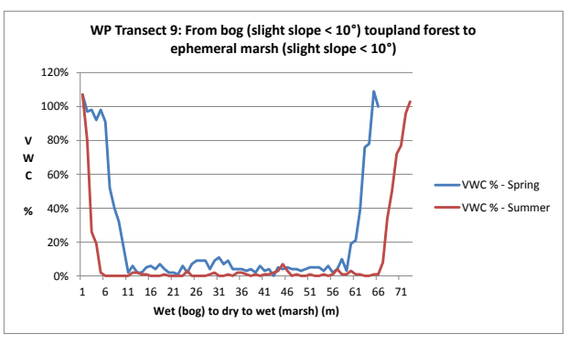

WP Transect 4: From treed area (slope ~5°) into open water marsh
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

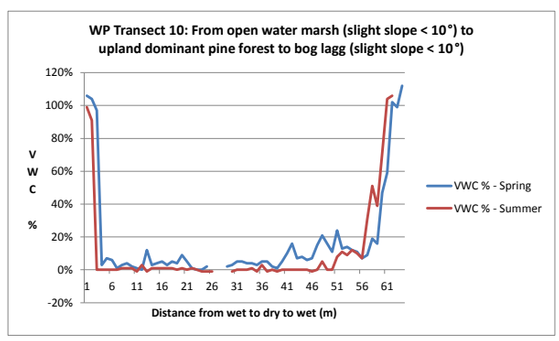

WP Transect 5: From open grassy area (slope > 20°) into open water marsh
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer

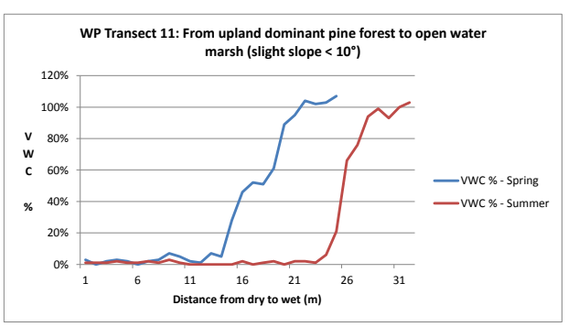

WP Transect 6: From bog peat mat across bog lag across island to bog lag/peat mat on other side area (no slope)
VWC %
Distance from wet to dry to wet (m)
VWC % - Spring
VWC % - Summer

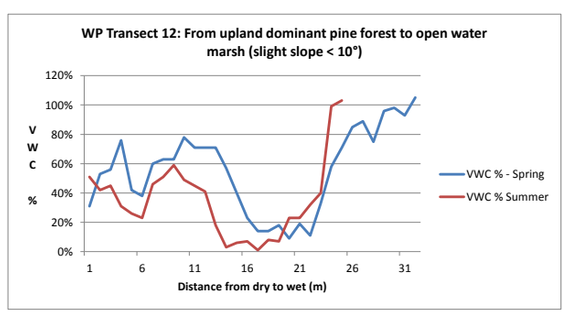

WP Transect 7: From upland forest to grassy open water marsh (slight slope < 10°)
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer


WP Transect 8: From upland forest to bog lagg (slight slope < 10°)
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer


WP Transect 9: From bog (slight slope < 10°) toupland forest to ephemeral marsh (slight slope < 10°)
VWC %
Wet (bog) to dry to wet (marsh) (m)
VWC % - Spring
VWC % - Summer


WP Transect 10: From open water marsh (slight slope < 10°) to upland dominant pine forest to bog lagg (slight slope < 10°)
VWC %
Distance from wet to dry to wet (m)
VWC % - Spring
VWC % - Summer

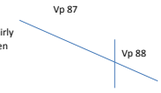

WP Transect 11: From upland dominant pine forest to open water marsh (slight slope < 10°)
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % - Summer


WP Transect 12: From upland dominant pine forest to open water marsh (slight slope < 10°)
VWC %
Distance from dry to wet (m)
VWC % - Spring
VWC % Summer

Date: Thursday, April 29, 2010 Spring Field Research
Location: Loch Garry - Southside Lakeshore Road
Weather: High 15C; low 2C; rain the previous 2 days ("-.3cm
Description: Open area upland with herbs (golden rod; black eyed susan; moving into a open shrubby; reedy marsh
Azimuth (Bearing of Transect): 280°
Photo #s

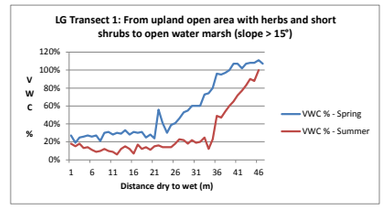
Point #	Volumetric Water Content (%)	Period	Description/Details
1	27%	0.96	
2	19%	0.91	
3	25%	0.95	
4	26%	0.95	
5	27%	0.96	
6	26%	0.95	
7	27%	0.96	
8	21%	0.92	
9	30%	0.98	
10	31%	0.98	
11	28%	0.96	
12	30%	0.98	
13	29%	0.97	
14	33%	1.00	
15	28%	0.96	
16	31%	0.98	
17	30%	0.98	
18	31%	0.98	
19	25%	0.95	
20	28%	0.96	
21	24%	0.94	
22	56%	1.12	
23	41%	1.04	
24	30%	0.98	
25	39%	1.03	
26	41%	1.04	
27	46%	1.07	
28	53%	1.10	
29	55%	1.11	
30	60%	1.13	
31	60%	1.14	
32	60%	1.13	
33	73%	1.19	
34	74%	1.20	
35	80%	1.22	
36	96%	1.29	
37	95%	1.28	
38	97%	1.29	
39	100%	1.30	
40	107%	1.33	
41	107%	1.33	
42	102%	1.31	
43	107%	1.33	
44	108%	1.33	
45	108%	1.33	
46	111%	1.34	
47	107%	1.33	
48			
49			
50			

Date: Tuesday, July 13, 2010 Summer Field Research
Location: Loch Garry - Southside Lakeshore Road
Weather: Sunny; High 29C low 20C; Rain (.4cm) previous day
Description: Starts in VP 87 - moves down fairly significant slope (> 15°) into open marsh (VP 88)



Azimuth (Bearing of Transect): 280°
Photo #s 3836 - 3840

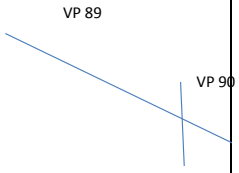
Point #	Volumetric Water Content (%)	Period	Description/Details
1	18%	0.90	
2	15%	0.88	
3	18%	0.91	
4	13%	0.87	
5	14%	0.88	
6	11%	0.85	
7	9%	0.84	
8	10%	0.85	
9	12%	0.86	
10	10%	0.85	
11	9%	0.84	
12	6%	0.82	
13	12%	0.86	
14	15%	0.88	
15	12%	0.86	
16	7%	0.82	
17	17%	0.89	
18	12%	0.86	
19	14%	0.88	
20	11%	0.85	
21	15%	0.88	
22	16%	0.89	
23	14%	0.87	
24	14%	0.87	
25	14%	0.88	
26	18%	0.90	
27	23%	0.93	
28	22%	0.93	
29	18%	0.90	
30	22%	0.93	
31	19%	0.91	
32	20%	0.91	
33	25%	0.95	
34	12%	0.86	
35	23%	0.94	
36	49%	1.08	
37	47%	1.07	
38	54%	1.11	
39	60%	1.13	
40	65%	1.16	
41	72%	1.19	
42	77%	1.24	
43	83%	1.24	
44	90%	1.26	
45	88%	1.24	
46	100%	1.30	
47			
48			
49			
50			
51			
52			
53			



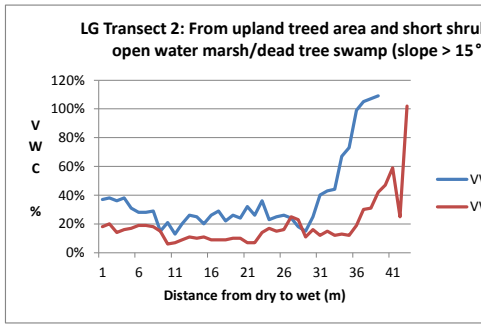
Date: Thursday, April 29, 2010 Spring Field Research
Location: Loch Garry - Southside Lakeshore Road
Weather: High 15C; low 2C; rain the previous 2 days (~.3cm
Description: Starts in more treed area further south of LG 1; trees are cedars and slope is fairly significant (>15°); moves into open area across manmade track into open water marsh/ or dead treed swamp area
Azimuth (Bearing of Transect): 300°
Photo #s 2809-2811

Point #	Volumetric Water Content (%)	Period	Description/Details
1	37%	1.02	
2	38%	1.02	
3	36%	1.01	
4	38%	1.02	
5	31%	0.98	
6	28%	0.97	
7	28%	0.97	
8	29%	0.97	
9	15%	0.88	
10	21%	0.33	
11	13%	0.87	
12	20%	0.92	
13	26%	0.95	
14	25%	0.95	
15	20%	0.92	
16	26%	0.95	
17	29%	0.97	
18	22%	0.93	
19	26%	0.95	
20	24%	0.94	
21	32%	0.99	
22	26%	0.96	
23	36%	1.01	
24	23%	0.93	
25	25%	0.95	
26	26%	0.95	
27	24%	0.94	
28	18%	0.91	
29	15%	0.88	
30	25%	0.95	
31	40%	1.04	
32	43%	1.05	
33	44%	1.06	
34	67%	1.17	
35	73%	1.19	
36	99%	1.30	
37	105%	1.32	
38	107%	1.33	
39	109%	1.34	
40			
41			
42			
43			
44			
45			

Date: Tuesday, July 13, 2010 Summer Field Research
Location: Loch Garry - Southside Lakeshore Road
Weather: Sunny; High 29C low 20C; Rain (.4cm) previous day
Description: Start in VP 89; moving into VP 90 (could be swamp due to all the dead trees)
Azimuth (Bearing of Transect): 300°
Photo #s 3841 - 3847



Point #	Volumetric Water Content (%)	Period	Description/Details
1	18%	0.91	
2	20%	0.91	
3	14%	0.88	
4	16%	0.89	
5	17%	0.90	
6	19%	0.91	
7	19%	0.91	
8	18%	0.89	
9	15%	0.88	
10	6%	0.82	
11	7%	0.83	
12	9%	0.84	
13	11%	0.85	
14	10%	0.85	
15	11%	0.85	
16	9%	0.84	
17	9%	0.84	
18	9%	0.84	
19	10%	0.85	
20	10%	0.85	
21	7%	0.82	
22	7%	0.83	
23	14%	0.88	
24	17%	0.90	
25	15%	0.88	
26	16%	0.89	
27	25%	0.95	
28	23%	0.93	
29	11%	0.85	
30	16%	0.89	
31	12%	0.86	
32	15%	0.88	
33	12%	0.86	
34	13%	0.87	
35	12%	0.86	
36	19%	0.91	
37	30%	0.98	
38	31%	0.99	
39	42%	1.05	
40	47%	1.07	
41	59%	1.13	
42	25%	0.95	
43	102%	1.31	
44			
45			



Monday, May 03, 2010 Spring Field Research
Loch Garry - Agreement Forest - 1 Kenyon Concession Road

Rainy (0.5cm) high 23C, low 16C; no rain previous day

Through pine plantation/cedar stand; ending in fenish marsh

0°
2825

Volumetric Water Content (%)	Period	Description/Details
24%	0.94	
17%	0.90	
20%	0.92	
14%	0.88	
26%	0.95	
28%	0.97	
23%	0.94	
20%	0.92	
16%	0.89	
11%	0.86	
12%	0.86	
17%	0.90	
13%	0.87	
22%	0.93	
24%	0.94	
19%	0.91	
32%	0.99	
14%	0.88	
32%	0.99	
56%	1.11	
65%	1.16	
58%	1.12	
35%	1.01	
67%	1.17	
30%	0.98	
49%	1.08	
61%	1.14	
58%	1.12	
66%	1.14	
47%	1.07	

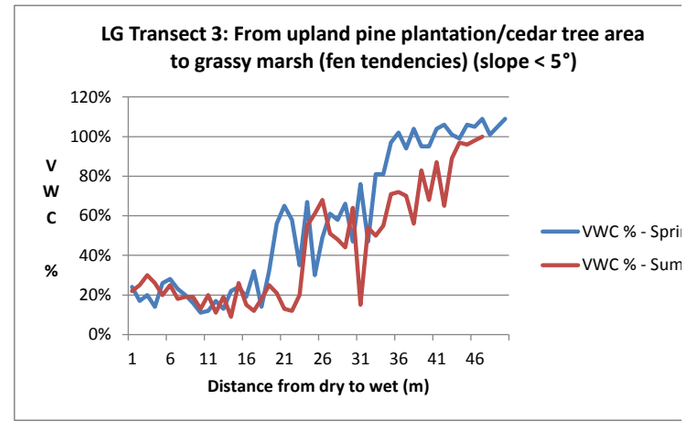
Date: Wednesday, July 14, 2010 Summer Field Research
Location: Loch Garry - Agreement Forest - 1 Kenyon Concession Road
Weather: Minor Rain (High 28C, Low 19C); no rain previous day

Description: Slight slope (<5°) from cedar stand (VP 94) going through cutblock (VP 95); down into more of a cedar stand finally ending in marsh (VP 96); spring points 8-9

Azimuth (Bearing of Transect):

Photo #s 3854-3860

Point #	Volumetric Water Content (%)	Period	Description/Details
1	22%	0.93	
2	25%	0.95	
3	30%	0.98	
4	26%	0.95	
5	20%	0.92	
6	25%	0.95	
7	18%	0.90	
8	19%	0.91	
9	19%	0.91	
10	13%	0.87	
11	20%	0.92	
12	11%	0.86	
13	19%	0.91	
14	9%	0.82	
15	26%	0.96	
16	15%	0.88	
17	12%	0.86	
18	18%	0.90	
19	25%	0.95	
20	21%	0.92	
21	13%	0.87	
22	12%	0.86	
23	20%	0.92	
24	55%	1.11	
25	61%	1.14	
26	68%	1.17	
27	51%	1.14	
28	48%	1.08	
29	44%	1.05	
30	64%	1.15	



76%	1.21	31	15%	0.89
47%	1.07	32	54%	1.11
81%	1.22	33	50%	1.08
81%	1.23	34	55%	1.11
97%	1.29	35	71%	1.18
102%	1.31	36	72%	1.19
94%	1.28	37	70%	1.18
104%	1.32	38	56%	1.11
95%	1.28	39	83%	1.24
95%	1.28	40	68%	1.17
104%	1.32	41	87%	1.25
106%	1.33	42	65%	1.16
101%	1.31	43	89%	1.26
99%	1.30	44	97%	1.29
106%	1.33	45	96%	1.29
105%	1.32	46	98%	1.30
109%	1.34	47	100%	1.31
101%	1.31	48		
105%	1.32	49		
109%	1.34	50		
		51		

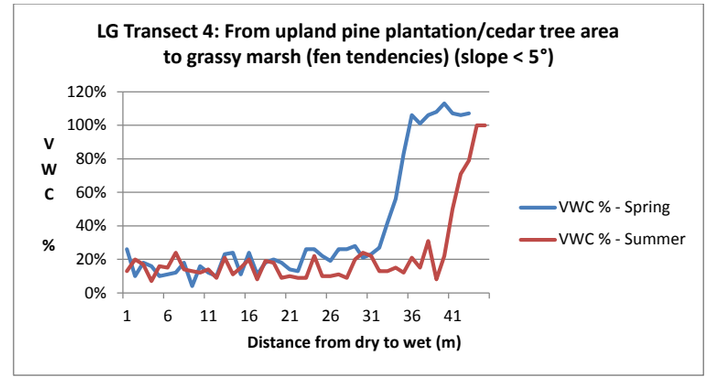
Monday, May 03, 2010 Spring Field Research
Loch Garry - Agreement Forest - 1 Kenyon Concession Road
Rainy (0.5cm) high 23C, low 16C; no rain previous day

250°
2830-2834

Volumetric Water Content (%)	Period	Description/Details
26%	0.96	
10%	0.85	
18%	0.90	
16%	0.89	
10%	0.85	
11%	0.85	
12%	0.86	
18%	0.90	
4%	0.80	
16%	0.89	
12%	0.86	
10%	0.85	
23%	0.93	
24%	0.94	
11%	0.86	
24%	0.94	
11%	0.85	
18%	0.90	
20%	0.92	
18%	0.91	
14%	0.88	
13%	0.87	
26%	0.95	
26%	0.95	
22%	0.93	
19%	0.91	
26%	0.95	
26%	0.95	
28%	0.97	
21%	0.92	
23%	0.93	
27%	0.96	
42%	1.05	
56%	1.12	
83%	1.23	
106%	1.33	
101%	1.31	

Date: Wednesday, July 14, 2010 Summer Field Research
Location: Loch Garry - Agreement Forest - 1 Kenyon Concession Road
Weather: Minor Rain (High 28C, Low 19C); no rain previous day
Description: Pts 11 to 10
Azimuth (Bearing of Transect): 250°
Photo #s

Point #	Volumetric Water Content (%)	Period	Description/Details
1	13%	0.87	
2	20%	0.91	
3	17%	0.90	
4	7%	0.82	
5	16%	0.89	
6	15%	0.89	
7	24%	0.94	
8	14%	0.87	
9	13%	0.87	
10	12%	0.86	
11	14%	0.87	
12	9%	0.84	
13	21%	0.92	
14	11%	0.88	
15	15%	0.89	
16	20%	0.91	
17	8%	0.83	
18	19%	0.91	
19	18%	0.91	
20	9%	0.84	
21	10%	0.85	
22	9%	0.84	
23	9%	0.84	
24	22%	0.93	
25	10%	0.84	
26	10%	0.85	
27	11%	0.85	
28	9%	0.84	
29	20%	0.92	
30	24%	0.94	
31	22%	0.93	
32	13%	0.87	
33	13%	0.87	
34	15%	0.89	
35	12%	0.86	
36	21%	0.92	
37	15%	0.89	



106%	1.33	38	31%	0.98
108%	1.33	39	8%	0.83
113%	1.35	40	22%	0.93
107%	1.33	41	50%	1.08
106%	1.33	42	71%	1.23
107%	1.33	43	79%	1.22
		44	100%	1.30
		45	100%	1.30
		46 .		

Monday, May 03, 2010 Spring Field Research
Loch Garry - Agreement Forest - 1 Kenyon Concession Road
Rainy (0.5cm) high 23C, low 16C; no rain previous day

Change in direction corrected for when entering data

65°
2835-2837

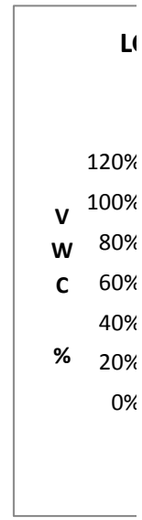
Volumetric Water Content (%)	Period	Description/Details
108%	1.24	
105%	1.32	
106%	1.33	
104%	1.32	
92%	1.17	
107%	1.33	
107%	1.33	
106%	1.33	
95%	1.29	
31%	0.98	
39%	1.02	
73%	1.19	
79%	1.20	
66%	1.16	
50%	1.28	

Date: Wednesday, July 14, 2010 Summer Field Research
Location: Loch Garry - Agreement Forest - 1 Kenyon Concession Road
Weather: Minor Rain (High 28C, Low 19C); no rain previous day

Description: Starts in VP 97 ;which is dead tree swamp; through ecotone (VP 98; moving across entire peninsula (in Spring went east to west (pt. 13 to 12) in Summer went west to east (pt. 12 to 13)); peninsula is cedar forest stand; then ending in VP 99 which is also dead tree swamp with minor live hardwood

Azimuth (Bearing of Transect): 65°
Photo #s 3864-3871

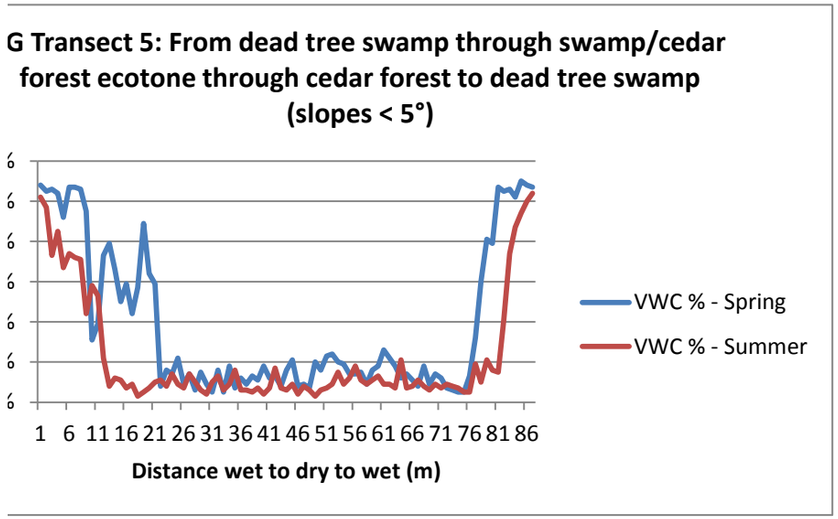
Point #	Volumetric Water Content (%)	Period	Description/Details
1	102%	1.31	
2	97%	1.29	
3	73%	1.19	
4	85%	1.24	
5	67%	1.16	
6	74%	1.20	
7	72%	1.19	
8	71%	1.18	
9	44%	1.06	
10	58%	1.13	
11	53%	1.10	
12	22%	0.93	
13	8%	0.83	
14	12%	0.86	
15	11%	0.85	



59%	1.13	16	7%	0.82
44%	1.06	17	9%	0.84
57%	1.12	18	3%	0.79
89%	1.26	19	5%	0.81
64%	1.15	20	7%	0.83
59%	1.13	21	10%	0.85
8%	0.83	22	11%	0.86
16%	0.89	23	8%	0.83
14%	0.88	24	14%	0.87
22%	0.93	25	9%	0.84
9%	0.84	26	7%	0.83
14%	0.87	27	14%	0.87
6%	0.81	28	10%	0.85
15%	0.89	29	6%	0.82
9%	0.89	30	4%	0.80
5%	0.81	31	10%	0.85
16%	0.89	32	13%	0.87
5%	0.81	33	6%	0.82
18%	0.90	34	9%	0.84
7%	0.83	35	16%	0.90
12%	0.87	36	6%	0.82
9%	0.84	37	6%	0.81
13%	0.87	38	5%	0.81
11%	0.85	39	7%	0.82
18%	0.91	40	4%	0.80
12%	0.86	41	7%	0.83
13%	0.87	42	17%	0.90
8%	0.83	43	7%	0.82
16%	0.89	44	6%	0.82
21%	0.92	45	9%	0.84
8%	0.83	46	4%	0.80
9%	0.84	47	8%	0.83
7%	0.82	48	6%	0.82
20%	0.91	49	3%	0.79

16%	0.89	50	6%	0.82
23%	0.93	51	7%	0.83
24%	0.94	52	9%	0.84
20%	0.92	53	15%	0.89
19%	0.91		9%	0.84
14%	0.87		12%	0.86
14%	0.88		18%	0.91
15%	0.89		11%	0.85
9%	0.84		9%	0.84
16%	0.89		11%	0.85
18%	0.90		13%	0.87
26%	0.95		9%	0.84
22%	0.93		9%	0.84
18%	0.90		7%	0.83
12%	0.86		21%	0.92
14%	0.88		7%	0.82
11%	0.85		8%	0.83
8%	0.83		11%	0.85
18%	0.90		8%	0.83
9%	0.84		6%	0.81
14%	0.88		9%	0.84
12%	0.86		7%	0.83
7%	0.83		9%	0.84
6%	0.81		8%	0.83
5%	0.81		7%	0.83
5%	0.81		5%	0.81
13%	0.87		5%	0.81
32%	0.99		19%	0.91
60%	1.13		10%	0.85
81%	1.23		21%	0.92
79%	1.22		16%	0.89
107%	1.33		15%	0.88
105%	1.32		41%	1.04
106%	1.33		74%	1.20

102%	1.31		87%	1.25
110%	1.34		94%	1.28
108%	1.33		100%	1.30
107%	1.33		104%	1.32


G Transect 5: From dead tree swamp through swamp/cedar forest ecotone through cedar forest to dead tree swamp (slopes < 5°)
1 6 11 16 21 26 31 36 41 46 51 56 61 66 71 76 81 86
Distance wet to dry to wet (m)
VWC % - Spring
VWC % - Summer

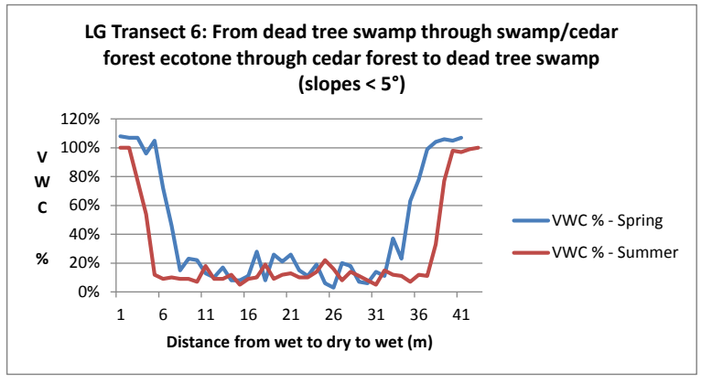
Monday, May 03, 2010 Spring Field Research
Loch Garry - Agreement Forest - 1 Kenyon Concession Road
Rainy (0.5cm) high 23C, low 16C; no rain previous day

85°

Volumetric Water Content (%)	Period	Description/Details
108%	1.34	
107%	1.33	
107%	1.33	
96%	1.39	
105%	1.32	
72%	1.19	
46%	1.07	
15%	0.88	
23%	0.94	
22%	0.93	
13%	0.87	
10%	0.85	
17%	0.89	
8%	0.83	
8%	0.83	
11%	0.86	
28%	0.97	
8%	0.83	
26%	0.95	
21%	0.93	
26%	0.95	
15%	0.88	
11%	0.85	
19%	0.91	
6%	0.81	
3%	0.79	
20%	0.92	
18%	0.90	
7%	0.83	
6%	0.82	
14%	0.87	
11%	0.86	
37%	1.02	
23%	0.93	

Date: Wednesday, July 14, 2010 Summer Field Research
Location: Loch Garry - Agreement Forest - 1 Kenyon Concession Road
Weather: Minor Rain (High 28C, Low 19C); no rain previous day
Description: Across peninsula transect from dead tree cedar swamp (VP 99) through cedar forest stand (VP 94) to dc cedar swamp (VP 97)
Azimuth (Bearing of Transect): 85°
Photo #s 3864-3871

Point #	Volumetric Water Content (%)	Period	Description/Details
1	100%	1.30	
2	100%	1.30	
3	77%	1.21	
4	54%	1.11	
5	12%	0.86	
6	9%	0.84	
7	10%	0.84	
8	9%	0.84	
9	9%	0.84	
10	7%	0.82	
11	18%	0.90	
12	9%	0.84	
13	9%	0.84	
14	12%	0.86	
15	5%	0.81	
16	9%	0.84	
17	10%	0.85	
18	19%	0.91	
19	9%	0.84	
20	12%	0.86	
21	13%	0.87	
22	10%	0.85	
23	10%	0.85	
24	14%	0.87	
25	22%	0.93	
26	16%	0.89	
27	8%	0.83	
28	14%	0.87	
29	11%	0.85	
30	8%	0.83	
31	5%	0.81	
32	15%	0.89	
33	12%	0.86	
34	11%	0.86	



63%	1.15
78%	1.21
99%	1.30
104%	1.32
106%	1.33
105%	1.32
107%	1.33

35	7%	0.83
36	12%	0.86
37	11%	0.85
38	33%	1.00
39	77%	1.21
40	98%	1.29
41	97%	1.29
42	99%	1.30
43	100%	1.31
44		
45		

Date: Monday, May 03, 2010 Spring Field Research
Location: Loch Garry - Agreement Forest - 1 Kenyon Concession Road
Weather: Rainy (0.5cm) high 23C, low 16C; no rain previous day

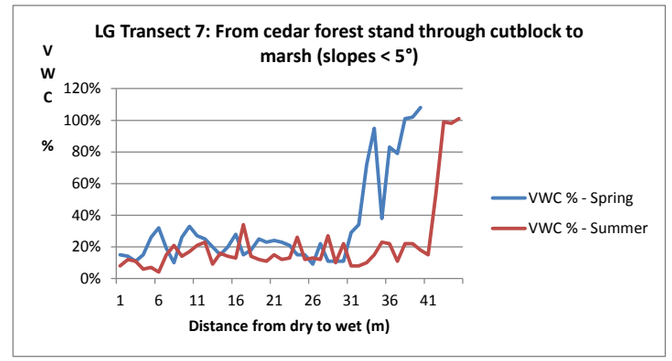
Description: Tree cut area example
Azimuth (Bearing of Transect): 140°
Photo #s

Point #	Volumetric Water Content (%)	Period	Description/Details
1	15%	0.88	
2	14%	0.88	
3	11%	0.85	
4	15%	0.89	
5	26%	0.96	
6	32%	0.99	
7	19%	0.91	
8	10%	0.85	
9	26%	0.95	
10	33%	1.00	
11	27%	0.96	
12	25%	0.95	
13	20%	0.91	
14	15%	0.88	
15	20%	0.92	
16	28%	0.96	
17	15%	0.88	
18	18%	0.90	
19	25%	0.95	
20	23%	0.94	
21	24%	0.94	
22	23%	0.93	
23	21%	0.92	
24	15%	0.89	
25	15%	0.88	
26	9%	0.84	
27	22%	0.93	
28	11%	0.86	
29	11%	0.85	
30	11%	0.86	
31	29%	0.97	
32	34%	1.00	
33	72%	1.19	
34	95%	1.28	
35	38%	1.26	
36	83%	1.24	

Date: Wednesday, July 14, 2010 Summer Field Research
Location: Loch Garry - Agreement Forest - 1 Kenyon Concession Road
Weather: Minor Rain (High 28C, Low 19C); no rain previous day

Description: From Cedar stand through cutblock (VP 95); into cedar stand and into marsh (VP 96); spring points (16 - 17); very minimal slope (< 5°)
Azimuth (Bearing of Transect): 140°
Photo #s 3856-3860

Point #	Volumetric Water Content (%)	Period	Description/Details
1	8%	0.83	
2	12%	0.86	
3	11%	0.85	
4	6%	0.82	
5	7%	0.83	
6	4%	0.80	
7	15%	0.88	
8	21%	0.92	
9	14%	0.88	
10	17%	0.90	
11	21%	0.92	
12	23%	0.93	
13	9%	0.84	
14	16%	0.89	
15	14%	0.87	
16	13%	0.87	
17	34%	1.00	
18	14%	0.87	
19	12%	0.86	
20	11%	0.86	
21	15%	0.88	
22	12%	0.86	
23	13%	0.87	
24	26%	0.95	
25	12%	0.86	
26	13%	0.87	
27	12%	0.86	
28	27%	0.96	
29	10%	0.84	
30	22%	0.93	
31	8%	0.83	
32	8%	0.83	
33	10%	0.85	
34	15%	0.89	
35	23%	0.94	
36	22%	0.93	



37	79%	1.22
38	101%	1.31
39	102%	1.31
40	108%	1.33
41		
42		
43		
44		
45		

37	11%	0.85
38	22%	0.93
39	22%	0.93
40	18%	0.90
41	15%	0.88
42	53%	1.10
43	99%	1.30
44	98%	1.30
45	101%	1.31

Monday, May 03, 2010 Spring Field Research
Loch Garry - Agreement Forest - 1 Kenyon Concession Road
Rainy (0.5cm) high 23C, low 16C; no rain
previous day

45°
2863

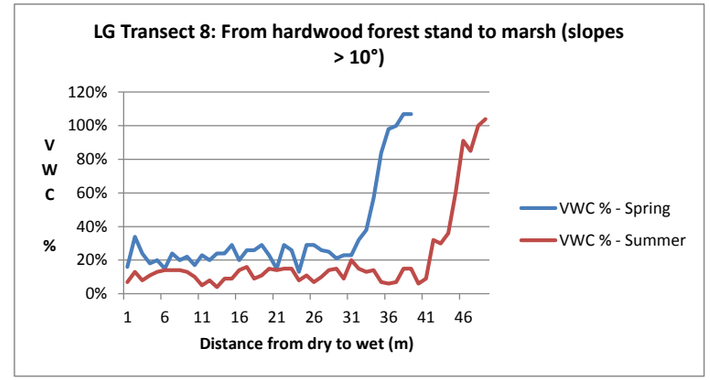
Volumetric Water Content (%)	Period	Description/Details
16%	0.89	
34%	1.00	
24%	0.92	
18%	0.91	
20%	0.92	
15%	0.89	
24%	0.94	
20%	0.91	
22%	0.93	
17%	0.87	
23%	0.93	
20%	0.92	
24%	0.94	
24%	0.94	
29%	0.97	
20%	0.92	
26%	0.96	
26%	0.96	
29%	0.97	
23%	0.93	
15%	0.88	
29%	0.97	
26%	0.95	
13%	0.87	
29%	0.97	
29%	0.97	
26%	0.95	
25%	0.95	
21%	0.93	
23%	0.93	
23%	0.94	
32%	0.99	
38%	1.02	
57%	1.12	

Date: Tuesday, July 13, 2010 Summer Field Research
Location: Loch Garry - Northside Lakeshore Road
Weather: Sunny; High 29C low 20C; Rain (.4cm) previous day

Description: From upland (VP 83ish); very shallow slope to transition area VP 86 -- to very large cattail marsh (VP 85)

Azimuth (Bearing of Transect): 45°
Photo #s 3826-3831

Point #	Volumetric Water Content (%)	Period	Description/Details
1	7%	0.83	
2	13%	0.87	
3	8%	0.83	
4	11%	0.86	
5	13%	0.87	
6	14%	0.87	
7	14%	0.88	
8	14%	0.87	
9	13%	0.87	
10	10%	0.85	
11	5%	0.81	
12	8%	0.83	
13	4%	0.80	
14	9%	0.84	
15	9%	0.84	
16	14%	0.88	
17	16%	0.89	
18	9%	0.84	
19	11%	0.85	
20	15%	0.90	
21	14%	0.87	
22	15%	0.88	
23	15%	0.88	
24	8%	0.82	
25	11%	0.85	
26	7%	0.83	
27	10%	0.85	
28	14%	0.88	
29	15%	0.88	
30	9%	0.84	
31	20%	0.92	
32	15%	0.88	
33	13%	0.87	
34	14%	0.87	



84%	1.24
98%	1.30
100%	1.30
107%	1.33
107%	1.33

35	7%	0.83
36	6%	0.82
37	7%	0.82
38	15%	0.88
39	15%	0.87
40	6%	0.82
41	9%	0.84
42	32%	0.99
43	30%	0.98
44	36%	1.01
45	60%	1.13
46	91%	1.27
47	85%	1.24
48	100%	1.30
49	104%	1.32
50		
51		
52		
53		

Date: Monday, May 03, 2010 Spring Field Research
Location: Loch Garry - Agreement Forest - 1 Kenyon Concession Road
Weather: Rainy (0.5cm) high 23C, low 16C; no rain previous day

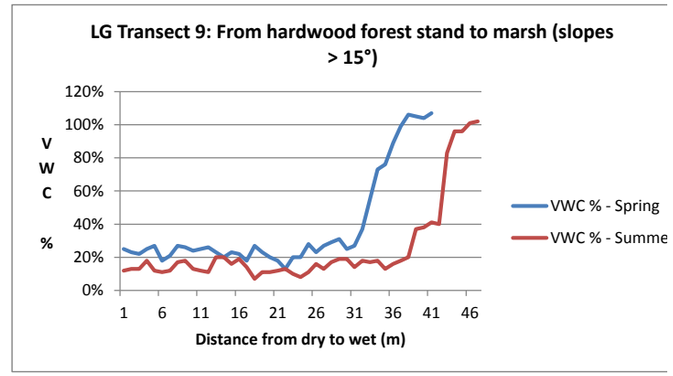
Description:
Azimuth (Bearing of Transect): 70°
Photo #s 2864

Point #	Volumetric Water Content (%)	Period	Description/Details
1	25%	0.95	
2	23%	0.94	
3	22%	0.93	
4	25%	0.95	
5	27%	0.96	
6	18%	0.90	
7	21%	0.92	
8	27%	0.96	
9	26%	0.95	
10	24%	0.94	
11	25%	0.95	
12	26%	0.95	
13	23%	0.94	
14	20%	0.92	
15	23%	0.93	
16	22%	0.93	
17	18%	0.90	
18	27%	0.96	
19	23%	0.94	
20	20%	0.92	
21	18%	0.90	
22	13%	0.87	
23	20%	0.91	
24	20%	0.92	
25	28%	0.97	
26	23%	0.94	
27	27%	0.96	
28	29%	0.97	
29	31%	0.98	
30	25%	0.95	
31	27%	0.96	
32	37%	1.02	
33	55%	1.11	
34	73%	1.19	
35	76%	1.21	
36	89%	1.26	

Date: Tuesday, July 13, 2010 Summer Field Research
Location: Loch Garry - Northside Lakeshore Road
Weather: Sunny; High 29C low 20C; Rain (.4cm) previous day

Description: Start in VP 83; upland forest moving down a gradual slope (>15°) into big cattail Marsh
Azimuth (Bearing of Transect): 70°
Photo #s 3823-3827

Point #	Volumetric Water Content (%)	Period	Description/Details
1	12%	0.86	
2	13%	0.87	
3	13%	0.87	
4	18%	0.90	
5	12%	0.86	
6	11%	0.86	
7	12%	0.86	
8	17%	0.89	
9	18%	0.90	
10	13%	0.87	
11	12%	0.87	
12	11%	0.86	
13	20%	0.91	
14	20%	0.92	
15	16%	0.89	
16	19%	0.91	
17	14%	0.88	
18	7%	0.82	
19	11%	0.85	
20	11%	0.86	
21	12%	0.86	
22	13%	0.87	
23	10%	0.85	
24	8%	0.83	
25	11%	0.85	
26	16%	0.89	
27	13%	0.87	
28	17%	0.90	
29	19%	0.91	
30	19%	0.91	
31	14%	0.87	
32	18%	0.90	
33	17%	0.90	
34	18%	0.90	
35	13%	0.87	
36	16%	0.89	



37	99%	1.30
38	106%	1.33
39	105%	1.32
40	104%	1.32
41	107%	1.33
42		
43		
44		
45		
46		
47		

37	18%	0.91
38	20%	0.92
39	37%	1.02
40	38%	1.02
41	41%	1.04
42	40%	1.03
43	83%	1.23
44	96%	1.29
45	96%	1.29
46	101%	1.31
47	102%	1.31

Date: Monday, May 03, 2010 Spring Field Research
Location: Loch Garry - Agreement Forest - 1 Kenyon Concession Road
Weather: Rainy (0.5cm) high 23C, low 16C; no rain previous day

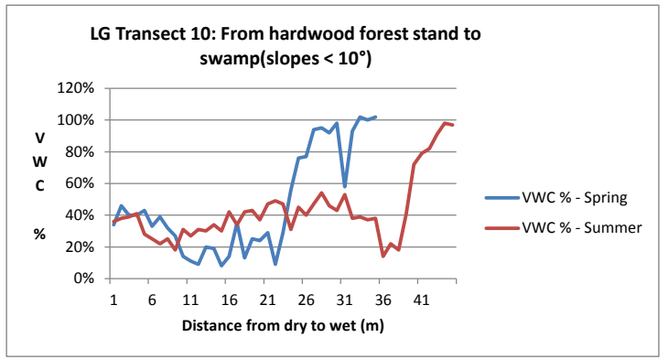
Description:
Azimuth (Bearing of Transect): 220°
Photo #s 2865

Point #	Volumetric Water Content (%)	Period	Description/Details
1	34%	1.00	
2	46%	1.07	
3	40%	1.03	
4	40%	1.03	
5	43%	1.05	
6	33%	1.00	
7	39%	1.03	
8	32%	0.99	
9	27%	0.96	
10	14%	0.87	
11	11%	0.86	
12	9%	0.84	
13	20%	0.92	
14	19%	0.91	
15	8%	0.83	
16	14%	0.87	
17	35%	1.01	
18	13%	0.87	
19	25%	0.95	
20	24%	0.94	
21	29%	0.97	
22	9%	0.84	
23	29%	0.97	
24	56%	1.11	
25	76%	1.21	
26	77%	1.21	
27	94%	1.28	
28	95%	1.29	
29	92%	1.27	
30	98%	1.30	
31	58%	1.12	
32	93%	1.28	
33	102%	1.31	
34	100%	1.31	
35	102%	1.31	
36			
37			

Date: Thursday, July 15, 2010 Summer Field Research
Location: Loch Garry - Northside of Lakeshore Road (off Fens)
Weather: Foggy; high 30C; low 17C; rain previous 3 days 1.5cm)
Description: From hardwood forest into swamp that surrounds LG Fens (slope was < 10°) using points 25 - 26; swamp is VP 109

Azimuth (Bearing of Transect): 220°
Photo #s 3918-3923

Point #	Volumetric Water Content (%)	Period	Description/Details
1	36%	1.01	
2	38%	1.03	
3	39%	1.03	
4	41%	1.04	
5	28%	0.97	
6	25%	0.95	
7	22%	0.93	
8	25%	0.95	
9	18%	0.90	
10	31%	0.98	
11	27%	0.96	
12	31%	0.99	
13	30%	0.98	
14	34%	1.00	
15	30%	0.98	
16	42%	1.05	
17	34%	1.00	
18	42%	1.05	
19	43%	1.05	
20	37%	1.02	
21	47%	1.07	
22	49%	1.08	
23	47%	1.07	
24	31%	0.98	
25	45%	1.06	
26	40%	1.03	
27	47%	1.07	
28	54%	1.11	
29	46%	1.07	
30	43%	1.05	
31	53%	1.10	
32	38%	1.03	
33	39%	1.03	
34	37%	1.02	
35	38%	1.02	
36	14%	0.88	
37	22%	0.93	



38	38	18%	0.91
39	39	41%	1.04
40	40	72%	1.19
41	41	79%	1.22
42	42	82%	1.23
43	43	91%	1.27
44	44	98%	1.30
45	45	97%	1.29

Date: Monday, May 03, 2010 Spring Field Research
Location: Loch Garry - Agreement Forest - 1 Kenyon Concession Road
Weather: Rainy (0.5cm) high 23C, low 16C; no rain previous day

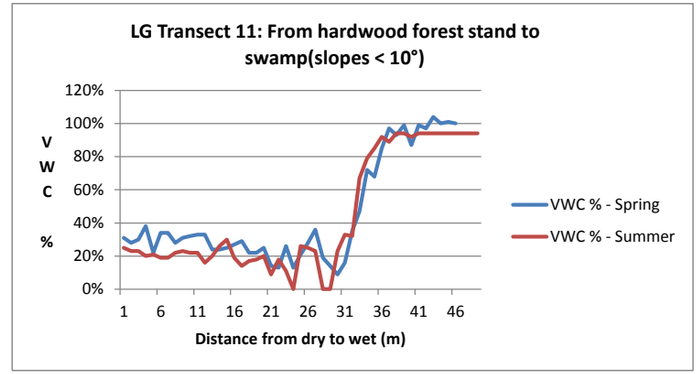
Description:
Azimuth (Bearing of Transect): 45°
Photo #s 2866??

Point #	Volumetric Water Content (%)	Period	Description/Details
1	31%	0.91	
2	28%	0.97	
3	30%	0.98	
4	38%	1.02	
5	22%	0.99	
6	34%	1.00	
7	34%	1.00	
8	28%	0.97	
9	31%	0.99	
10	32%	0.99	
11	33%	1.00	
12	33%	0.99	
13	24%	0.94	
14	24%	0.94	
15	25%	0.95	
16	27%	0.96	
17	29%	0.97	
18	22%	0.93	
19	22%	0.93	
20	25%	0.95	
21	14%	0.88	
22	13%	0.87	
23	26%	0.95	
24	13%	0.87	
25	21%	0.92	
26	28%	0.97	
27	36%	1.01	
28	19%	0.91	
29	14%	0.88	
30	9%	0.84	
31	16%	0.87	
32	35%	1.01	
33	47%	1.07	
34	72%	1.19	
35	68%	1.17	

Date: Thursday, July 15, 2010 Summer Field Research
Location: Loch Garry - Northside of Lakeshore Road (off Fens)
Weather: Foggy; high 30C; low 17C; rain previous 3 days 1.5cm)
From hardwood forest into swamp that surrounds LG Fens (slope was < 10°) using points 25 - 26; swamp is

Description: VP 109
Azimuth (Bearing of Transect): 45°
Photo #s 3918-3923

Point #	Volumetric Water Content (%)	Period	Description/Details
1	25%	0.95	
2	23%	0.94	
3	23%	0.94	
4	20%	0.92	
5	21%	0.92	
6	19%	0.91	
7	19%	0.91	
8	22%	0.93	
9	23%	0.93	
10	22%	0.93	
11	22%	0.93	
12	16%	0.89	
13	20%	0.91	
14	26%	0.95	
15	30%	0.98	
16	19%	0.91	
17	14%	0.87	
18	17%	0.90	
19	18%	0.90	
20	20%	0.91	
21	9%	0.84	
22	18%	0.90	
23	11%	0.85	
24	0%	0.77	
25	26%	0.96	
26	25%	0.95	
27	23%	0.93	
28	0%	0.77	
29	0%	0.77	
30	23%	0.94	
31	33%	1.00	
32	32%	0.99	
33	67%	1.17	
34	79%	1.22	
35	85%	1.24	



36	85%	1.24
37	97%	1.29
38	93%	1.27
39	99%	1.30
40	87%	1.25
41	99%	1.30
42	97%	1.29
43	104%	1.32
44	100%	1.30
45	101%	1.31
46	100%	1.30
47		
48		
49		

36	92%	1.27
37	89%	1.26
38	94%	1.28
39	94%	1.28
40	92%	1.27
41	94%	1.28
42	94%	1.28
43	94%	1.28
44	94%	1.28
45	94%	1.28
46	94%	1.28
47	94%	1.28
48	94%	1.28
49	94%	1.28

Date: Tuesday, April 27, 2010 Spring Field Research
Location: Loch Garry - Northside of Lakeshore Road (off Fens)
Weather: Snow/rain;0.3cm; high 6C; low 0C; no precipitation previous three days

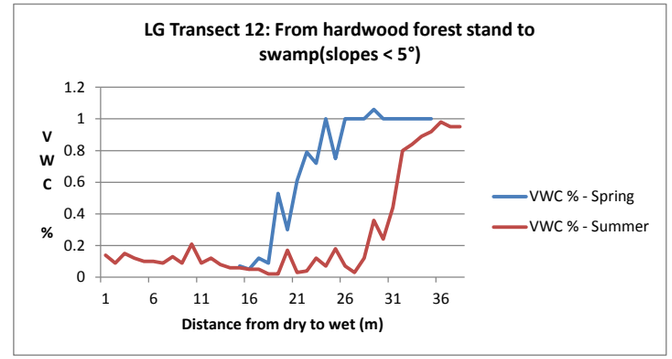
Description: From Mixed forest stand (cedar/birch/hemlock/peat/spruce) into cedar/dead tree swamp with tamarack
Azimuth (Bearing of Transect):
Photo #s

Point #	Volumetric Water Content (%)	Period	Description/Details
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15	7%		
16	5%		
17	12%		
18	9%		
19	53%		
20	30%		
21	61%		
22	79%		
23	72%		
24	100%		
25	75%		
26	100%		
27	100%		
28	100%		
29	106%		
30	100%		
31	100%		
32	100%		
33	100%		
34	100%		
35	100%		
36			

Date: Thursday, July 15, 2010 Summer Field Research
Location: Loch Garry - Northside of Lakeshore Road (off Fens)
Weather: Foggy; high 30C; low 17C; rain previous 3 days 1.5cm)

Description: Starts in VP 107 (cedar dominated forest stand); going down slight slope to VP 106 (Swamp/upland ecotone) into VP 105; start point is SMT 14a and end point is SMT 14b
Azimuth (Bearing of Transect): 34°
Photo #s 3903 - 3913

Point #	Volumetric Water Content (%)	Period	Description/Details
1	14%	0.88	
2	9%	0.94	
3	15%	0.88	
4	12%	0.86	
5	10%	0.85	
6	10%	0.85	
7	9%	0.84	
8	13%	0.87	
9	9%	0.84	
10	21%	0.92	
11	9%	0.84	
12	12%	0.86	
13	8%	0.84	
14	6%	0.82	
15	6%	0.82	
16	5%	0.81	
17	5%	0.81	
18	2%	0.79	
19	2%	0.79	
20	17%	0.90	
21	3%	0.79	
22	4%	0.80	
23	12%	0.86	
24	7%	0.83	
25	18%	0.87	
26	7%	0.83	
27	3%	0.79	
28	12%	0.86	
29	36%	1.01	
30	24%	0.94	
31	44%	1.06	
32	80%	1.22	
33	84%	1.24	
34	89%	1.26	
35	92%	1.27	
36	98%	1.29	



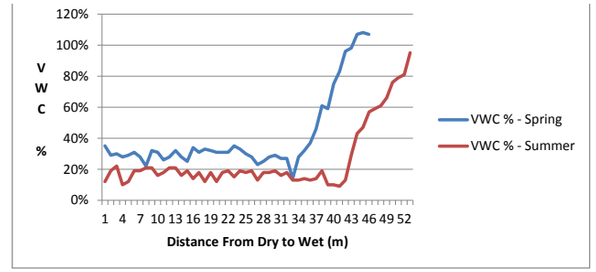
37	37	95%	1.28
38	38	95%	1.28
39	39		
40	40		

Description: Open field, to pond which is ringed by wet vegetation; no real discernable slope; the open area was surrounded by a cedar/pine/birch forest (majority coniferous)
Azimuth (Bearing of Transect): 105°
Photo #s 3050 - 3053

Point #	Volumetric Water Content (%)	Period	Description/Details
1	35%	1.01	
2	29%	0.97	
3	30%	28.00	
4	28%	0.96	
5	29%	0.97	
6	31%	0.98	
7	28%	0.97	
8	22%	0.95	
9	32%	0.99	
10	31%	0.98	
11	26%	0.96	
12	28%	0.97	
13	32%	0.99	
14	28%	0.96	
15	25%	0.95	
16	34%	1.00	
17	31%	0.98	
18	33%	0.99	
19	32%	0.99	
20	31%	0.98	
21	31%	0.99	
22	31%	0.98	
23	35%	1.00	
24	33%	1.00	
25	30%	0.98	
26	28%	0.96	
27	23%	0.94	
28	25%	0.95	
29	28%	0.96	
30	29%	0.97	
31	27%	0.96	
32	27%	0.96	
33	14%	0.88	
34	28%	0.97	
35	32%	0.99	
36	37%	1.02	
37	46%	1.06	
38	61%	1.14	
39	59%	1.13	
40	75%	1.20	
41	83%	1.24	
42	96%	1.29	
43	98%	1.30	
44	107%	1.33	
45	108%	1.34	
46	107%	1.33	

Description: Same
Azimuth (Bearing of Transect): 105°
Photo #s n/a

Point #	Volumetric Water Content (%)	Period	Description/Details
1	12%	0.87	
2	19%	0.91	
3	22%	0.93	
4	10%	0.85	
5	12%	0.86	
6	19%	0.91	
7	19%	0.91	
8	21%	0.92	
9	21%	0.92	
10	16%	0.89	
11	18%	0.90	
12	21%	0.92	
13	21%	0.92	
14	16%	0.89	
15	19%	0.91	
16	14%	0.88	
17	18%	0.90	
18	12%	0.87	
19	18%	0.90	
20	12%	0.87	
21	18%	0.90	
22	19%	0.91	
23	15%	0.89	
24	19%	0.91	
25	18%	0.90	
26	19%	0.91	
27	13%	0.87	
28	18%	0.90	
29	18%	0.90	
30	19%	0.91	
31	16%	0.89	
32	18%	0.91	
33	13%	0.87	
34	13%	0.87	
35	14%	0.87	
36	13%	0.87	
37	14%	0.88	
38	19%	0.91	
39	10%	0.85	
40	10%	0.85	
41	9%	0.84	
42	13%	0.87	
43	29%	0.97	
44	43%	1.05	
45	47%	1.07	
46	57%	1.12	
47	59%	1.13	
48	61%	1.14	
49	66%	1.16	



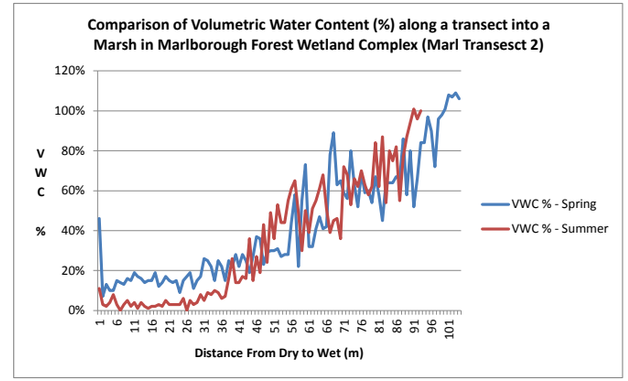
50	76%	1.21
51	79%	1.22
52	81%	1.23
53	95%	1.20

Date:	Monday, May 10, 2010	Spring Field Research	
Location:	Marlborough Forest Wetland Complex	Roger Stevens Pond	
Weather:	Sunny, 11C High, -1 Low; light winds (rain and/or snow the three previous days)		
Description:	Off trail; through fairly open birch/poplar forest (dominant hardwood) with some cedars (all less than 15 m); understory at this time very low growing herbs; some seedlings; shallow slope to pond		
Azimuth (Bearing of Transect):	240°		
Photo #s	3054 - 3057		

Point #	Volumetric Water Content (%)	Period	Description/Details
1	46%	0.89	
2	7%	0.82	
3	13%	0.87	
4	10%	0.85	
5	10%	0.85	
6	15%	0.88	
	14%	0.87	
8	13%	0.87	
9	16%	0.89	
10	15%	0.88	
11	19%	0.91	
12	17%	0.90	
13	16%	0.89	
14	14%	0.88	
15	15%	0.88	
16	15%	0.88	
17	19%	0.91	
18	12%	0.86	
19	14%	0.87	
20	17%	0.89	
21	15%	0.89	
22	14%	0.88	
23	15%	0.88	
24	9%	0.84	
25	15%	0.88	
26	17%	0.89	
27	19%	0.91	
28	11%	0.86	
29	15%	0.88	
30	17%	0.90	
31	26%	0.95	
32	25%	0.95	
33	22%	0.93	
34	15%	0.89	
35	25%	0.95	
36	22%	0.93	
37	15%	0.89	
38	25%	0.95	
39	22%	0.93	
40	28%	0.96	
41	22%	0.93	
42	28%	0.97	
43	25%	0.95	
44	19%	0.91	
45	27%	0.96	
46	37%	1.02	

Date:	Monday, July 05, 2010	Summer Field Research	
Location:	Marlborough Forest Wetland Complex		
Weather:	Sunny, 34C high, 19C low; very light winds (no rain the previous 2 days)		
Description:	Same - herbs have devloped into dense poison ivy covering		
Azimuth (Bearing of Transect):	Same		
Photo #s	n/a		

Point #	Volumetric Water Content (%)	Period	Description/Details
1	11%	0.86	
2	3%	0.80	
3	2%	0.78	
4	4%	0.80	
5	8%	0.83	
6	3%	0.79	
7	0%	0.77	
8	3%	0.80	
9	5%	0.81	
10	2%	0.78	
11	4%	0.80	
12	1%	0.78	
13	4%	0.80	
14	2%	0.79	
15	1%	0.77	
16	2%	0.79	
17	2%	0.79	
18	3%	0.79	
19	2%	0.78	
20	5%	0.81	
21	3%	0.79	
22	3%	0.79	
23	3%	0.79	
24	3%	0.79	
25	6%	0.81	
26	0%	0.77	
27	5%	0.81	
28	3%	0.80	
29	4%	0.80	
30	8%	0.83	
31	5%	0.81	
32	9%	0.84	
33	8%	0.83	
34	10%	0.84	
35	9%	0.84	
36	6%	0.82	
37	7%	0.82	
38	16%	0.89	
39	26%	0.96	
40	14%	0.88	
41	14%	0.88	
42	17%	0.90	
43	16%	0.89	
44	36%	1.01	
45	15%	0.88	
46	27%	0.96	



47	36%	1.01
48	23%	0.93
49	29%	0.97
50	30%	0.98
51	30%	0.98
52	31%	0.99
53	27%	0.96
54	28%	0.97
55	28%	0.97
56	44%	1.05
57	58%	1.13
58	22%	0.93
59	55%	1.11
60	73%	1.19
61	32%	0.99
62	32%	0.99
63	41%	1.04
64	47%	1.07
65	41%	1.04
66	42%	1.04
67	78%	1.21
68	89%	1.26
69	63%	1.15
70	65%	1.16
71	59%	1.13
72	56%	1.11
73	80%	1.22
74	63%	1.15
75	52%	1.10
76	69%	1.18
77	59%	1.13
78	60%	1.14
79	54%	1.10
80	67%	1.17
81	58%	1.13
82	45%	1.06
83	64%	1.15
84	64%	1.15
85	64%	1.15
86	67%	1.17
87	66%	1.16
88	86%	1.25
89	58%	1.12
90	80%	1.22
91	52%	1.09
92	66%	1.06
93	84%	1.24
94	84%	1.24
95	97%	1.29
96	90%	1.27
97	72%	1.19
98	96%	1.29
99	98%	1.29
100	101%	1.31
101	108%	1.37
102	107%	1.33
103	109%	1.34
104	106%	1.33

47	19%	0.91
48	43%	1.05
49	24%	0.94
50	49%	1.08
51	36%	1.01
52	53%	1.10
53	44%	1.06
	44%	1.05
	55%	1.11
	61%	1.14
	65%	1.16
	49%	1.08
	30%	0.98
	50%	1.09
	39%	1.03
	51%	1.09
	55%	1.11
	61%	1.14
	68%	1.17
	51%	1.09
	39%	1.03
	45%	1.06
	46%	1.06
	36%	1.01
	72%	1.19
	68%	1.17
	53%	1.10
	66%	1.16
	62%	1.14
	70%	1.18
	63%	1.15
	58%	1.13
	62%	1.14
	84%	1.12
	62%	1.14
	87%	1.25
	54%	1.13
	80%	1.22
	75%	1.20
	82%	1.23
	55%	1.16
	77%	1.21
	87%	1.25
	94%	1.28
	101%	1.21
	96%	1.29
	100%	1.30

Date:	Monday, May 10, 2010		Spring Field Research		Date:
Location:	Marlborough Forest Wetland Complex		Off Bear Trail		Location:
Weather:	Sunny, 11C High, -1 Low; light winds (rain and/or snow the three previous days)				Weather:
Description:	Bear Trail; across path through an open area into a grassy fen'ish area with half grasses and half shrubs and grasses; dense cedar forest surrounding				Description:
Azimuth (Bearing of Transect):	0°/360°				Azimuth (Bearing of Transect):
Photo #s	3058-3061				Photo #s
Point #	Volumetric Water Content (%)		Period	Description/Details	Point #
1		37%	1.02		1
2		39%	1.03		2
3		41%	1.04		3
4		30%	0.98		4
5		33%	1.00		5
6		33%	0.99		6
7		26%	0.95		7
8		37%	1.02		8
9		38%	1.02		9
10		30%	0.98		10
11		39%	1.03		11
12		27%	0.96		12
13		38%	1.02		13
14		47%	1.07		14
15		32%	0.99		15
16		37%	1.03		16
17		44%	1.06		17
18		56%	1.11		18
19		65%	1.16		19
20		64%	1.15		20
21		72%	1.19		21
22		84%	1.24		22
23		85%	1.25		23
24		63%	1.15		24
25		77%	1.27		25
26		95%	1.29		26
25		104%	1.32		27
28		100%	1.30		28
29		94%	1.28		29
30		105%	1.32		30
31		104%	1.33		31
32		104%	1.32		32

33	107%	1.33	33
34	99%	1.30	34
35	104%	1.32	35
36	110%	1.34	36
37	111%	1.35	37
38	110%	1.34	38
39	109%	1.34	39
40	109%	1.34	40
41			41
42			42
43			43
44			44
45			45
46			46
47			47
48			48
49			49
50			50
			51
			52
			53

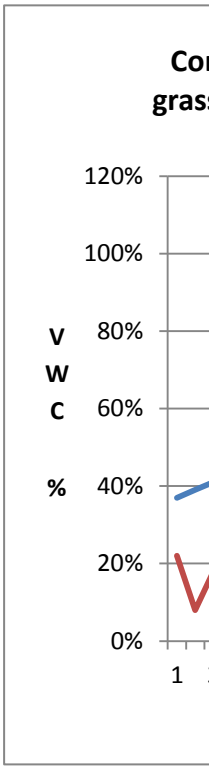
Monday, July 05, 2010 Summer Field Research
Marlborough Forest Wetland Complex Off Bear Trail

Sunny, 34C high, 19C low; very light winds
(no rain the previous 2 days)

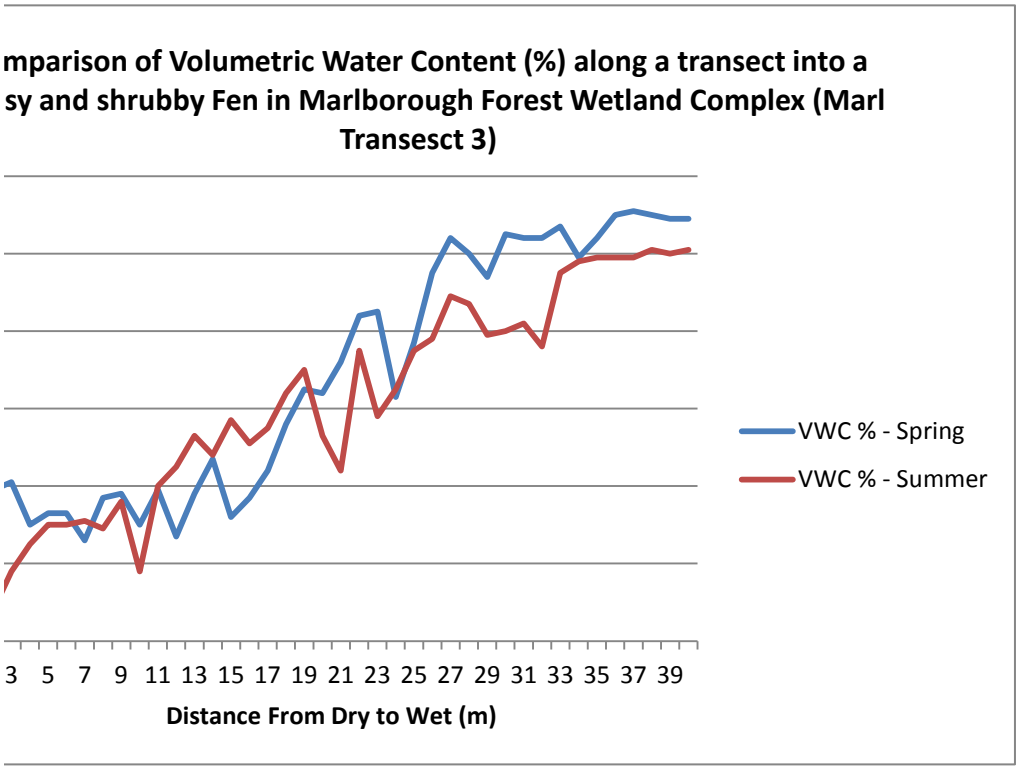
Same

Same
3721-3726

Volumetric Water Content (%)	Period	Description/Details
22%	0.93	
8%	0.83	
18%	0.90	
25%	0.95	
30%	0.98	
30%	0.98	
31%	0.98	
29%	0.97	
36%	1.01	
18%	0.90	
40%	1.03	
45%	1.06	
53%	1.10	
48%	1.07	
57%	1.12	
51%	1.09	
55%	1.16	
64%	1.15	
70%	1.18	
53%	1.10	
44%	1.06	
75%	1.20	
58%	1.12	
65%	1.16	
75%	1.20	
78%	1.21	
89%	1.26	
87%	1.23	
79%	1.22	
80%	1.22	
82%	1.23	
76%	1.21	



95%	1.29
98%	1.30
99%	1.30
99%	1.30
99%	1.30
101%	1.31
100%	1.30
101%	1.31

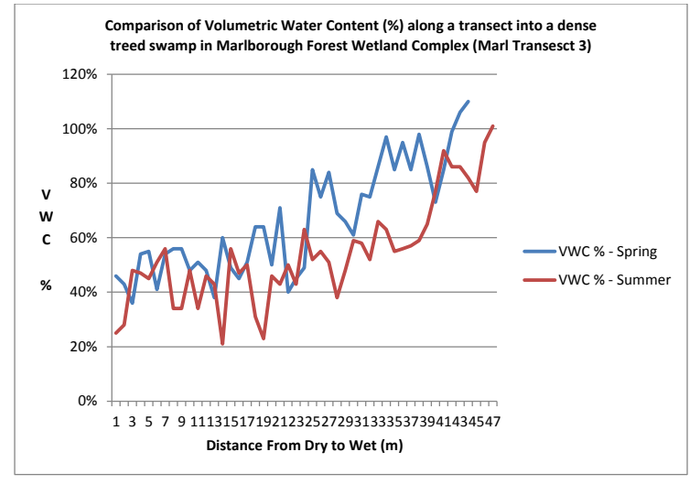

mparison of Volumetric Water Content (%) along a transect into a
sy and shrubby Fen in Marlborough Forest Wetland Complex (Marl
Transesct 3)
3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39
Distance From Dry to Wet (m)
VWC % - Spring
VWC % - Summer

Date:	Monday, May 10, 2010	Spring Field Research
Location:	Marlborough Forest Wetland Complex	End of Bear Trail
Weather:	Sunny, 11C High, -1 Low; light winds (rain and/or snow the three previous days)	
Description:	Transect down trail in extremely dense cedar forest; trail ends by becoming permanently filled with water; (minnows and other permanent features apparent.	
Azimuth (Bearing of Transect):	62°	
Photo #s	3062 - 3065	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	46%	1.06	
2	43%	1.05	
3	36%	1.01	
4	54%	1.10	
5	55%	1.11	
6	41%	1.04	
7	54%	1.11	
8	56%	1.11	
9	56%	1.12	
10	48%	1.08	
11	51%	1.09	
12	48%	1.07	
13	38%	1.02	
14	60%	1.13	
15	49%	1.08	
16	45%	1.06	
17	51%	1.09	
18	64%	1.15	
19	64%	1.15	
20	50%	1.09	
21	71%	1.08	
22	40%	1.03	
23	45%	1.06	
24	49%	1.08	
25	85%	1.24	
26	75%	1.20	
27	84%	1.24	
28	69%	1.17	
29	66%	1.16	
30	61%	1.14	
31	76%	1.21	
32	75%	1.20	
33	86%	1.25	
34	97%	1.29	
35	85%	1.24	
36	95%	1.28	
37	85%	1.25	
38	98%	1.29	
39	86%	1.25	

Date:	Monday, July 05, 2010	Summer Field Research
Location:	Marlborough Forest Wetland Comple	End of Bear Trail
Weather:	Sunny, 34C high, 19C low; very light winds (no rain the previous 2 days)	
Description:	Same	
Azimuth (Bearing of Transect):	Same	
Photo #s	3727 - 3730	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	25%	0.95	
2	28%	0.97	
3	48%	1.08	
4	47%	1.07	
5	45%	1.06	
6	51%	1.09	
7	56%	1.12	
8	34%	1.00	
9	34%	1.00	
10	48%	1.08	
11	34%	1.00	
12	46%	1.06	
13	43%	1.05	
14	21%	0.92	
15	56%	1.11	
16	47%	1.07	
17	50%	1.08	
18	31%	0.98	
19	23%	0.94	
20	46%	1.06	
21	43%	1.05	
22	50%	1.09	
23	43%	1.05	
24	63%	1.15	
25	52%	1.10	
26	55%	1.11	
27	51%	1.09	
28	38%	1.02	
29	48%	1.08	
30	59%	1.13	
31	58%	1.12	
32	52%	1.10	
33	66%	1.16	
34	63%	1.15	
35	55%	1.11	
36	56%	1.12	
37	57%	1.12	
38	59%	1.13	
39	65%	1.16	



40	73%	1.19
41	85%	1.24
42	99%	1.30
43	106%	1.33
44	110%	1.84
45		
46		
47		
48		

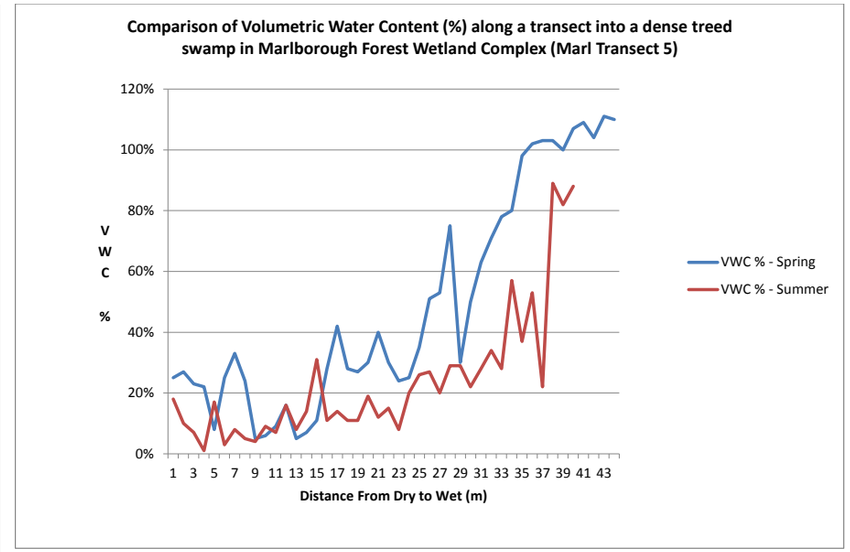
40	77%	1.21
41	92%	1.27
42	86%	1.25
43	86%	1.25
44	82%	1.23
45	77%	1.21
46	95%	1.28
47	101%	1.31
48		

Date:	Monday, May 10, 2010	Spring Field Research
Location:	Marlborough Forest Wetland Complex	Hoys Hunting Camp Trail
Weather:	Sunny, 11C High, -1 Low; light winds (rain and/or snow the three previous days)	
Description:	Smallish open water, bush marsh with grasses, bushes and saplings surrounded by very thick dense cedar forest/ some dead cedars on the edges ringing the area	
Azimuth (Bearing of Transect):	345°	
Photo #s	3068-3071	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	25%	0.95	
2	27%	0.96	
3	23%	0.94	
4	22%	0.93	
5	8%	0.83	
6	25%	0.95	
7	33%	1.00	
8	24%	0.94	
9	5%	0.81	
10	6%	0.82	
11	9%	0.84	
12	16%	0.89	
13	5%	0.81	
14	7%	0.82	
15	11%	0.85	
16	28%	0.97	
17	42%	1.04	
18	28%	0.97	
19	27%	0.96	
20	30%	0.98	
21	40%	1.03	
22	30%	0.98	
23	24%	0.94	
24	25%	0.95	
25	35%	1.00	
26	51%	1.09	
27	53%	1.10	
28	75%	1.20	
29	30%	0.98	
30	50%	1.09	
31	63%	1.15	
32	71%	1.18	
33	78%	1.22	
34	80%	1.22	
35	98%	1.30	
36	102%	1.31	
37	103%	1.31	
38	103%	1.32	
39	100%	1.30	
40	107%	1.33	

Date:	Monday, July 05, 2010	Summer Field Research
Location:	Marlborough Forest Wetland Complex	
Weather:	Sunny, 34C high, 19C low; very light winds (no rain the previous 2 days)	
Description:	Same	
Azimuth (Bearing of Transect):	Same	
Photo #s		

Point #	Volumetric Water Content (%)	Period	Description/Details
1	18%	0.91	
2	10%	0.85	
3	7%	0.83	
4	1%	0.77	
5	17%	0.90	
6	3%	0.80	
7	8%	0.83	
8	5%	0.81	
9	4%	0.80	
10	9%	0.84	
11	7%	0.83	
12	16%	0.89	
13	8%	0.83	
14	14%	0.88	
15	31%	0.98	
16	11%	0.86	
17	14%	0.88	
18	11%	0.85	
19	11%	0.85	
20	19%	0.91	
21	12%	0.86	
22	15%	0.88	
23	8%	0.84	
24	20%	0.92	
25	26%	0.95	
26	27%	0.96	
27	20%	0.92	
28	29%	0.97	
29	29%	0.97	
30	22%	0.93	
31	28%	0.97	
32	34%	1.00	
33	28%	0.97	
34	57%	1.12	
35	37%	1.02	
36	53%	1.10	
37	22%	0.93	
38	89%	1.26	No saturation zone of 100% or more
39	82%	1.23	
40	88%	1.26	



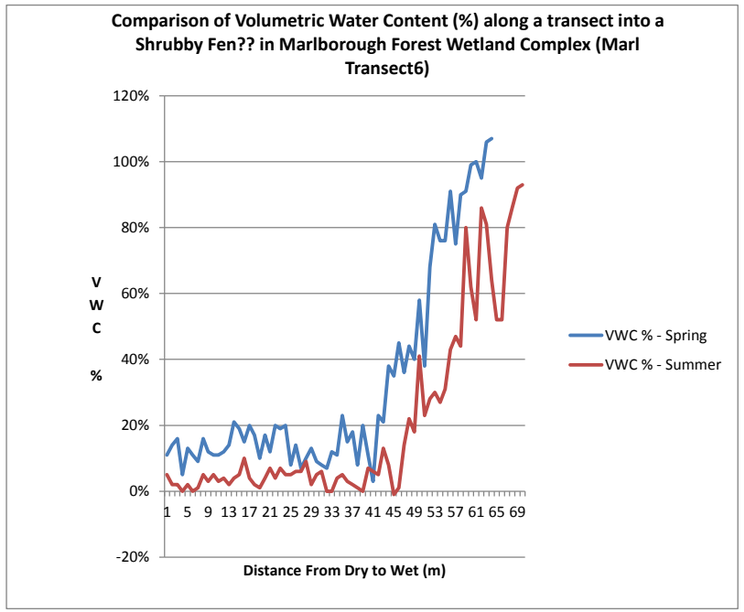
41	109%	1.34	41	
42	104%	1.32	42	
43	111%	1.35	43	
44	110%	1.34	44	
45			45	

Date:		Spring Field Research
Location:	Marlborough Forest Wetland Complex	Trail to Hoy's Hunting Camp
Weather:	Sunny, 11C High, -1 Low; light winds (rain and/or snow the three previous days)	
Description:	Cedar/spruce forest (dominant) some hardwood; very dense; slight slope (trail is on ridge) little understorey; sloping slightly down into shrubby/grassy area (seems like a shrubby fen??	
Azimuth (Bearing of Transect):	270°	
Photo #s	3072 - 3075	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	11%	0.85	
2	14%	0.88	
3	16%	0.89	
4	5%	0.81	
5	13%	0.87	
6	11%	0.86	
7	9%	0.84	
8	16%	0.89	
9	12%	0.86	
10	11%	0.85	
11	11%	0.85	
12	12%	0.86	
13	14%	0.88	
14	21%	0.92	
15	19%	0.91	
16	15%	0.88	
17	20%	0.92	
18	17%	0.89	
19	10%	0.85	
20	17%	0.90	
21	12%	0.87	
22	20%	0.91	
23	19%	0.91	
24	20%	0.91	
25	8%	0.83	
26	14%	0.88	
27	7%	0.83	
28	10%	0.85	
29	13%	0.87	
30	9%	0.84	
31	8%	0.83	
32	7%	0.83	
33	12%	0.86	
34	11%	0.86	
35	23%	0.94	

Date:	Tuesday, July 06, 2010	Summer Field Research
Location:	Marlborough Forest Wetland Complex	
Weather:	Sunny, 34C high, 19C low; very light winds (no rain the previous 2 days)	
Description:	Same	
Azimuth (Bearing of Transect):	Same	
Photo #s	3731 - 3736	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	5%	0.81	
2	2%	0.78	
3	2%	0.78	
4	0%	0.77	
5	2%	0.78	
6	0%	0.77	
7	1%	0.78	
8	5%	0.81	
9	3%	0.80	
10	5%	0.81	
11	3%	0.79	
12	4%	0.80	
13	2%	0.78	
14	4%	0.80	
15	5%	0.81	
16	10%	0.85	
17	4%	0.80	
18	2%	0.79	
19	1%	0.79	
20	4%	0.80	
21	7%	0.82	
22	4%	0.80	
23	7%	0.83	
24	5%	0.81	
25	5%	0.81	
26	6%	0.81	
27	6%	0.82	
28	9%	0.84	
29	2%	0.78	
30	5%	0.81	
31	6%	0.82	
32	0%	0.77	
33	0%	0.77	
34	4%	0.80	
35	5%	0.81	



36	15%	0.89
37	18%	0.90
38	8%	0.83
39	20%	0.92
40	11%	0.85
41	3%	0.79
42	23%	0.93
43	21%	0.92
44	38%	1.02
45	35%	1.01
46	45%	1.06
47	36%	1.01
48	44%	1.05
49	40%	1.03
50	58%	1.12
	38%	1.01
	68%	1.17
	81%	1.23
	76%	1.20
	76%	1.20
	91%	1.27
	75%	1.20
	90%	1.27
	91%	1.27
	99%	1.30
	100%	1.30
	95%	1.29
	106%	1.33
	107%	1.33

36	3%	0.79
37	2%	0.79
38	1%	0.77
39	0%	0.77
40	7%	0.83
41	6%	0.82
42	5%	0.81
43	13%	0.87
44	8%	0.83
45	-1%	0.76
46	1%	0.78
47	14%	0.88
48	22%	0.93
49	18%	0.91
50	41%	1.04
51	23%	0.94
52	28%	0.97
53	30%	0.98
	27%	0.96
	31%	0.99
	43%	1.05
	47%	1.07
	44%	1.06
	80%	1.22
	62%	1.15
	52%	1.10
	86%	1.25
	81%	1.23
	64%	1.15
	52%	1.09
	52%	1.10
	80%	1.23
	86%	1.25
	92%	1.27
	93%	1.28

Date: Tuesday, May 11, 2010 Spring Field Research
Location: Marlborough Forest Wetland Complex To small fen

Weather: Sunny, 16C high, 0C low, very light wind

Description: From a pure hardwood stand (Maple/Ironwood/Black Cherry) with very little understorey; sloping down into a very dense treed cedar/spruce swamp (snow 2 days before)

Azimuth (Bearing of Transect): 270°

Photo #s 3100-3102

Point #	Volumetric Water Content (%)	Period	Description/Details
1	33%	1.00	
2	24%	0.94	
3	26%	0.96	
4	32%	0.99	
5	25%	0.95	
6	24%	0.94	
7	32%	0.99	
8	31%	0.98	
9	37%	1.02	
10	38%	1.02	
11	47%	1.07	
12	42%	1.04	
13	26%	0.95	
14	35%	1.01	
15	44%	1.06	
16	42%	1.04	
17	18%	0.90	
18	22%	0.93	
19	24%	0.94	
20	19%	0.91	
21	15%	0.88	
22	26%	0.95	
23	19%	0.91	
24	30%	0.98	
25	27%	0.96	
26	31%	0.98	
27	21%	0.93	
28	35%	1.01	
29	51%	1.09	
30	39%	1.03	
31	45%	1.06	
32	72%	1.19	
33	59%	1.18	
34	93%	1.28	
35	101%	1.31	

Date: Monday, June 28, 2010 Summer Field Research
Location: Marlborough Forest Wetland Complex

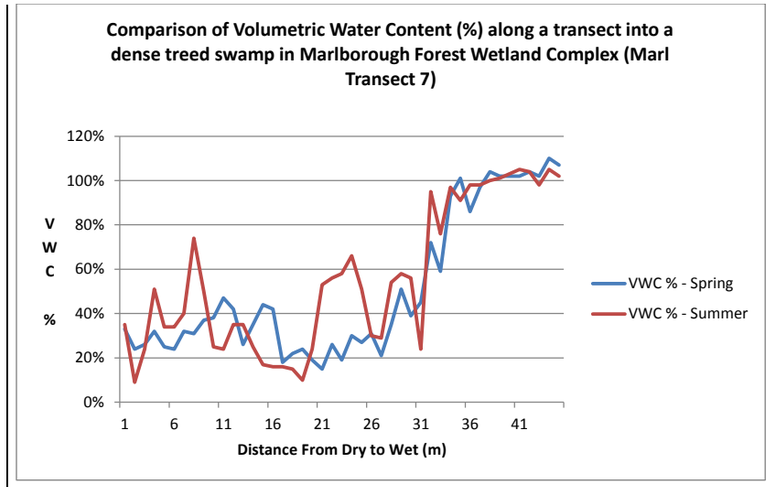
Weather: **Rainy (1.0cm)**/sunny; 29C high; low of 18C; light wind (rain for 2 previous days)

Description: Same

Azimuth (Bearing of Transect): Same

Photo #s 3647 - 3649

Point #	Volumetric Water Content (%)	Period	Description/Details
1	35%	1.01	
2	9%	0.84	
3	24%	0.94	
4	51%	1.09	
5	34%	1.00	
6	34%	1.00	
7	40%	1.03	
8	74%	1.20	
9	50%	1.09	
10	25%	0.95	
11	24%	0.94	
12	35%	1.01	
13	35%	1.01	
14	25%	0.95	
15	17%	0.90	
16	16%	0.89	
17	16%	0.89	
18	15%	0.88	
19	10%	0.85	
20	24%	0.94	
21	53%	1.10	
22	56%	1.11	
23	58%	1.13	
24	66%	1.16	
25	51%	1.09	
26	30%	0.98	
27	29%	0.97	
28	54%	1.15	
29	58%	1.17	
30	56%	1.11	
31	24%	0.94	
32	95%	1.28	
33	76%	1.20	
34	97%	1.29	
35	91%	1.27	



36	86%	1.25
37	97%	1.29
38	104%	1.32
39	102%	1.31
40	102%	1.31
41	102%	1.31
42	104%	1.32
43	102%	1.31
44	110%	1.34
45	107%	1.33
46		

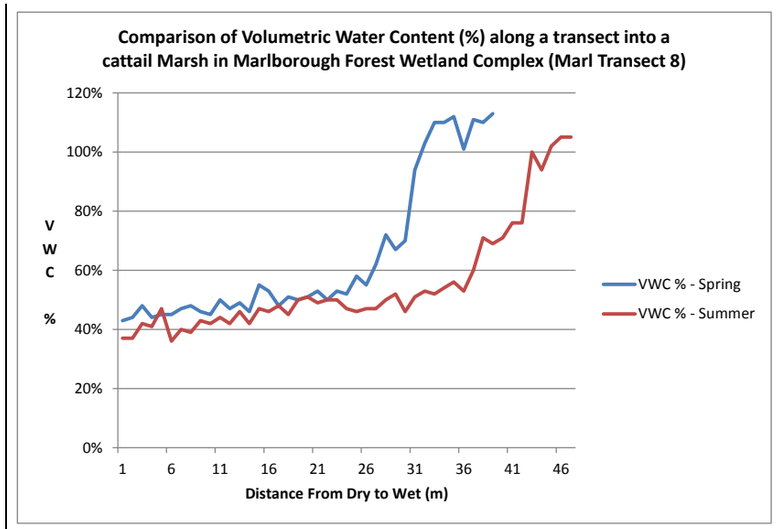
36	98%	1.29
37	98%	1.29
38	100%	1.30
39	101%	1.31
40	103%	1.32
41	105%	1.32
42	104%	1.30
43	98%	1.30
44	105%	1.32
45	102%	1.31
46		

Date:	Wednesday, May 12, 2010	Spring Field Research
Location:	Marlborough Forest Wetland Complex	Out of Gate E4
Weather:	Sunny; 15C High, 4C Low	
Description:	Open field into open water marsh (cattail) surrounded by some bushes; fairly sparsely treed; some mixed deciduous forest stands	
Azimuth (Bearing of Transect):	155°	
Photo #s	3103 - 3106	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	43%	1.05	
2	44%	1.05	
3	48%	1.08	
4	44%	1.06	
5	45%	1.06	
6	45%	1.06	
7	47%	1.07	
8	48%	1.08	
9	46%	1.07	
10	45%	1.06	
11	50%	1.08	
12	47%	1.07	
13	49%	1.08	
14	46%	1.06	
15	55%	1.11	
16	53%	1.10	
17	48%	1.08	
18	51%	1.09	
19	50%	1.08	
20	51%	1.09	
21	53%	1.10	
22	50%	1.09	
23	53%	1.10	
24	52%	1.10	
25	58%	1.12	
26	55%	1.11	
27	62%	1.14	
28	72%	1.19	
29	67%	1.17	
30	70%	1.18	
31	94%	1.28	
32	103%	1.31	
33	110%	1.34	
34	110%	1.34	
35	112%	1.35	
36	101%	1.31	
37	111%	1.35	
38	110%	1.34	

Date:	Tuesday, June 29, 2010	Summer Field Research
Location:	Marlborough Forest Wetland Complex	
Weather:	Rainy; (19 High; 13Low) (Rain for the previous 3 days)	
Description:	Same	
Azimuth (Bearing of Transect):	Same	
Photo #s	3688-89	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	37%	1.02	
2	37%	1.02	
3	42%	1.04	
4	41%	1.04	
5	47%	1.07	
6	36%	1.01	
7	40%	1.03	
8	39%	1.03	
9	43%	1.05	
10	42%	1.04	
11	44%	1.06	
12	42%	1.04	
13	46%	1.07	
14	42%	1.04	
15	47%	1.07	
16	46%	1.07	
17	48%	1.08	
18	45%	1.06	
19	50%	1.09	
20	51%	1.09	
21	49%	1.08	
22	50%	1.09	
23	50%	1.08	
24	47%	1.07	
25	46%	1.07	
26	47%	1.07	
27	47%	1.07	
28	50%	1.08	
29	52%	1.09	
30	46%	1.06	
31	51%	1.09	
32	53%	1.10	
33	52%	1.10	
34	54%	1.11	
35	56%	1.12	
36	53%	1.10	
37	60%	1.14	
38	71%	1.18	



39	113%	1.35
40		
41		
42		
43		
44		
45		
46		
47		
48		

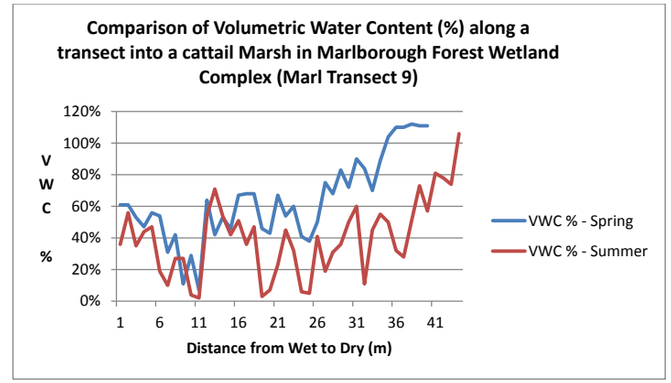
39	69%	1.18
40	71%	1.18
41	76%	1.21
42	76%	1.20
43	100%	1.30
44	94%	1.28
45	102%	1.31
46	105%	1.32
47	105%	1.32
48		

Date:	Wednesday, May 12, 2010	Spring Field Research
Location:	Marlborough Forest Wetland Complex	Going north from M8
Weather:	Sunny; 15C High, 4C Low	
Description:	From dense cedar forest into open water; cedar/hardwood (poplar/birch/maple) swamp;some tamarack/spruce; some grasses; dead trees	
Azimuth (Bearing of Transect):	82°	
Photo #s	3107 - 3110	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	61%	1.04	
2	61%	1.04	
3	53%	1.05	
4	47%	1.07	
5	56%	1.16	
6	54%	1.11	
7	31%	0.99	
8	42%	1.05	
9	11%	0.85	
10	29%	0.97	
11	7%	0.82	
12	64%	1.15	
13	42%	1.04	
14	53%	1.10	
15	46%	1.06	
16	67%	1.17	
17	68%	1.17	
18	68%	1.17	
19	46%	1.07	
20	43%	1.05	
21	67%	1.17	
22	54%	1.11	
23	60%	1.13	
24	41%	1.04	
25	38%	1.03	
26	50%	1.09	
27	75%	1.20	
28	68%	1.17	
29	83%	1.24	
30	72%	1.19	
31	90%	1.27	
32	84%	1.24	
33	70%	1.18	
34	89%	1.26	
35	104%	1.32	
36	110%	1.34	

Date:	Tuesday, June 29, 2010	Summer Field Research
Location:	Marlborough Forest Wetland Complex	
Weather:	Rainy; (19 High; 13Low) (Rain for the previous 3 days)	
Description:	Same	
Azimuth (Bearing of Transect):	Same	
Photo #s	3694 - 3696	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	36%	1.01	
2	56%	1.12	
3	35%	1.01	
4	44%	1.05	
5	47%	1.07	
6	19%	0.91	
7	10%	0.85	
8	27%	0.96	
9	27%	0.96	
10	4%	0.80	
11	2%	0.79	
12	54%	1.11	
13	71%	1.18	
14	54%	1.11	
15	42%	1.04	
16	51%	1.09	
17	36%	1.01	
18	47%	1.07	
19	3%	0.79	
20	7%	0.83	
21	23%	0.93	
22	45%	1.06	
23	32%	0.99	
24	6%	0.82	
25	5%	0.81	
26	41%	1.04	
27	19%	0.91	
28	31%	0.98	
29	36%	1.01	
30	50%	1.08	
31	60%	1.13	
32	11%	0.86	
33	45%	1.06	
34	55%	1.16	
35	50%	1.08	
36	32%	0.99	



37	110%	1.34
38	112%	1.35
39	111%	1.35
40	111%	1.35
41		
42		
43		
44		
45		

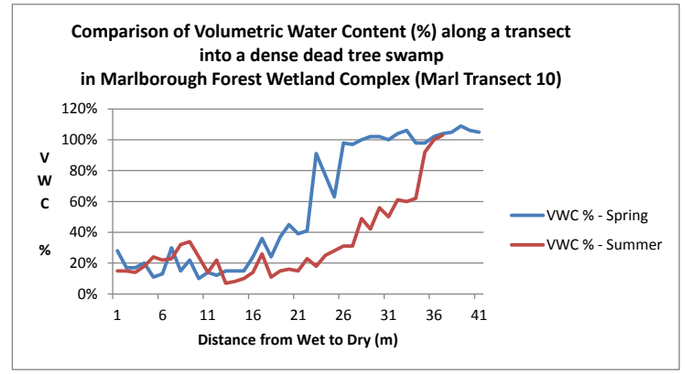
37	28%	0.96
38	51%	1.14
39	73%	1.19
40	57%	1.12
41	81%	1.23
42	78%	1.22
43	74%	1.20
44	106%	
45		

Date:	Wednesday, May 12, 2010	Spring Field Research
Location:	Marlborough Forest Wetland Complex	
Weather:	Sunny (High 15C, Low 4C)	
Description:	Cedar & Spruce; peat swamp very dense grades from 100% deciduous forest stand tall old growth Maples/Poplars/Birch into swamp (which leads to fen eventually)	
Azimuth (Bearing of Transect):	250°	
Photo #s	3111-3114	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	28%	0.97	
2	17%	0.90	
3	17%	0.87	
4	20%	0.91	
5	11%	0.86	
6	13%	0.87	
7	30%	0.98	
8	15%	0.88	
9	22%	0.93	
10	10%	0.85	
11	14%	0.88	
12	12%	0.86	
13	15%	0.89	
14	15%	0.87	
15	15%	0.89	
16	24%	0.94	
17	36%	1.01	
18	24%	0.94	
19	37%	1.02	
20	45%	1.06	
21	39%	1.03	
22	41%	1.04	
23	91%	1.27	
24	77%	1.21	
25	63%	1.15	
26	98%	1.29	
27	97%	1.29	
28	100%	1.31	
29	102%	1.31	
30	102%	1.31	
31	100%	1.30	
32	104%	1.32	
33	106%	1.33	
34	98%	1.30	
35	98%	1.29	
36	102%	1.31	
37	104%	1.32	

Date:	Tuesday, June 29, 2010	Summer Field Research
Location:	Marlborough Forest Wetland Complex	
Weather:	Rainy; (19 High; 13Low) (Rain for the previous 3 days)	
Description:	Start was Vegetation Plot 15 and End of Transect was Vegetation Plot 16	
Azimuth (Bearing of Transect):		
Photo #s	3670?	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	15%	0.89	
2	15%	0.89	
3	14%	0.87	
4	18%	0.90	
5	24%	0.94	
6	22%	0.93	
7	23%	0.94	
8	32%	0.99	
9	34%	1.00	
10	24%	0.94	
11	14%	0.88	
12	22%	0.83	
13	7%	0.82	
14	8%	0.84	
15	10%	0.85	
16	14%	0.88	
17	26%	0.95	
18	11%	0.86	
19	15%	0.89	
20	16%	0.89	
21	15%	0.89	
22	23%	0.94	
23	18%	0.90	
24	25%	0.95	
25	28%	0.97	
26	31%	0.98	
27	31%	0.98	
28	49%	1.08	
29	42%	1.02	
30	56%	1.11	
31	50%	1.09	
32	61%	1.14	
33	60%	1.13	
34	62%	1.15	
35	92%	1.27	
36	100%	1.30	
37	103%	1.31	



38	105%	1.32	38	
39	109%	1.40	39	
40	106%	1.30	40	
41	105%	1.33	41	

Date: Wednesday, May 12, 2010 Spring Field Research
Location: Marlborough Forest Wetland Complex

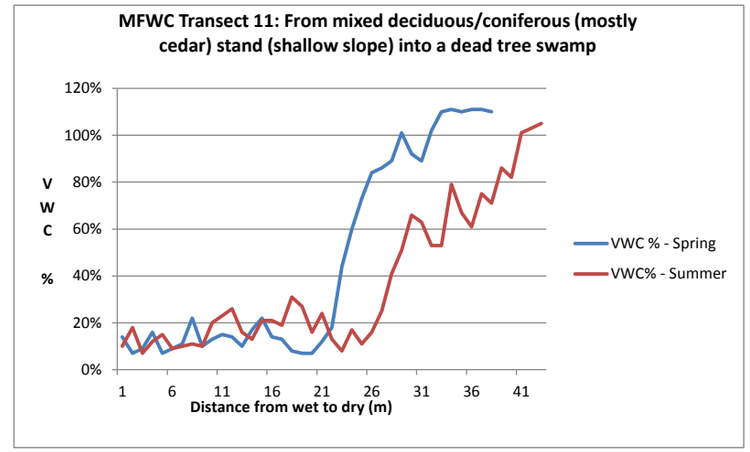
Weather: Sunny (High 15C, Low 4C)
Description: Mixed deciduous/coniferous mostly cedar forest grading into mostly dead tree swamp surrounded by bushes and with some open water
Azimuth (Bearing of Transect): 260°
Photo #s 3117-3119

Point #	Volumetric Water Content (%)	Period	Description/Details
1	14%	0.87	
2	7%	0.83	
3	9%	0.84	
4	16%	0.89	
5	7%	0.82	
6	9%	0.84	
7	11%	0.85	
8	22%	0.93	
9	10%	0.85	
10	13%	0.87	
11	15%	0.88	
12	14%	0.88	
13	10%	0.85	
14	17%	0.90	
15	22%	0.93	
16	14%	0.88	
17	13%	0.87	
18	8%	0.83	
19	7%	0.83	
20	7%	0.82	
21	12%	0.86	
22	18%	0.90	
23	44%	1.05	
24	60%	1.14	
25	73%	1.19	
26	84%	1.24	
27	86%	1.25	
28	89%	1.26	
29	101%	1.31	
30	92%	1.27	
31	89%	1.26	
32	102%	1.31	
33	110%	1.34	
34	111%	1.34	
35	110%	1.34	
36	111%	1.34	
37	111%	1.34	

Date: Tuesday, June 29, 2010 Summer Field Research
Location: Marlborough Forest Wetland Complex
Weather: Rainy; (19 High; 13Low) (Rain for the previous 3 days)

Description:
Azimuth (Bearing of Transect):
Photo #s

Point #	Volumetric Water Content (%)	Period	Description/Details
1	10%	0.85	
2	18%	0.90	
3	7%	0.82	
4	12%	0.86	
5	15%	0.89	
6	9%	0.84	
7	10%	0.85	
8	11%	0.85	
9	10%	0.85	
10	20%	0.92	
11	23%	0.94	
12	26%	0.95	
13	16%	0.89	
14	13%	0.87	
15	21%	0.92	
16	21%	0.92	
17	19%	0.91	
18	31%	0.98	
19	27%	0.96	
20	16%	0.89	
21	24%	0.94	
22	13%	0.87	
23	8%	0.83	
24	17%	0.90	
25	11%	0.85	
26	16%	0.89	
27	25%	0.95	
28	41%	1.04	
29	51%	1.09	
30	66%	1.16	
31	63%	1.15	
32	53%	1.10	
33	53%	1.10	
34	79%	1.22	
35	67%	1.17	
36	61%	1.14	
37	75%	1.20	



38	110%	1.34	38	71%	1.19
39			39	86%	1.25
40			40	82%	1.23
41			41	101%	1.21
42			42	103%	1.31
43			43	105%	1.32

Date: Wednesday, May 12, 2010 Spring Field Research
Location: Marlborough Forest Wetland Complex

Weather: Sunny (High 15C, Low 4C)

Description: Huge cattail marsh either side of E5 trail; gradient is from cedar forest with some deciduous (poplar/birch); sloping down into marsh with distinct grass/shrub boundary at marsh edge (with some dead standing trees)
Azimuth (Bearing of Transect): 160°
Photo #s 3120-3124

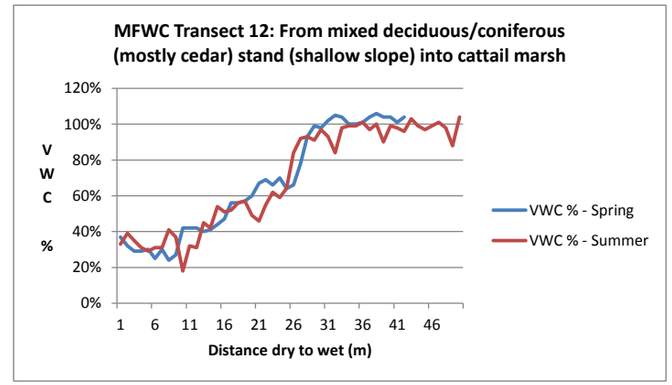
Point #	Volumetric Water Content (%)	Period	Description/Details
1	37%	1.02	
2	32%	0.99	
3	29%	0.97	
4	29%	0.97	
5	30%	0.98	
6	25%	0.95	
7	30%	0.98	
8	24%	0.94	
9	27%	0.96	
10	42%	1.05	
11	42%	1.05	
12	42%	1.05	
13	40%	1.03	
14	41%	1.04	
15	44%	1.06	
16	47%	1.07	
17	56%	1.11	
18	56%	1.11	
19	57%	1.12	
20	60%	1.13	
21	67%	1.17	
22	69%	1.18	
23	66%	1.16	
24	70%	1.18	
25	64%	1.15	
26	66%	1.16	
27	78%	1.21	
28	93%	1.28	
29	99%	1.30	
30	98%	1.30	
31	102%	1.31	
32	105%	1.32	
33	104%	1.32	
34	100%	1.30	
35	100%	1.30	

Date: Tuesday, June 29, 2010 Summer Field Research
Location: Marlborough Forest Wetland Complex

Weather: Rainy; (19 High; 13Low) (Rain for the previous 3 days)

Description:
Azimuth (Bearing of Transect):
Photo #s

Point #	Volumetric Water Content (%)	Period	Description/Details
1	33%	0.99	
2	39%	1.03	
3	35%	1.01	
4	31%	0.99	
5	29%	0.97	
6	31%	0.98	
7	31%	0.98	
8	41%	1.04	
9	37%	1.02	
10	18%	0.90	
11	32%	0.99	
12	31%	0.98	
13	45%	1.06	
14	42%	1.05	
15	54%	1.10	
16	51%	1.09	
17	52%	1.10	
18	56%	1.11	
19	57%	1.12	
20	49%	1.08	
21	46%	1.07	
22	55%	1.11	
23	62%	1.15	
24	59%	1.13	
25	64%	1.15	
26	84%	1.24	
27	92%	1.27	
28	93%	1.28	
29	91%	1.27	
30	97%	1.29	
31	93%	1.28	
32	84%	1.24	
33	98%	1.30	
34	99%	1.30	
35	99%	1.20	



36	101%	1.31
37	104%	1.32
38	106%	1.33
39	104%	1.32
40	104%	1.32
41	101%	1.31
42	104%	1.32
43		
44		
45		
46		
47		
48		
49		
50		

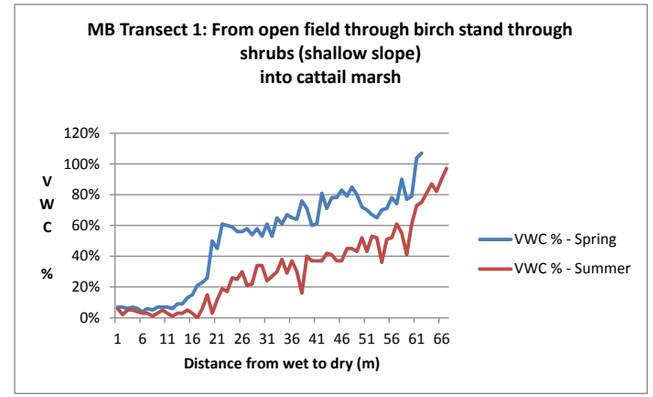
36	101%	1.31
37	97%	1.27
38	100%	1.30
39	90%	1.27
40	99%	1.30
41	98%	1.30
42	96%	1.29
43	103%	1.32
44	99%	1.30
45	97%	1.29
46	99%	1.30
47	101%	1.31
48	98%	1.30
49	88%	1.25
50	104%	1.32

Date:	Tuesday, May 04, 2010	Spring Field Research
Location:	Mer Bleue	
Weather:	Sunny (but rain occurred pre-visit) High 21C; Low 11C; Rain the day before	
Description:	Near EH (Elyn Humphrey's) site (far left end (west)); Open field with raspberry shrubs grading into birch tree upland; grading into shrubby shoreline; grading into cattail marsh that eventually grades into bog	
Azimuth (Bearing of Transect):	5°	
Photo #s	2884-2886	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	7%	0.83	
2	7%	0.83	
3	6%	0.82	
4	7%	0.82	
5	6%	0.82	
6	4%	0.80	
7	6%	0.81	
8	5%	0.81	
9	7%	0.83	
10	7%	0.83	
11	7%	0.83	
12	6%	0.82	
13	9%	0.84	
14	9%	0.84	
15	13%	0.87	
16	15%	0.88	
17	21%	0.92	
18	23%	0.94	
19	26%	0.96	
20	50%	1.08	
21	45%	1.06	
22	61%	1.14	
23	60%	1.14	
24	59%	1.13	
25	56%	1.11	
26	56%	1.11	
27	58%	1.12	
28	54%	1.11	
29	58%	1.12	
30	53%	1.10	
31	61%	1.14	
32	53%	1.10	
33	65%	1.16	
34	61%	1.14	
35	67%	1.17	

Date:	Tuesday, July 20, 2010	Summer Field Research
Location:	Mer Bleue	
Weather:	Sunny (fog in morning) High 28C; Low 16C; Rain the Previous 4 days)	
Description:	Open (lots of herbs though); into birch into shrubs; into marsh (Start of transect is VP 113; end of Transect is VP 114; mid transect is VP 115)	
Azimuth (Bearing of Transect):	5°	
Photo #s	3928-3932	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	6%	0.82	
2	2%	0.79	
3	5%	0.81	
4	5%	0.81	
5	4%	0.80	
6	3%	0.80	
7	3%	0.79	
8	1%	0.78	
9	3%	0.79	
10	5%	0.81	
11	3%	0.79	
12	1%	0.77	
13	3%	0.80	
14	3%	0.80	
15	5%	0.81	
16	3%	0.79	
17	0%	0.77	
18	6%	0.81	
19	15%	0.88	
20	3%	0.80	
21	12%	0.86	
22	19%	0.91	
23	17%	0.85	
24	26%	0.95	
25	25%	0.95	
26	30%	0.98	
27	21%	0.91	
28	22%	0.93	
29	34%	1.00	
30	34%	1.00	
31	24%	0.94	
32	27%	0.97	
33	30%	0.98	
34	38%	1.02	
35	29%	0.97	

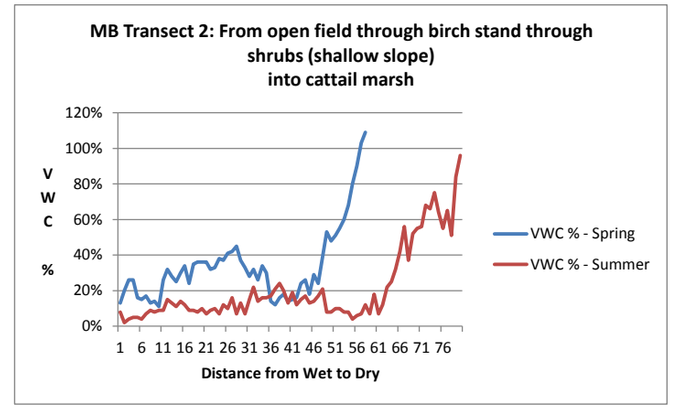


36	65%	1.16
37	64%	1.15
38	76%	1.21
39	71%	1.19
40	60%	1.13
41	61%	1.14
42	81%	1.23
43	71%	1.19
44	78%	1.22
45	78%	1.21
46	83%	1.23
47	79%	1.02
48	85%	1.24
49	80%	1.25
50	72%	1.19
51	70%	1.18
52	67%	1.18
53	65%	1.16
54	70%	1.18
55	71%	1.18
56	78%	1.22
57	74%	1.20
58	90%	1.26
59	77%	1.21
60	79%	1.22
61	104%	1.32
62	107%	1.33

36	37%	1.02
37	30%	0.98
38	16%	0.89
39	40%	1.04
40	37%	1.02
41	37%	1.02
42	37%	1.02
43	42%	1.05
44	41%	1.04
45	37%	1.02
46	37%	1.02
47	45%	1.06
48	45%	1.06
49	43%	1.05
50	52%	1.09
51	43%	1.05
52	53%	1.10
53	52%	1.10
	36%	1.01
	51%	1.09
	52%	1.09
	61%	1.14
	55%	1.11
	41%	1.04
	61%	1.14
	73%	1.19
	75%	1.20
	81%	1.23
	87%	1.25
	82%	1.22
	90%	1.26
	97%	1.29

Date:	Tuesday, May 04, 2010		Spring Field Research
Location:	Mer Bleue		
Weather:	Sunny (but rain occurred pre-visit) High 21C; Low 11C; Rain the day before		
Description:	Open grass into birch; east of MB1; more trees and shrubs in birch stand and shrubbier along the shoreline		
Azimuth (Bearing of Transect):	30°		
Photo #s	2887-2890		
Point #	Volumetric Water Content (%)	Period	Description/Details
1	13%	0.87	
2	20%	0.92	
3	26%	0.96	
4	26%	0.95	
5	16%	0.89	
6	15%	0.88	
7	17%	0.90	
8	13%	0.87	
9	14%	0.87	
10	11%	0.86	
11	26%	0.96	
12	32%	0.99	
13	28%	0.97	
14	25%	0.95	
15	30%	0.98	
16	34%	1.00	
17	24%	0.94	
18	35%	1.01	
19	36%	1.01	
20	36%	1.01	
21	36%	1.01	
22	32%	0.99	
23	33%	1.00	
24	38%	1.02	
25	37%	1.02	
26	41%	1.04	
27	42%	1.05	
28	45%	1.06	
29	37%	1.02	
30	33%	1.00	
31	28%	0.97	
32	32%	0.99	
33	26%	0.95	
34	34%	1.00	
35	30%	0.98	
36	14%	0.88	
37	12%	0.86	

Date:	Tuesday, July 20, 2010		Summer Field Research
Location:	Mer Bleue		
Weather:	Sunny (fog in morning) High 28C; Low 16C; Rain the Previous 4 days)		
Description:	Open into birch into shrubs into marsh (Starts at VP 116; end pt is SMT15B)		
Azimuth (Bearing of Transect):	30°		
Photo #s	3928-3929		
Point #	Volumetric Water Content (%)	Period	Description/Details
1	8%	0.84	
2	2%	0.79	
3	4%	0.80	
4	5%	0.81	
5	5%	0.81	
6	4%	0.80	
7	7%	0.82	
8	9%	0.84	
9	8%	0.83	
10	9%	0.84	
11	9%	0.84	
12	15%	0.89	
13	13%	0.87	
14	11%	0.86	
15	14%	0.88	
16	12%	0.86	
17	9%	0.84	
18	9%	0.84	
19	8%	0.83	
20	10%	0.84	
21	7%	0.82	
22	9%	0.84	
23	10%	0.85	
24	7%	0.82	
25	12%	0.86	
26	10%	0.85	
27	16%	0.89	
28	7%	0.82	
29	13%	0.87	
30	7%	0.83	
31	15%	0.88	
32	22%	0.93	
33	14%	0.87	
34	16%	0.89	
35	16%	0.89	
36	17%	0.90	
37	21%	0.92	



38	16%	0.89
39	18%	0.91
40	14%	0.88
41	15%	0.88
42	16%	0.89
43	24%	0.94
44	26%	0.95
45	18%	0.90
46	29%	0.97
47	24%	0.94
48	39%	1.03
49	53%	1.10
50	48%	1.08
	51%	1.14
	55%	1.11
	60%	1.13
	68%	1.17
	80%	1.22
	90%	1.27
	103%	1.32
	109%	1.34

38	24%	0.94
39	20%	0.92
40	13%	0.32
41	19%	0.91
42	12%	0.86
43	15%	0.88
44	17%	0.90
45	13%	0.87
46	14%	0.88
47	17%	0.90
48	21%	0.92
49	8%	0.83
50	8%	0.83
51	10%	0.85
52	10%	0.85
53	8%	0.84
	8%	0.83
	4%	0.80
	6%	0.82
	7%	0.82
	12%	0.86
	7%	0.83
	18%	0.90
	7%	0.82
	12%	0.86
	22%	0.93
	25%	0.95
	32%	0.99
	42%	1.05
	56%	1.12
	37%	1.02
	52%	1.10
	55%	1.11
	56%	1.12
	68%	1.17
	66%	1.16
	75%	1.20
	64%	1.15
	55%	1.11
	65%	1.16
	51%	1.09
	84%	1.26
	96%	1.29

Date: Tuesday, May 04, 2010 Spring Field Research
Location: Mer Bleue

Weather: Sunny (but rain occurred pre-visit) High 21C; Low 11C; Rain the day before

Description: From grassy open field through birch forest; east of MB1 & MB2; more trees and shrubs in birch stand and less shrubbier than MB2 along the shoreline; depth of water in Marsh was .8m (along boardwalk to EH's research station)

Azimuth (Bearing of Transect): 355°

Photo #s 2891 - 2894

Point #	Volumetric Water Content (%)	Period	Description/Details
1	21%	0.92	
2	22%	0.93	
3	23%	0.93	
4	22%	0.93	
5	27%	0.96	
6	36%	0.96	
7	32%	0.99	
8	25%	0.95	
9	30%	0.98	
10	33%	0.99	
11	29%	0.97	
12	24%	0.94	
13	31%	0.98	
14	32%	0.99	
15	44%	1.06	
16	34%	1.00	
17	33%	0.99	
18	46%	1.07	
19	62%	1.14	
20	66%	1.16	
21	53%	1.10	
22	56%	1.12	
23	70%	1.18	
24	61%	1.14	
25	41%	1.04	
26	47%	1.07	
27	42%	1.05	
28	49%	1.08	
29	50%	1.09	
30	56%	1.11	
31	39%	1.03	
32	17%	0.90	
33	34%	1.00	

Date: Tuesday, July 20, 2010 Summer Field Research
Location: Mer Bleue

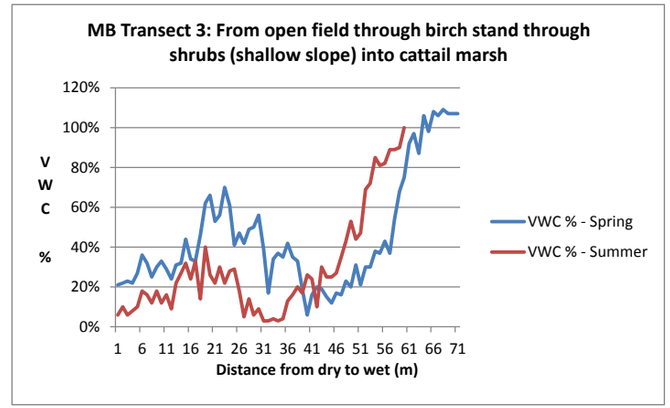
Weather: Sunny (fog in morning) High 28C; Low 16C; Rain the Previous 4 days)

Description: Open into birch stand into marsh along EH's boardwalk (Starts at SMT 16A; end pt is SMT16B)

Azimuth (Bearing of Transect): 355°

Photo #s

Point #	Volumetric Water Content (%)	Period	Description/Details
1	6%	0.82	
2	10%	0.84	
3	6%	0.82	
4	8%	0.83	
5	10%	0.85	
6	18%	0.91	
7	16%	0.89	
8	12%	0.86	
9	18%	0.90	
10	12%	0.86	
11	16%	0.89	
12	9%	0.84	
13	22%	0.93	
14	27%	0.93	
15	32%	0.99	
16	24%	0.94	
17	33%	1.00	
18	14%	0.88	
19	40%	1.03	
20	26%	0.96	
21	22%	0.93	
22	30%	0.98	
23	22%	0.93	
24	28%	0.96	
25	29%	0.97	
26	18%	0.90	
27	5%	0.81	
28	14%	0.87	
29	6%	0.82	
30	9%	0.84	
31	3%	0.79	
32	3%	0.79	
33	4%	0.80	



34	37%	1.02
35	35%	1.01
36	42%	1.04
37	35%	1.01
38	33%	0.99
39	19%	0.91
40	6%	0.82
41	16%	0.89
42	20%	0.91
43	19%	0.91
44	15%	0.88
45	12%	0.86
46	17%	0.90
47	16%	0.89
48	23%	0.93
49	20%	0.92
50	31%	0.99
	21%	0.92
	30%	0.98
	30%	0.98
	38%	1.02
	37%	1.02
	43%	1.05
	37%	1.02
	54%	1.11
	68%	1.17
	75%	1.20
	92%	1.17
	97%	1.27
	87%	1.25
	106%	1.33
	98%	1.30
	108%	1.33
	106%	1.33
	109%	1.34
	107%	1.33
	107%	1.33
	107%	1.33
	107%	1.33

34	3%	0.80
35	4%	0.80
36	13%	0.87
37	16%	0.89
38	20%	0.91
39	17%	0.90
40	26%	0.96
41	24%	0.94
42	10%	0.84
43	30%	0.98
44	25%	0.95
45	25%	0.95
46	27%	0.96
47	35%	1.01
48	43%	1.05
49	53%	1.10
50	44%	1.02
51	47%	1.07
52	69%	1.18
53	72%	1.19
	85%	1.25
	81%	1.23
	82%	1.23
	89%	1.26
	89%	1.26
	90%	1.26
	100%	1.31

Date: Tuesday, May 04, 2010 Spring Field Research
Location: Mer Bleue

Weather: Sunny (but rain occurred pre-visit) High 21C; Low 11C; Rain the day before

Description: To east of EH boardwalk; sandy soil open bare ground; slightly grassy in places with a single tree in the centre; transect moves on a > 20° angle through not too dense birch stand with shrubs;

Azimuth (Bearing of Transect): 15°

Photo #s 2895

Point #	Volumetric Water Content (%)	Period	Description/Details
1	5%	0.81	
2	5%	0.81	
3	4%	0.80	
4	5%	0.81	
5	3%	0.79	
6	3%	0.80	
7	3%	0.80	
8	4%	0.80	
9	4%	0.80	
10	4%	0.80	
11	3%	0.79	
12	3%	0.80	
13	2%	0.79	
14	3%	0.79	
15	1%	0.77	
16	3%	0.79	
17	2%	0.79	
18	5%	0.81	
19	7%	0.83	
20	2%	0.79	
21	9%	0.84	
22	9%	0.84	
23	17%	0.90	
24	20%	0.92	
25	32%	0.99	
26	35%	1.01	
27	47%	1.07	
28	67%	1.17	
29	66%	1.16	
30	70%	1.18	
31	77%	1.21	
32	95%	1.28	
33	102%	1.31	
34	104%	1.32	
35	97%	1.29	

Date: Tuesday, July 20, 2010 Summer Field Research
Location: Mer Bleue

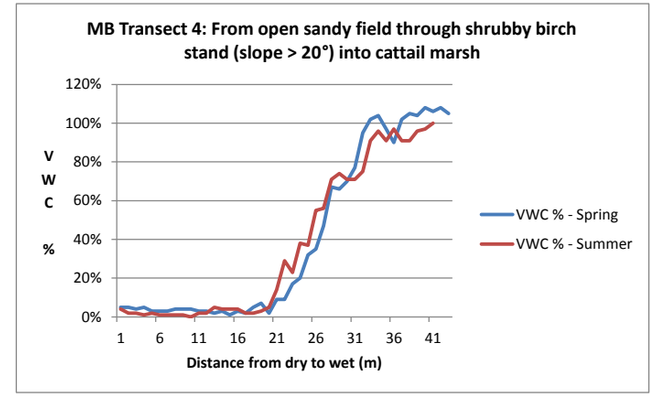
Weather: Sunny (fog in morning) High 28C; Low 16C; Rain the Previous 4 days)

Description: Starts in VP 126; and ends in VP 127

Azimuth (Bearing of Transect): 15°

Photo #s 3979-3986

Point #	Volumetric Water Content (%)	Period	Description/Details
1	4%	0.80	
2	2%	0.79	
3	2%	0.79	
4	1%	0.78	
5	2%	0.78	
6	1%	0.78	
7	1%	0.78	
8	1%	0.78	
9	1%	0.78	
10	0%	0.77	
11	2%	0.79	
12	2%	0.79	
13	5%	0.81	
14	4%	0.80	
15	4%	0.80	
16	4%	0.80	
17	2%	0.79	
18	2%	0.79	
19	3%	0.79	
20	5%	0.81	
21	14%	0.88	
22	29%	0.97	
23	23%	0.94	
24	38%	1.03	
25	37%	1.02	
26	55%	1.11	
27	56%	1.11	
28	71%	1.18	
29	74%	1.20	
30	71%	1.18	
31	71%	1.18	
32	75%	1.20	
33	91%	1.27	
34	96%	1.29	
35	91%	1.27	



36	90%	1.26
37	102%	1.31
38	105%	1.32
39	104%	1.32
40	108%	1.33
41	106%	1.33
42	108%	1.33
43	105%	1.32
44		

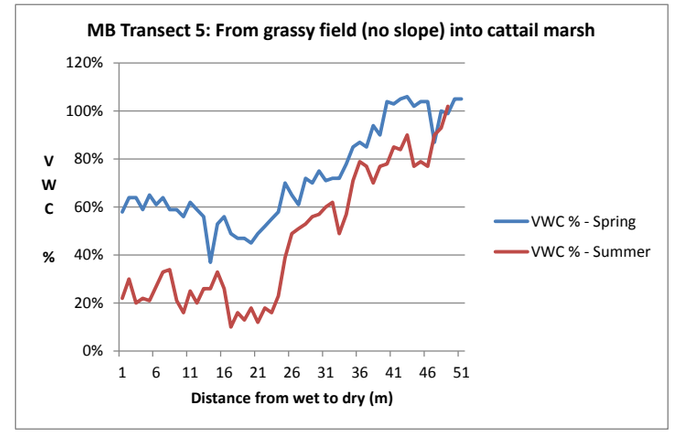
36	97%	1.29
37	91%	1.27
38	91%	1.27
39	96%	1.29
40	97%	1.30
41	100%	1.30
42		
43		
44		

Date: Tuesday, May 04, 2010 Spring Field Research
Location: Mer Bleue
Weather: Sunny (but rain occurred pre-visit) High 21C; Low 11C; Rain the day before
Description: South of EH site (southside of road); grassy field with slight slope into taller grasses grading into cattail marsh
Azimuth (Bearing of Transect): 355°
Photo #s 2901-2908

Point #	Volumetric Water Content (%)	Period	Description/Details
1	58%	1.12	
2	64%	1.15	
3	64%	1.15	
4	59%	1.13	
5	65%	1.16	
6	61%	1.14	
7	64%	1.15	
8	59%	1.13	
9	59%	1.13	
10	56%	1.11	
11	62%	1.15	
12	59%	1.13	
13	56%	1.12	
14	37%	1.02	
15	53%	1.10	
16	56%	1.12	
17	49%	1.08	
18	47%	1.07	
19	47%	1.07	
20	45%	1.06	
21	49%	1.08	
22	52%	1.10	
23	55%	1.11	
24	58%	1.12	
25	70%	1.18	
26	65%	1.16	
27	61%	1.14	
28	72%	1.19	
29	70%	1.18	
30	75%	1.20	
31	71%	1.19	
32	72%	1.19	
33	72%	1.19	
34	78%	1.21	
35	85%	1.24	

Date: Wednesday, July 21, 2010 Summer Field Research
Location: Mer Bleue - Off of Body Dump
Weather: Cloudy with rain, fog and a thunderstorm (High 25C, Low 17C) (Rained not the previous day but the four previous days)
Description: Starts in VP 128; ends in VP 129
Azimuth (Bearing of Transect): 355°
Photo #s 3990 - 3993

Point #	Volumetric Water Content (%)	Period	Description/Details
1	22%	0.93	
2	30%	0.98	
3	20%	0.92	
4	22%	0.93	
5	21%	0.92	
6	27%	0.96	
7	33%	0.99	
8	34%	1.00	
9	21%	0.92	
10	16%	0.89	
11	25%	0.95	
12	20%	0.92	
13	26%	0.96	
14	26%	0.95	
15	33%	0.99	
16	26%	0.96	
17	10%	0.85	
18	16%	0.89	
19	13%	0.87	
20	18%	0.90	
21	12%	0.86	
22	18%	0.90	
23	16%	0.89	
24	23%	0.94	
25	39%	1.03	
26	49%	1.08	
27	51%	1.09	
28	53%	1.10	
29	56%	1.12	
30	57%	1.12	
31	60%	1.13	
32	62%	1.14	
33	49%	1.08	
34	57%	1.12	
35	71%	1.18	



36	87%	1.25
37	85%	1.24
38	94%	1.28
39	90%	1.26
40	104%	1.32
41	103%	1.32
42	105%	1.32
43	106%	1.33
44	102%	1.33
45	104%	1.32
46	104%	1.32
47	87%	1.25
48	100%	1.31
49	99%	1.30
50	105%	1.32
	105%	1.32

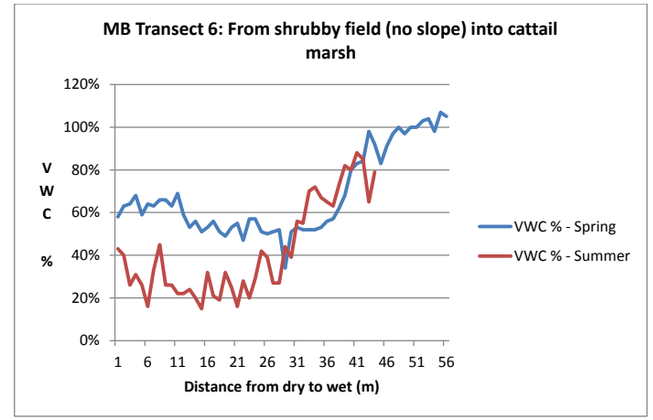
36	79%	1.22
37	77%	1.21
38	70%	1.18
39	77%	1.22
40	78%	1.21
41	85%	1.24
42	84%	1.24
43	90%	1.26
44	77%	1.20
45	79%	1.22
46	77%	1.21
47	90%	1.27
48	93%	1.28
49	102%	1.31
50		
51		
52		
53		

Date:	Tuesday, May 04, 2010	Spring Field Research
Location:	Mer Bleue - Off of Body Dump	
Weather:	Sunny (but rain occurred pre-visit) High 21C; Low 11C; Rain the day before	
Description:	South of EH Boardwalk; Shrubby Transect without any trees; 1m to taller shrubs that are >2m; grades into cattail marsh; very shallow slope (same marsh as MB5	
Azimuth (Bearing of Transect):	180°	
Photo #s	2909-2915	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	58%	1.12	
2	63%	1.15	
3	64%	1.15	
4	68%	1.17	
5	59%	1.13	
6	64%	1.15	
7	63%	1.15	
8	66%	1.16	
9	66%	1.16	
10	63%	1.15	
11	69%	1.18	
12	59%	1.13	
13	53%	1.10	
14	56%	1.11	
15	51%	1.09	
16	53%	1.10	
17	56%	1.11	
18	51%	1.09	
19	49%	1.08	
20	53%	1.10	
21	55%	1.11	
22	47%	1.07	
23	57%	1.12	
24	57%	1.12	
25	51%	1.09	
26	50%	1.09	
27	51%	1.09	
28	52%	1.09	
29	34%	1.00	
30	51%	1.09	
31	53%	1.10	
32	52%	1.10	
33	52%	1.09	
34	52%	1.09	
35	53%	1.10	

Date:	Wednesday, July 21, 2010	Summer Field Research
Location:	Mer Bleue	
Weather:	Cloudy with rain, fog and a thunderstorm (High 25C, Low 17C) (Rained not the previous day but the four previous days)	
Description:	Starts at VP 130 and ends VP 129	
Azimuth (Bearing of Transect):	180°	
Photo #s	3997-3998	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	43%	1.05	
2	40%	1.03	
3	26%	0.96	
4	31%	0.98	
5	26%	0.96	
6	16%	0.89	
7	33%	1.00	
8	45%	1.06	
9	26%	0.95	
10	26%	0.95	
11	22%	0.93	
12	22%	0.93	
13	24%	0.94	
14	20%	0.92	
15	15%	0.89	
16	32%	0.99	
17	21%	0.92	
18	19%	0.91	
19	32%	0.99	
20	25%	0.95	
21	16%	0.89	
22	28%	0.97	
23	20%	0.91	
24	29%	0.97	
25	42%	1.04	
26	39%	1.03	
27	27%	0.96	
28	27%	0.96	
29	44%	1.05	
30	39%	1.03	
31	56%	1.12	
32	55%	1.11	
33	70%	1.18	
34	72%	1.19	
35	67%	1.17	



36	56%	1.12
37	57%	1.12
38	62%	1.15
39	68%	1.17
40	80%	1.22
41	83%	1.24
42	84%	1.24
43	98%	1.30
44	92%	1.27
45	83%	1.23
46	91%	1.27
47	97%	1.29
48	100%	1.30
49	97%	1.29
50	100%	1.30
	100%	1.30
	103%	1.32
	104%	1.32
	98%	1.30
	107%	1.33
	105%	1.32

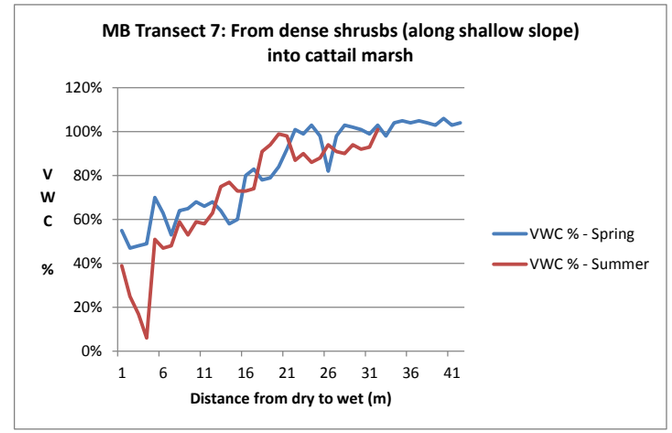
36	65%	1.16
37	63%	1.19
38	73%	1.19
39	82%	1.23
40	80%	1.22
41	88%	1.20
42	85%	1.24
43	65%	1.16
44	79%	1.19
45	Ended due to lightening	
46		
47		
48		
49		
50		
51		
52		
53		

Date:	Tuesday, May 04, 2010	Spring Field Research
Location:	Mer Bleue	
Weather:	Sunny (but rain occurred pre-visit) High 21C; Low 11C; Rain the day before	
Description:	Through bushes >2m dense with fern understory; lots of dense dead grasses; down off trail 53; some bushes 1m to 1.5 m; ends in cattail marsh	
Azimuth (Bearing of Transect):	180°	
Photo #s	2916	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	55%	1.11	
2	47%	1.07	
3	48%	1.07	
4	49%	1.08	
5	70%	1.18	
6	63%	1.15	
7	53%	1.10	
8	64%	1.15	
9	65%	1.16	
10	68%	1.17	
11	66%	1.16	
12	68%	1.17	
13	64%	1.15	
14	58%	1.13	
15	60%	1.13	
16	80%	1.22	
17	83%	1.24	
18	78%	1.22	
19	79%	1.22	
20	84%	1.24	
21	92%	1.29	
22	101%	1.30	
23	99%	1.30	
24	103%	1.32	
25	98%	1.30	
26	82%	1.23	
27	98%	1.30	
28	103%	1.32	
29	102%	1.31	
30	101%	1.31	
31	99%	1.30	
32	103%	1.31	
33	98%	1.30	
34	104%	1.32	

Date:	Wednesday, July 21, 2010	Summer Field Research
Location:	Mer Bleue - Trail 53	
Weather:	Cloudy with rain, fog and a thunderstorm (High 25C, Low 17C) (Rained not the previous day but the four previous days)	
Description:	Starts at VP 137 and ends at SMT17B (cattail marsh) (VP 133)	
Azimuth (Bearing of Transect):	180°	
Photo #s	4026-4028	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	39%	1.03	
2	25%	0.95	
3	17%	0.90	
4	6%	0.82	
5	51%	1.09	
6	47%	1.07	
7	48%	1.08	
8	59%	1.13	
9	53%	1.10	
10	59%	1.13	
11	58%	1.12	
12	63%	1.15	
13	75%	1.20	
14	77%	1.21	
15	73%	1.19	
16	73%	1.19	
17	74%	1.20	
18	91%	1.27	
19	94%	1.20	
20	99%	1.30	
21	98%	1.28	
22	87%	1.25	
23	90%	1.26	
24	86%	1.25	
25	88%	1.26	
26	94%	1.28	
27	91%	1.27	
28	90%	1.27	
29	94%	1.28	
30	92%	1.27	
31	93%	1.28	
32	101%	1.30	
33			
34			



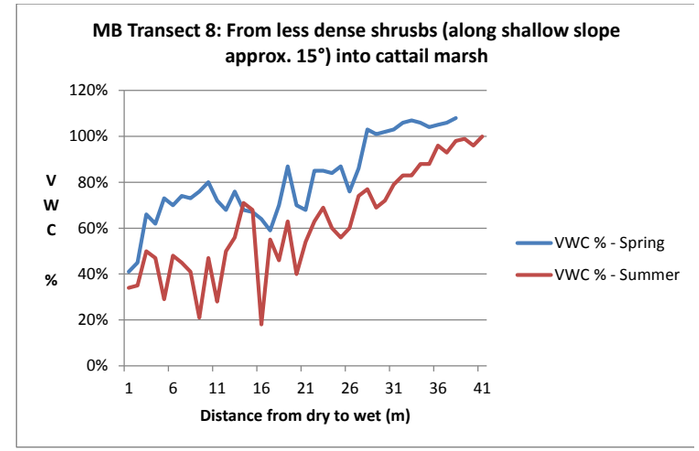
35	105%	1.32	35	
36	104%	1.32	36	
37	105%	1.32	37	
38	104%	1.32	38	
39	103%	1.31	39	
40	106%	1.33	40	
41	103%	1.32	41	
42	104%	1.32	42	

Date:	Tuesday, May 04, 2010	Spring Field Research
Location:	Mer Bleue	
Weather:	Sunny (but rain occurred pre-visit) High 21C; Low 11C; Rain the day before	
Description:	East of MB 7; more open area and less dense shrubs (but shrubs still present > 2m); at the beginning of transect is sedge area (grades into cattail marsh); slope is approx. 15°	
Azimuth (Bearing of Transect):	200°	
Photo #s	2920	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	41%	1.04	
2	45%	1.06	
3	66%	1.16	
4	62%	1.15	
5	73%	1.19	
6	70%	1.18	
7	74%	1.20	
8	73%	1.19	
9	76%	1.21	
10	80%	1.22	
11	72%	1.19	
12	68%	1.17	
13	76%	1.21	
14	68%	1.17	
15	67%	1.17	
16	64%	1.15	
17	59%	1.13	
18	70%	1.18	
19	87%	1.25	
20	70%	1.18	
21	68%	1.17	
22	85%	1.24	
23	85%	1.24	
24	84%	1.24	
25	87%	1.25	
26	76%	1.21	
27	86%	1.25	
28	103%	1.31	
29	101%	1.31	
30	102%	1.31	
31	103%	1.32	
32	106%	1.33	

Date:	Wednesday, July 21, 2010	Summer Field Research
Location:	Mer Bleue - Trail 53	
Weather:	Cloudy with rain, fog and a thunderstorm (High 25C, Low 17C) (Rained not the previous day but the four previous days)	
Description:	Starts in VP 135 and ends in the same cattail marsh at MB7 (VP 133)	
Azimuth (Bearing of Transect):	200°	
Photo #s	4015 - 4016	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	34%	1.00	
2	35%	1.00	
3	50%	1.08	
4	47%	1.07	
5	29%	0.97	
6	48%	1.08	
7	45%	1.06	
8	41%	1.04	
9	21%	0.92	
10	47%	1.07	
11	28%	0.97	
12	50%	1.09	
13	56%	1.12	
14	71%	1.18	
15	68%	1.17	
16	18%	0.91	
17	55%	1.11	
18	46%	1.07	
19	63%	1.15	
20	40%	1.03	
21	54%	1.10	
22	63%	1.15	
23	69%	1.18	
24	60%	1.15	
25	56%	1.12	
26	60%	1.13	
27	74%	1.20	
28	77%	1.21	
29	69%	1.17	
30	72%	1.19	
31	79%	1.22	
32	83%	1.24	



33	107%	1.33
34	106%	1.33
35	104%	1.32
36	105%	1.32
37	106%	1.32
38	108%	1.33
39		
40		
41		
42		
43		

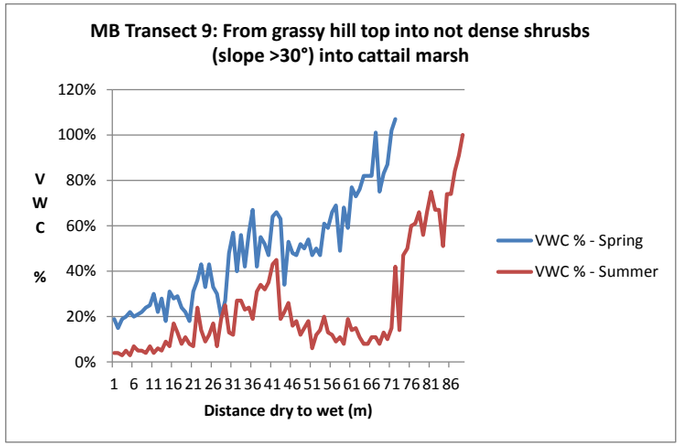
33	83%	1.24
34	88%	1.25
35	88%	1.25
36	96%	1.29
37	93%	1.28
38	98%	1.30
39	99%	1.30
40	96%	1.26
41	100%	1.30
42		
43		

Date:	Tuesday, May 04, 2010	Spring Field Research
Location:	Mer Bleue	
Weather:	Sunny (but rain occurred pre-visit) High 21C; Low 11C; Rain the day before	
Description:	East of MB 8 off of Trail 53; starting at hill top (slope >35°) grassy area very open; grading into shrub/open area (shrubs >2m) eventually into cattail marsh (as MB 7 and 8);	
Azimuth (Bearing of Transect):	180°	
Photo #s	2925	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	19%	0.91	
2	15%	0.89	
3	19%	0.91	
4	20%	0.92	
5	22%	0.93	
6	20%	0.91	
7	21%	0.92	
8	22%	0.93	
9	24%	0.94	
10	25%	0.95	
11	30%	0.98	
12	22%	0.93	
13	28%	0.97	
14	18%	0.90	
15	31%	0.98	
16	28%	0.97	
17	29%	0.97	
18	24%	0.94	
19	22%	0.93	
20	18%	0.90	
21	31%	0.98	
22	36%	1.03	
23	43%	1.05	
24	33%	0.99	
25	43%	1.05	
26	33%	1.00	
27	30%	0.98	
28	20%	0.92	
29	27%	0.96	
30	48%	1.08	
31	57%	1.12	

Date:	Wednesday, July 21, 2010	Summer Field Research
Location:	Mer Bleue - Trail 53	
Weather:	Cloudy with rain, fog and a thunderstorm (High 25C, Low 17C) (Rained not the previous day but the four previous days)	
Description:	Starts in VP 131 open area; going through VP 132 and ending in VP 133	
Azimuth (Bearing of Transect):	180°	
Photo #s	3999-4007	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	4%	0.80	Top of hill and slope
2	4%	0.80	
3	3%	0.80	
4	5%	0.81	
5	3%	0.79	
6	7%	0.82	
7	5%	0.81	
8	5%	0.81	
9	4%	0.80	
10	7%	0.82	
11	4%	0.80	
12	6%	0.82	
13	5%	0.81	
14	9%	0.84	
15	7%	0.82	
16	17%	0.90	
17	13%	0.87	
18	8%	0.83	
19	11%	0.85	
20	8%	0.83	
21	7%	0.83	
22	24%	0.94	
23	14%	0.87	
24	9%	0.84	
25	12%	0.86	
26	17%	0.90	
27	7%	0.83	
28	19%	0.91	
29	25%	0.95	
30	13%	0.87	
31	12%	0.86	



32	40%	1.03
33	56%	1.11
34	42%	1.05
35	57%	1.12
36	67%	1.17
37	42%	1.04
38	55%	1.11
39	52%	1.10
40	47%	1.07
41	64%	1.15
42	66%	1.16
43	63%	1.15
44	34%	1.00
45	53%	1.10
46	48%	1.08
47	47%	1.07
48	52%	1.10
49	50%	1.09
50	54%	1.10
51	47%	1.07
52	50%	1.09
53	47%	1.07
54	61%	1.14
55	59%	1.13
56	66%	1.16
57	69%	1.18
58	49%	1.08
59	68%	1.17
60	59%	1.13
61	77%	1.21
62	73%	1.19
63	76%	1.20
64	82%	1.23
65	82%	1.23
66	82%	1.23
67	101%	1.31
68	75%	1.20
69	83%	1.23
70	87%	1.25
71	102%	1.31
72	107%	1.31

32	27%	0.96
33	27%	0.96
34	23%	0.94
35	24%	0.94
36	19%	0.91
37	31%	0.98
38	34%	1.00
39	32%	0.99
40	35%	1.01
41	43%	1.05
42	45%	1.06
43	19%	0.91
44	22%	0.93
45	26%	0.95
46	16%	0.89
47	18%	0.90
48	12%	0.86
49	15%	0.89
50	18%	0.90
51	6%	0.82
52	12%	0.86
53	14%	0.88
54	20%	0.92
55	13%	0.87
56	12%	0.86
57	9%	0.84
58	11%	0.85
59	8%	0.83
60	19%	0.91
61	14%	0.87
62	15%	0.88
63	11%	0.85
64	8%	0.83
65	8%	0.84
66	11%	0.86
67	11%	0.85
68	8%	0.84
69	13%	0.87
70	10%	0.85
71	15%	0.88
72	42%	1.05
73	14%	0.87
74	47%	1.07
75	50%	1.09
76	60%	1.13
77	61%	1.14
78	66%	1.16
79	56%	1.12

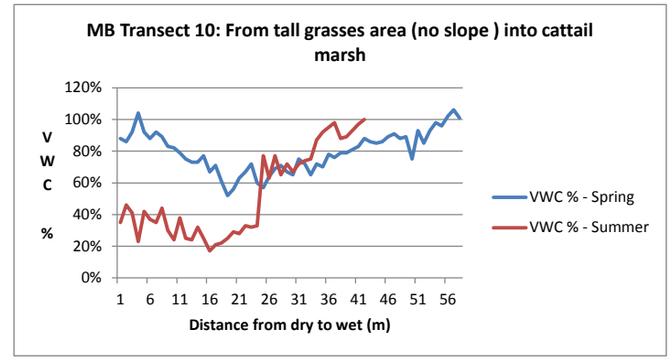
80	66%	1.16
81	75%	1.20
82	67%	1.16
83	67%	1.17
84	51%	1.09
85	74%	1.20
86	74%	1.20
87	84%	1.24
88	91%	1.27
89	100%	1.30

Date:	Wednesday, May 05, 2010	Spring Field Research
Location:	Mer Bleue Bog - Trail 53A	
Weather:	Cloudy with rain (.8cm) (High of 24C; low of 5C) Rain the previous day of .1cm	
Description:	North side of Ridge Road; through open tall grasses and shrubs that are 1m or less; no real discernable slope; farms up on Ridge Road (ridge slope > 45°)	
Azimuth (Bearing of Transect):	0°	
Photo #s	2930	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	88%	1.25	
2	86%	1.25	
3	92%	1.27	
4	104%	1.32	
5	92%	1.27	
6	88%	1.26	
7	92%	1.27	
8	89%	1.26	
9	83%	1.23	
10	82%	1.23	
11	79%	1.22	
12	75%	1.20	
13	73%	1.19	
14	73%	1.19	
15	77%	1.21	
16	67%	1.17	
17	71%	1.18	
18	61%	1.14	
19	52%	1.15	
20	56%	1.12	
21	63%	1.15	
22	67%	1.17	
23	72%	1.19	
24	60%	1.13	
25	57%	1.12	
26	64%	1.15	
27	69%	1.18	
28	71%	1.18	
29	67%	1.16	
30	65%	1.16	
31	75%	1.20	
32	72%	1.19	
33	65%	1.16	
34	72%	1.19	
35	70%	1.18	

Date:	Thursday, July 22, 2010	Summer Field Research
Location:	Mer Bleue Bog - Trail 53A	
Weather:	Sunny; high of 28C low of 17C; Rain of approx .4cm day before)	
Description:	Starts at GPS pt. GMT18A (but starts in landcover similar to VP 139); ends in VP 140; cattail marsh	
Azimuth (Bearing of Transect):	0°	
Photo #s	4031-4038	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	35%	1.01	
2	46%	1.06	
3	41%	1.04	
4	23%	0.94	
5	42%	1.04	
6	37%	1.02	
7	35%	1.00	
8	44%	1.05	
9	30%	0.98	
10	24%	0.94	
11	38%	1.02	
12	25%	0.95	
13	24%	0.94	
14	32%	0.99	
15	25%	0.95	
16	17%	0.90	
17	21%	0.92	
18	22%	0.93	
19	25%	0.95	
20	29%	0.97	
21	28%	0.97	
22	33%	1.00	
23	32%	0.99	
24	33%	0.99	
25	77%	1.21	
26	63%	1.15	
27	77%	1.12	
28	65%	1.16	
29	72%	1.19	
30	67%	1.17	
31	72%	1.19	
32	74%	1.12	
33	75%	1.20	
34	87%	1.25	
35	92%	1.27	



36	78%	1.21
37	76%	1.21
38	79%	1.22
39	79%	1.22
40	81%	1.23
41	83%	1.24
42	88%	1.26
43	86%	1.25
44	85%	1.24
45	86%	1.25
46	89%	1.26
47	91%	1.27
48	88%	1.26
49	89%	1.26
50	75%	1.20
	93%	1.28
	85%	1.24
	93%	1.28
	98%	1.30
	96%	1.29
	102%	1.31
	106%	1.33
	101%	1.31

36	95%	1.28
37	98%	1.30
38	88%	1.25
39	89%	1.26
40	93%	1.28
41	97%	1.29
42	100%	1.31
43		
44		
45		
46		
47		
48		
49		
50		
51		
52		
53		

Date: Wednesday, May 05, 2010 Spring Field Research
Location: Mer Bleue Bog - Trail 53A

Weather: Cloudy with rain (.8cm) (High of 24C; low of 5C) Rain the previous day of .1cm

Description: East of MB10; past the "cut line" (anthropogenic disturbance -- highly apparent in imagery); through shrubs >1m; and patches of shrubs > 2m; flat slope into same cattail marsh as MB 10

Azimuth (Bearing of Transect): 0°

Photo #s

Point #	Volumetric Water Content (%)	Period	Description/Details
1	53%	1.10	
2	59%	1.13	
3	61%	1.14	
4	54%	1.11	
5	58%	1.13	
6	55%	1.11	
7	58%	1.13	
8	59%	1.13	
9	53%	1.10	
10	52%	1.10	
11	55%	1.11	
12	44%	1.06	
13	32%	0.99	
14	41%	1.04	
15	31%	0.98	
16	47%	1.07	
17	51%	1.09	
18	61%	1.14	
19	55%	1.11	
20	55%	1.11	
21	50%	1.09	
22	55%	1.11	
23	63%	1.15	
24	72%	1.19	
25	76%	1.21	
26	77%	1.21	
27	69%	1.18	
28	80%	1.22	
29	87%	1.25	
30	92%	1.27	
31	87%	1.25	
32	95%	1.28	
33	96%	1.29	
34	90%	1.27	
35	95%	1.28	
36	92%	1.27	

Date: Thursday, July 22, 2010 Summer Field Research
Location: Mer Bleue Bog - Trail 53A

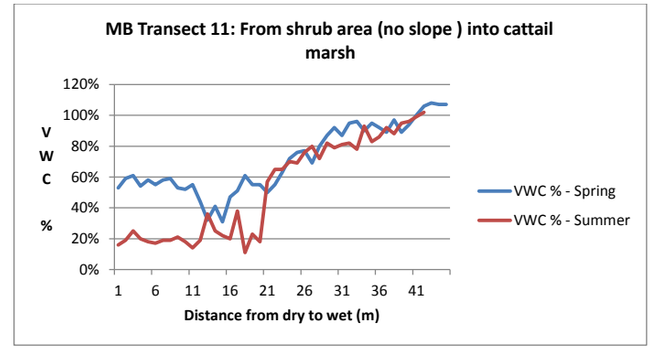
Weather: Sunny; high of 28C low of 17C; Rain of approx .4cm day before)

Description: Starts in short willows and sweet gale and moves into taller willows; starting pt. is SMT19A; end pt. is 19B (VP 140)

Azimuth (Bearing of Transect): 0°

Photo #s

Point #	Volumetric Water Content (%)	Period	Description/Details
1	16%	0.89	
2	19%	0.91	
3	25%	0.95	
4	20%	0.91	
5	18%	0.90	
6	17%	0.90	
7	19%	0.91	
8	19%	0.91	
9	21%	0.92	
10	18%	0.90	
11	14%	0.88	
12	19%	0.91	
13	36%	1.01	
14	25%	0.95	
15	22%	0.93	
16	20%	0.91	
17	38%	1.02	
18	11%	0.85	
19	23%	0.93	
20	18%	0.90	
21	57%	1.12	
22	65%	1.16	
23	65%	1.16	
24	70%	1.18	
25	69%	1.17	
26	76%	1.20	
27	80%	1.22	
28	72%	1.19	
29	82%	1.23	
30	79%	1.22	
31	81%	1.23	
32	82%	1.23	
33	78%	1.22	
34	93%	1.28	
35	83%	1.24	
36	86%	1.25	



37	89%	1.26		37	92%	1.27
38	97%	1.29	1	38	88%	1.25
39	89%	1.26		39	95%	1.28
40	94%	1.28		40	96%	1.29
41	100%	1.31		41	99%	1.30
42	106%	1.33		42	102%	1.31
43	108%	1.33		43		
44	107%	1.33		44		
45	107%	1.33		45		

Date: Wednesday, May 05, 2010 Spring Field Research
Location: Mer Bleue Bog - Trail 53A

Weather: Cloudy with rain (.8cm) (High of 24C; low of 5C) Rain the previous day of .1cm

Description: Up on ridge (near the road); from a maple stand going down a steep slope into a beaver pond/shrub meadow marsh wetland (crosses Trail 53A)

Azimuth (Bearing of Transect): 25°

Photo #s 2942

Point #	Volumetric Water Content (%)	Period	Description/Details
1	20%	0.92	
2	22%	0.93	
3	18%	0.91	
4	12%	0.86	
5	11%	0.86	
6	13%	0.87	
7	19%	0.91	
8	9%	0.84	
9	10%	0.85	
10	7%	0.82	
11	10%	0.85	
12	14%	0.88	
13	27%	0.96	
14	31%	0.99	
15	37%	1.02	
16	45%	1.06	
17	45%	1.06	
18	47%	1.07	
19	44%	1.05	
20	42%	1.05	
21	53%	1.10	
22	61%	1.14	
23	52%	1.10	
24	55%	1.11	
25	59%	1.13	
26	45%	1.06	
27	63%	1.15	
28	56%	1.12	
29	58%	1.13	
30	57%	1.12	
31	104%	1.32	
32	107%	1.33	
33	104%	1.32	

Date: Thursday, July 22, 2010 Summer Field Research
Location: Mer Bleue Bog - Trail 53A

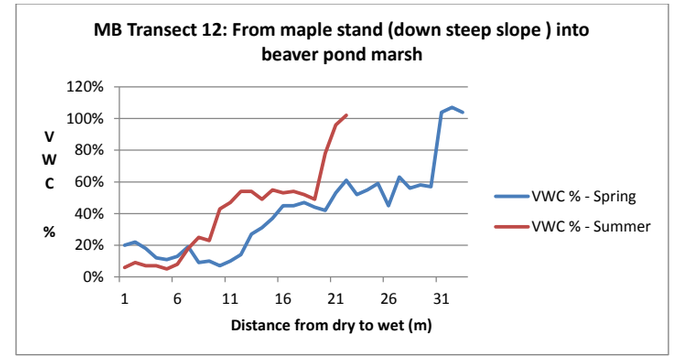
Weather: Sunny; high of 28C low of 17C; Rain of approx .4cm day before)

Description: Starts in VP 143; and ends at VP 144

Azimuth (Bearing of Transect): 25°

Photo #s 4078-4088

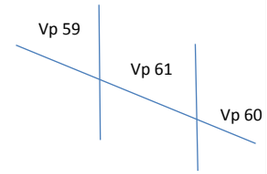
Point #	Volumetric Water Content (%)	Period	Description/Details
1	6%	0.82	
2	9%	0.84	
3	7%	0.82	
4	7%	0.82	
5	5%	0.81	
6	8%	0.84	
7	18%	0.90	
8	25%	0.95	
9	23%	0.94	
10	43%	1.05	
11	47%	1.07	
12	54%	1.11	
13	54%	1.11	
14	49%	1.09	
15	55%	1.11	
16	53%	1.10	
17	54%	1.10	
18	52%	1.10	
19	49%	1.08	
20	78%	1.21	
21	96%	1.29	
22	102%	1.31	
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			



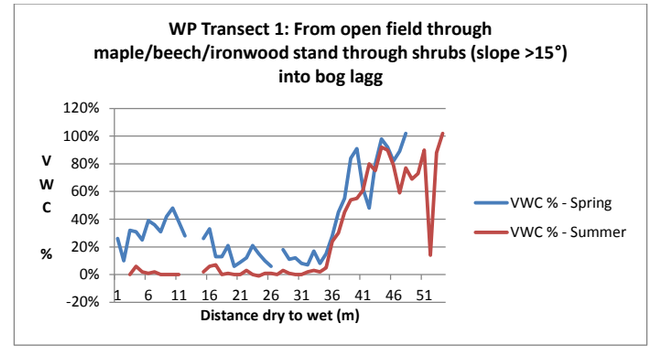
Date:	Thursday, May 06, 2010	Spring Field Research
Location:	Westport 1 (Hurlbutt Property)	
Weather:	Fog; rain/thunderstorm: High 16C, Low 7C; rained the 3 previous days (approx. 1.4 cm)	
Description:	From open area with bare rock and grasses; through a forest patch with shrubs down to bog lag; slope (>15°) very thin layers of soil; bog is in a "bowl" (shield depression surrounded by raised rock)	
Azimuth (Bearing of Transect):	65°	
Photo #s	2956-2960	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	26%	0.95	
2	10%	0.85	
3	32%	0.99	
4	31%	0.98	
5	25%	0.95	
6	39%	1.03	
7	36%	1.01	
8	31%	0.98	
9	42%	1.05	
10	48%	1.07	
11	38%	1.02	
12	28%	0.97	
13			rock
14			rock
15	26%	0.95	
16	33%	0.99	
17	13%	0.87	
18	13%	0.87	
19	21%	0.92	
20	6%	0.82	
21	9%	0.84	
22	12%	0.86	
23	21%	0.93	
24	15%	0.88	
25	10%	0.85	
26	6%	0.82	
27			rock
28	18%	0.90	
29	11%	0.86	
30	12%	0.86	
31	8%	0.83	
32	7%	0.83	
33	17%	0.90	
34	8%	0.83	
35	15%	0.89	

Date:	July 12,2010	Summer Field Research
Location:	Westport 1 (Hurlbutt Property)	
Weather:	Rain (0.1cm) High 30C, Low 14C;	
Description:	Started in VP 59; ended in bog lag (SMT9B) through treed area VP 61, with VP 60 (shrubby and ferns area just before the bog lag)	
Azimuth (Bearing of Transect):	65°	
Photo #s	3764-3765	



Point #	Volumetric Water Content (%)	Period	Description/Details
1			rock
2			rock
3	0%	0.77	
4	6%	0.81	
5	2%	0.79	
6	1%	0.78	
7	2%	0.78	
8	0%	0.77	
9	0%	0.77	
10	0%	0.77	
11	0%	0.77	
12			rock
13			rock
14			rock
15	2%	0.78	
16	6%	0.82	
17	7%	0.83	
18	0%	0.77	
19	1%	0.78	
20	0%	0.77	
21	0%	0.77	
22	3%	0.80	
23	0%	0.76	
24	-1%	0.76	
25	1%	0.78	
26	1%	0.77	
27	0%	0.77	
28	3%	0.80	
29	1%	0.77	
30	0%	0.77	
31	0%	0.77	
32	2%	0.78	
33	3%	0.79	
34	2%	0.78	
35	5%	0.81	



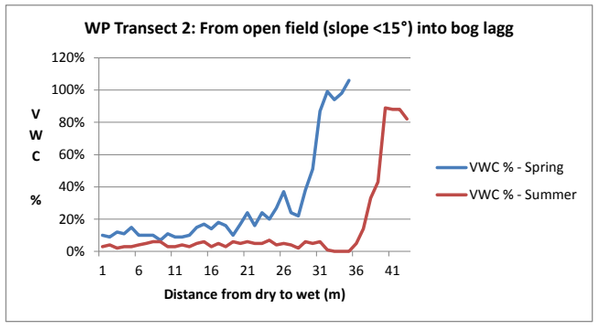
36	28%	0.96	36	24%	0.94	
37	45%	1.06	37	30%	0.98	
38	55%	1.11	38	45%	1.06	
39	84%	1.24	39	54%	1.10	
40	91%	1.07	40	55%	1.11	
41	62%	1.14	41	61%	1.14	
42	48%	1.08	42	80%	1.22	
43	80%	1.22	43	75%	1.20	
44	98%	1.29	44	92%	1.27	
45	92%	1.27	45	90%	1.27	
46	82%	1.23	46	79%	1.22	
47	89%	1.26	47	59%	1.13	
48	102%	1.31	48	77%	1.21	
49	97%	1.29	49	69%	1.18	
50	94%	1.28	50	73%	1.19	
	66%	1.16	51	90%	1.27	
	64%	1.15	52	14%	0.88	hummock
	96%	1.29	53	88%	1.22	
	110%	1.34		102%	1.24	
	111%	1.34				
	96%	1.29				
	108%	1.33				

Date:	Thursday, May 06, 2010	Spring Field Research
Location:	Westport 1 (Hurlbutt Property)	
Weather:	Fog; rain/thunderstorm: High 16C, Low 7C; rained the 3 previous days (approx. 1.4 cm)	
Description:	Starts in small forested stand moving into open grassy area that goes directly down into bog lagg; grasses are flattened and water is chest deep at edge	
Azimuth (Bearing of Transect):	18°	
Photo #s	2961-2964	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	10%	0.84	
2	9%	0.84	
3	12%	0.86	
4	11%	0.86	
5	15%	0.88	
6	10%	0.85	
7	10%	0.85	
8	10%	0.85	
9	7%	0.83	
10	11%	0.85	
11	9%	0.84	
12	9%	0.84	
13	10%	0.85	
14	15%	0.88	
15	17%	0.90	
16	14%	0.87	
17	18%	0.99	
18	16%	0.89	
19	10%	0.85	
20	17%	0.90	
21	24%	0.94	
22	16%	0.89	
23	24%	0.94	
24	20%	0.92	
25	27%	0.96	
26	37%	1.02	
27	24%	0.94	
28	22%	0.93	
29	38%	1.02	
30	51%	1.12	
31	87%	1.25	
32	99%	1.30	
33	94%	1.28	
34	98%	1.30	
35	106%	1.30	
36			
37			
38			
39			
40			

Date:	July 12,2010	Summer Field Research
Location:	Westport 1 (Hurlbutt Property)	
Weather:	Rain (0.1cm) High 30C, Low 14C;	
Description:	Starts in edge of VP62 (Open area) coming out of mixed forest area going down a slight slope (<15°) into bog lagg	
Azimuth (Bearing of Transect):	18°	
Photo #s	3767 - 3775	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	3%	0.79	
2	4%	0.80	
3	2%	0.79	
4	3%	0.79	
5	3%	0.80	
6	4%	0.80	
7	5%	0.81	
8	6%	0.82	
9	6%	0.81	
10	3%	0.80	
11	3%	0.79	
12	4%	0.80	
13	3%	0.79	
14	5%	0.81	
15	6%	0.82	
16	3%	0.79	
17	5%	0.81	
18	3%	0.79	
19	6%	0.82	
20	5%	0.81	
21	6%	0.82	
22	5%	0.81	
23	5%	0.81	
24	7%	0.82	
25	4%	0.81	
26	5%	0.81	
27	4%	0.80	
28	2%	0.78	
29	6%	0.81	
30	5%	0.81	
31	6%	0.81	
32	1%	0.78	
33	0%	0.77	
34	0%	0.77	
35	0%	0.77	
36	5%	0.81	
37	14%	0.88	
38	33%	1.00	
39	43%	1.05	
40	89%	1.26	



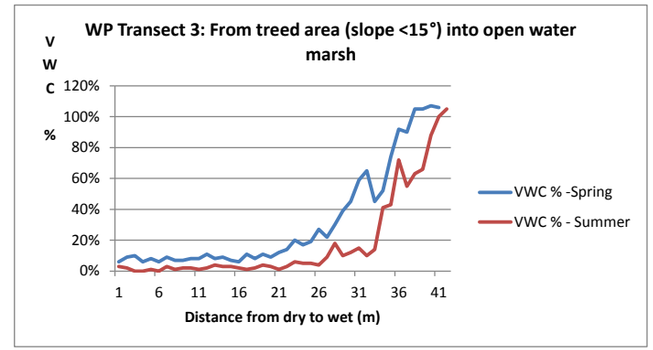
41		41	88%	1.25
42		42	88%	1.26
43		43	82%	1.23
44		44 too dangerous		

Date:	Thursday, May 06, 2010	Spring Field Research
Location:	Westport 1 (Hurlbutt Property)	
Weather:	Fog; rain/thunderstorm: High 16C, Low 7C; rained the 3 previous days (approx. 1.4 cm)	
Description:	Slight slope into open water pond (marsh) through beech/birch/maple stand with shrubs that are <1m; starts in open taller grasses with shrubs also <1m	
Azimuth (Bearing of Transect):	255°	
Photo #s	2966 - 2969	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	6%	0.82	
2	9%	0.84	
3	10%	0.85	
4	6%	0.82	
5	8%	0.83	
6	6%	0.82	
7	9%	0.84	
8	7%	0.83	
9	7%	0.83	
10	8%	0.83	
11	8%	0.84	
12	11%	0.86	
13	8%	0.83	
14	9%	0.84	
15	7%	0.83	
16	6%	0.84	
17	11%	0.86	
18	8%	0.83	
19	11%	0.85	
20	9%	0.84	
21	12%	0.86	
22	14%	0.88	
23	20%	0.92	
24	17%	0.90	
25	19%	0.91	
26	27%	0.96	
27	22%	0.93	
28	30%	0.98	
29	39%	1.03	
30	45%	1.06	
31	59%	1.13	
32	65%	1.16	
33	45%	1.06	
34	52%	1.10	
35	74%	1.20	
36	92%	1.27	

Date:	July 12,2010	Summer Field Research
Location:	Westport 1 (Hurlbutt Property)	
Weather:	Rain (0.1cm) High 30C, Low 14C;	
Description:	Starts in open grassy area with some bare rocks covered in lichen (similar to VP 59); moving through treed area VP 65; into VP 66 which is Marsh area	
Azimuth (Bearing of Transect):	255°	
Photo #s	3776 - 3778	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	3%	0.79	
2	2%	0.78	
3	0%	0.77	
4	0%	0.76	
5	1%	0.77	
6	0%	0.77	
7	3%	0.79	
8	1%	0.78	
9	2%	0.78	
10	2%	0.78	
11	1%	0.78	
12	2%	0.79	
13	4%	0.80	
14	3%	0.79	
15	3%	0.80	
16	2%	0.79	
17	1%	0.78	
18	2%	0.78	
19	4%	0.80	
20	3%	0.79	
21	1%	0.78	
22	3%	0.80	
23	6%	0.81	
24	5%	0.81	
25	5%	0.81	
26	4%	0.80	
27	9%	0.84	
28	18%	0.90	
29	10%	0.85	
30	12%	0.86	
31	15%	0.88	
32	10%	0.85	
33	14%	0.87	
34	41%	1.01	
35	43%	1.05	
36	72%	1.19	



37	90%	1.27	37	55%	1.11
38	105%	1.32	38	63%	1.15
39	105%	1.32	39	66%	1.16
40	107%	1.38	40	88%	1.26
41	106%	1.33	41	100%	1.31
42			42	105%	1.32

Date: Thursday, May 06, 2010 Spring Field Research
Location: Westport 1 (Hurlbutt Property)

Weather: Fog; rain/thunderstorm: High 16C, Low 7C; rained the 3 previous days (approx. 1.4 cm)

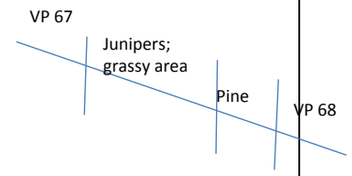
Description: Starting in deciduous forest (shagbark hickory and ironwood) moving into juniper/grassy area with small pines; down into open water marsh (slope ~ 5°); the marsh was man-made; flooded

Azimuth (Bearing of Transect): 70°
Photo #s 2970-2978

Point #	Volumetric Water Content (%)	Period	Description/Details
1	10%	0.85	
2	9%	0.84	
3	11%	0.86	
4	9%	0.84	
5	12%	0.86	
6	11%	0.85	
7	9%	0.84	
8	7%	0.83	
9	10%	0.85	
10	11%	0.85	
11	10%	0.85	
12	18%	0.90	
13	17%	0.90	
14	16%	0.89	
15	14%	0.88	
16	15%	0.89	
17	16%	0.89	
18	16%	0.89	
19	26%	0.96	
20	16%	0.89	
21	13%	0.87	
22	20%	0.91	
23	21%	0.92	
24	18%	0.90	
25	24%	0.94	
26	20%	0.92	
27	37%	1.02	
28	57%	1.12	
29	63%	1.15	
30	65%	1.16	
31	97%	1.29	
32	90%	1.27	
33	109%	1.34	
34	105%	1.32	

Date: July 12,2010 Summer Field Research
Location: Westport 1 (Hurlbutt Property)

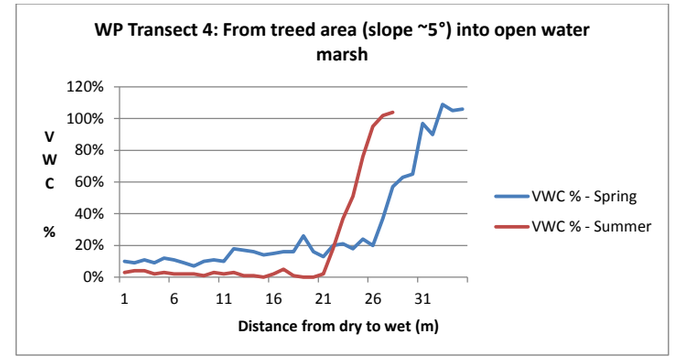
Weather: Rain (0.1cm) High 30C, Low 14C;



Description: Starts in VP 67; moving down slope to end in VP 68

Azimuth (Bearing of Transect): 70°
Photo #s 3779-3781

Point #	Volumetric Water Content (%)	Period	Description/Details
1	3%	0.80	
2	4%	0.80	
3	4%	0.80	
4	2%	0.79	
5	3%	0.79	
6	2%	0.78	
7	2%	0.79	
8	2%	0.78	
9	1%	0.77	
10	3%	0.79	
11	2%	0.78	
12	3%	0.79	
13	1%	0.78	
14	1%	0.78	
15	0%	0.77	
16	2%	0.78	
17	5%	0.81	
18	1%	0.78	
19	0%	0.77	
20	0%	0.77	
21	2%	0.78	
22	18%	0.90	
23	37%	1.02	
24	51%	1.14	
25	76%	1.26	
26	95%	1.28	
27	102%	1.31	
28	104%	1.32	
29			
30			
31			
32			
33			
34			



35	106%	1.33		35	

Date: Thursday, May 06, 2010 Spring Field Research
Location: Westport 1 (Hurlbutt Property)

Weather: Fog; rain/thunderstorm: High 16C, Low 7C; rained the 3 previous days (approx. 1.4 cm)

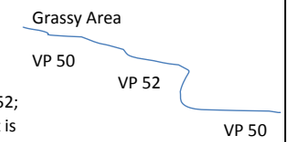
Description: East side of lake/seems to be a peat mat in the centre of open water; the transect starts at the top of the slope at the edge of treed area going down through a grassy area; down a very steep ridge onto the shore line;

Azimuth (Bearing of Transect): 260°
Photo #s 2979-2982

Point #	Volumetric Water Content (%)	Period	Description/Details
1	10%	0.85	
2	24%	0.94	
3	35%	1.01	
4	12%	0.86	
5	20%	0.91	
6	16%	0.89	
7	14%	0.88	
8	9%	0.84	
9	7%	0.83	
10	4%	0.80	
11	6%	0.82	
12	6%	0.82	
13	5%	0.81	
14	8%	0.83	
15	7%	0.82	
16	5%	0.81	
17	8%	0.84	
18	13%	0.87	
19	5%	0.81	
20	11%	0.85	
21	9%	0.84	
22	7%	0.82	
23	8%	0.83	
24	16%	0.89	
25	27%	0.96	
26	34%	1.00	
27	37%	1.02	
28	33%	0.99	
29	36%	1.01	
30	51%	1.09	
31	57%	1.12	
32	56%	1.11	
33	48%	1.08	
34	84%	1.24	

Date: Friday, July 09, 2010 Summer Field Research
Location: Westport (Hurlbutt Property

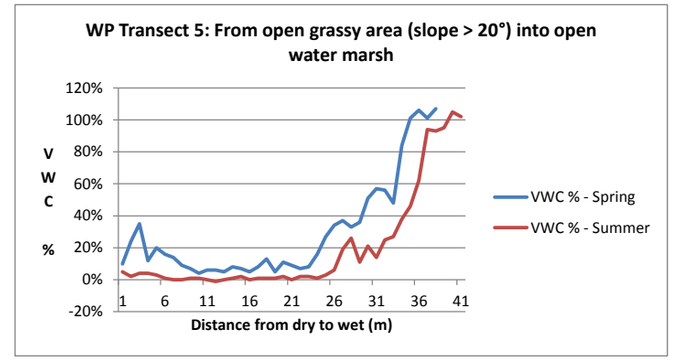
Weather: Fog; rain/thunderstorm (1.4cm): High 27C, Low 21C; rain previous day (negligible)



Description: Starts in VP 50; grows through VP 52; ends in VP 51 (additional end point is SMT 6B)

Azimuth (Bearing of Transect): 260°
Photo #s 3747-3749

Point #	Volumetric Water Content (%)	Period	Description/Details
1	5%	0.81	
2	2%	0.79	
3	4%	0.80	
4	4%	0.80	
5	3%	0.79	
6	1%	0.77	
7	0%	0.77	
8	0%	0.77	
9	1%	0.78	
10	1%	0.78	
11	0%	0.77	
12	-1%	0.76	
13	0%	0.77	
14	1%	0.77	
15	2%	0.78	
16	0%	0.77	
17	1%	0.78	
18	1%	0.78	
19	1%	0.78	
20	2%	0.78	
21	0%	0.77	
22	2%	0.79	
23	2%	0.78	
24	1%	0.77	
25	3%	0.79	
26	6%	0.82	
27	19%	0.91	
28	26%	0.96	
29	11%	0.86	
30	21%	0.92	
31	14%	0.88	
32	25%	0.95	
33	27%	0.96	
34	38%	1.02	



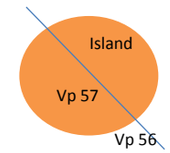
35	101%	1.31
36	106%	1.33
37	101%	1.31
38	107%	1.33
39		
40		
41		

35	46%	1.07
36	62%	1.14
37	94%	1.28
38	93%	1.28
39	95%	1.28
40	105%	1.32
41	102%	1.31

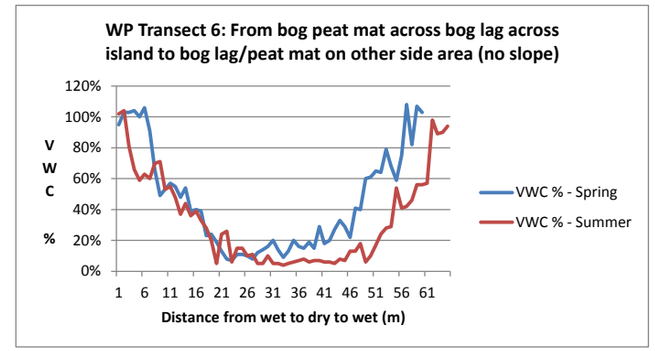
Date:	Thursday, May 06, 2010	Spring Field Research
Location:	Westport 1 (Hurlbutt Property)	
Weather:	Fog; rain/thunderstorm: High 16C, Low 7C; rained the 3 previous days (approx. 1.4 cm)	
Description:	Starts at edge of bog; goes through shrubs; through the lag then across island; to other side of lag to bog again; flat (no slope)	
Azimuth (Bearing of Transect):	215°	
Photo #s	2983-2988	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	95%	1.29	
2	103%	1.22	
3	103%	1.31	
4	104%	1.32	Peat mat
5	100%	1.30	
6	106%	1.33	
7	91%	1.27	
8	66%	1.16	
9	49%	1.08	
10	53%	1.10	
11	57%	1.12	
12	55%	1.11	
13	48%	1.08	
14	54%	1.10	
15	39%	1.03	
16	40%	1.03	
17	39%	1.03	
18	23%	0.94	
19	24%	0.94	
20	19%	0.91	
21	13%	0.87	
22	8%	0.84	
23	7%	0.82	
24	11%	0.86	
25	11%	0.85	
26	10%	0.84	
27	8%	0.83	
28	12%	0.86	
29	14%	0.88	
30	16%	0.89	
31	20%	0.92	
32	14%	0.88	
33	9%	0.84	
34	13%	0.87	
35	20%	0.92	
36	16%	0.89	

Date:	Friday, July 09, 2010	Summer Field Research
Location:	Westport (Hurlbutt Property	
Weather:	Fog; rain/thunderstorm (1.4cm) visit was pre-rain: High 27C, Low 21C; rain previous day (negligible)	
Description:	Starts at SMT 8A which is point for VP 56 (bog lag); goes across island (centre of which is VP 57)	
Azimuth (Bearing of Transect):	215°	
Photo #s	3757 -3762	



Point #	Volumetric Water Content (%)	Period	Description/Details
1	102%	1.31	
2	104%	1.32	
3	81%	1.23	
4	66%	1.16	
5	59%	1.13	
6	63%	1.15	
7	60%	1.14	
8	70%	1.18	
9	71%	1.18	
10	53%	1.10	
11	55%	1.11	
12	48%	1.07	
13	37%	1.02	
14	44%	1.05	
15	36%	1.01	
16	39%	1.03	
17	33%	1.00	
18	28%	0.96	
19	20%	0.91	
20	5%	0.80	
21	24%	0.94	
22	26%	0.95	
23	6%	0.82	
24	15%	0.88	
25	15%	0.88	
26	10%	0.84	
27	11%	0.85	
28	5%	0.81	
29	5%	0.81	
30	10%	0.85	
31	5%	0.81	
32	5%	0.81	
33	4%	0.80	
34	5%	0.81	
35	6%	0.82	
36	7%	0.83	



37	15%	0.88
38	19%	0.91
39	15%	0.88
40	29%	0.97
41	18%	0.90
42	20%	0.92
43	27%	0.96
44	33%	1.00
45	29%	0.97
46	22%	0.93
47	41%	1.04
48	40%	1.03
49	60%	1.12
50	61%	1.14
	65%	1.16
	64%	1.15
	79%	1.22
	68%	1.17
	59%	1.12
	75%	1.20
	108%	1.33
	82%	1.23
	107%	1.33
	103%	1.33

37	8%	0.83
38	6%	0.82
39	7%	0.82
40	7%	0.83
41	6%	0.82
42	6%	0.82
43	5%	0.81
44	8%	0.84
45	7%	0.83
46	13%	0.87
47	13%	0.87
48	18%	0.90
49	6%	0.82
50	10%	0.85
51	17%	0.90
52	24%	0.84
53	28%	0.97
	29%	0.97
	54%	1.11
	41%	1.04
	42%	1.04
	46%	1.07
	56%	1.11
	56%	1.12
	57%	1.12
	98%	1.30
	89%	1.26
	90%	1.26
	94%	1.26

Date: Thursday, May 06, 2010 Spring Field Research
Location: Westport 1 (Hurlbutt Property)

Weather: Fog; rain/thunderstorm: High 16C, Low 7C; rained the 3 previous days (approx. 1.4 cm)

Description: Upland ironwood/maple forest stand (with maple saplings); slight slope < 10° to open water grassy marsh that eventually grades into bog

Azimuth (Bearing of Transect): 350°

Photo #s 2989 - 2993

Point #	Volumetric Water Content (%)	Period	Description/Details
1	15%	0.88	
2	12%	0.87	
3	9%	0.84	
4	7%	0.83	
5	8%	0.84	
6	13%	0.87	
7	14%	0.88	
8	8%	0.84	
9	12%	0.86	
10	8%	0.83	
11	13%	0.87	
12	14%	0.87	
13	13%	0.87	
14	17%	0.90	
15	15%	0.88	
16	12%	0.86	
17	12%	0.86	
18	12%	0.86	
19	23%	0.94	
20	20%	0.92	
21	21%	0.92	
22	52%	1.09	
23	50%	1.08	
24	41%	1.04	
25	42%	1.05	
26	63%	1.15	
27	65%	1.16	
28	67%	1.17	
29	74%	1.20	
30	71%	1.18	
31	72%	1.19	
32	69%	1.17	
33	80%	1.22	

Date: Friday, July 09, 2010 Summer Field Research
Location: Westport (Hurlbutt Property

Patch GPS pt. 68

Weather: Fog; rain/thunderstorm (1.4cm) visit was pre-rain: High 27C, Low 21C; rain previous day (negligible)

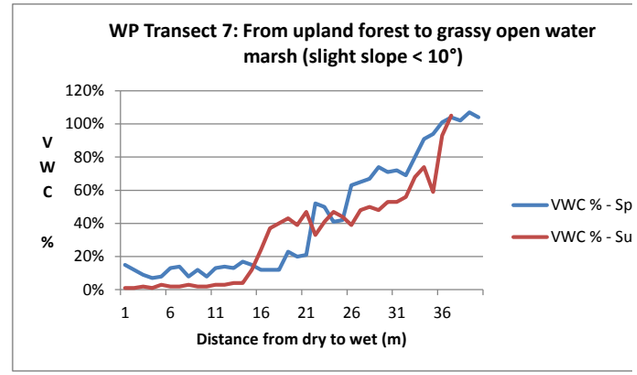
Patch GPS pt. 69 (also end

Description: Starting in patch GPS point 68 (VP 54) into open water grassy marsh (VP 55 (end pt. SMT 7B)

Azimuth (Bearing of Transect): 350°

Photo #s 3755 - 3756

Point #	Volumetric Water Content (%)	Period	Description/Details
1	1%	0.77	
2	1%	0.78	
3	2%	0.78	
4	1%	0.77	
5	3%	0.80	
6	2%	0.78	
7	2%	0.78	
8	3%	0.79	
9	2%	0.78	
10	2%	0.78	
11	3%	0.79	
12	3%	0.79	
13	4%	0.80	
14	4%	0.80	
15	12%	0.86	
16	24%	0.94	
17	37%	1.02	
18	40%	1.04	
19	43%	1.05	
20	39%	1.03	
21	47%	1.07	
22	33%	0.99	
23	41%	1.04	
24	47%	1.07	
25	44%	1.05	
26	39%	1.03	
27	48%	1.07	
28	50%	1.09	
29	48%	1.08	
30	53%	1.10	
31	53%	1.10	
32	56%	1.11	
33	68%	1.17	

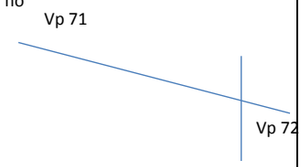


34	91%	1.27	34	74%	1.20
35	94%	1.28	35	59%	1.13
36	101%	1.31	36	93%	1.28
37	104%	1.32	37	105%	1.32
38	102%	1.31	38		
39	107%	1.33	39		
40	104%	1.32	40		

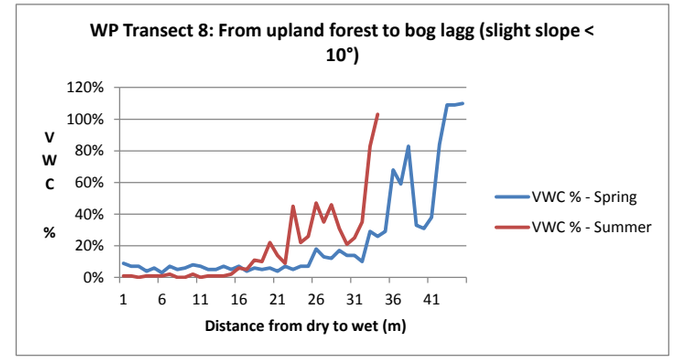
Date:	Friday, May 07, 2010	Spring Field Research
Location:	Westport (Jevons Property)	
Weather:	Rain (.1cm); High 12C; Low 3C; Rain for previous 4 days - ~1.4cm)	
Description:	Wooded maple/pine forest stand down to the bog; understorey consists of saplings and some grasses	
Azimuth (Bearing of Transect):		
Photo #s	2994 - 2997	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	9%	0.84	
2	7%	0.83	
3	7%	0.82	
4	4%	0.80	
5	6%	0.82	
6	3%	0.79	
7	7%	0.82	
8	5%	0.81	
9	6%	0.81	
10	8%	0.83	
11	7%	0.83	
12	5%	0.81	
13	5%	0.81	
14	7%	0.83	
15	5%	0.81	
16	7%	0.83	
17	4%	0.80	
18	6%	0.82	
19	5%	0.81	
20	6%	0.81	
21	4%	0.80	
22	7%	0.83	
23	5%	0.81	
24	7%	0.82	
25	7%	0.82	
26	18%	0.90	
27	13%	0.87	
28	12%	0.86	
29	17%	0.90	
30	14%	0.88	
31	14%	0.87	
32	10%	0.85	
33	29%	0.97	
34	26%	0.95	
35	29%	0.97	
36	68%	1.17	
37	59%	1.13	
38	83%	1.24	

Date:	Monday, July 12, 2010	Summer Field Research
Location:	Westport (Jevons Property)	
Weather:	Rain (0.1cm); High 30C; low 14C); no rain the previous days	
Description:	Patch GPS #70 to 71; Starting in similar landcover as VP 71 and ending at VP 72	
Azimuth (Bearing of Transect):		
Photo #s	3786 - 3792	



Point #	Volumetric Water Content (%)	Period	Description/Details
1	1%	0.77	
2	1%	0.77	
3	0%	0.77	
4	1%	0.77	
5	1%	0.78	
6	1%	0.77	
7	2%	0.79	
8	0%	0.77	
9	0%	0.77	
10	2%	0.78	
11	0%	0.76	
12	1%	0.78	
13	1%	0.78	
14	1%	0.78	
15	2%	0.78	
16	6%	0.82	
17	5%	0.81	
18	11%	0.85	
19	10%	0.85	
20	22%	0.93	
21	14%	0.88	
22	9%	0.84	
23	45%	1.06	
24	22%	0.93	
25	26%	0.95	
26	47%	1.07	
27	35%	1.11	
28	46%	1.06	
29	31%	0.98	
30	21%	0.92	
31	25%	0.95	
32	35%	1.01	
33	83%	1.24	
34	103%	1.31	
35			
36			
37			
38			



39	33%	0.99	39
40	31%	0.98	40
41	38%	1.02	41
42	84%	1.24	42
43	109%	1.34	43
44	109%	1.34	44
45	110%	1.34	45

Date: Friday, May 07, 2010 Spring Field Research

Location: Westport (Jevons Property)

Weather: Rain (.1cm); High 12C; Low 3C; Rain for previous 4 days - ~1.4cm)

Description: Long transect that goes wet to wet; starting in what seems like an ephemeral shrubby w/ grass marsh; crosses a peninsula of pine/maple stand with little understorey; back over to bog lagg area; slopes downward to wetlands from both sides but slopes are < 10°

Azimuth (Bearing of Transect):

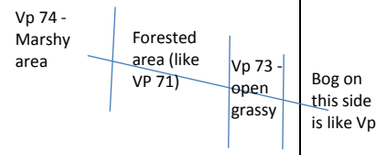
Photo #s 2998 - 3003

Point #	Volumetric Water Content (%)	Period	Description/Details
1	107%	1.33	
2	97%	1.29	
3	98%	1.30	
4	92%	1.07	
5	98%	1.30	
6	91%	1.07	
7	52%	1.10	
8	40%	1.03	
9	32%	0.99	
10	17%	0.90	
11	2%	0.78	
12	6%	0.81	
13	2%	0.78	
14	2%	0.79	
15	5%	0.81	
16	6%	0.82	
17	4%	0.80	
18	7%	0.83	
19	4%	0.81	
20	2%	0.79	
21	2%	0.79	
22	1%	0.77	
23	6%	0.82	
24	2%	0.79	
25	7%	0.82	
26	9%	0.84	
27	9%	0.84	
28	9%	0.84	
29	4%	0.80	
30	9%	0.84	
31	11%	0.85	
32	7%	0.83	
33	9%	0.84	
34	4%	0.80	

Date: Monday, July 12, 2010 Summer Field Research

Location: Westport (Jevons Property)

Weather: Rain (0.1cm); High 30C; low 14C); no rain the previous days

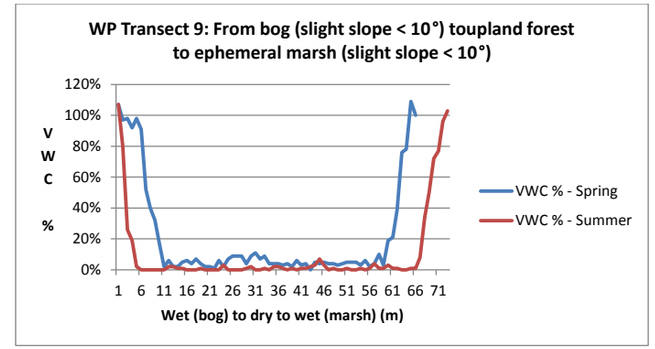


Description: See diagram

Azimuth (Bearing of Transect):

Photo #s 3793 - 3796

Point #	Volumetric Water Content (%)	Period	Description/Details
1	107%	1.33	
2	80%	1.23	
3	26%	0.95	
4	19%	0.91	
5	2%	0.78	
6	0%	0.77	
7	0%	0.77	
8	0%	0.77	
9	0%	0.77	
10	0%	0.77	
11	0%	0.77	
12	2%	0.78	
13	2%	0.79	
14	1%	0.78	
15	1%	0.77	
16	0%	0.77	
17	0%	0.77	
18	0%	0.77	
19	1%	0.78	
20	0%	0.77	
21	0%	0.77	
22	0%	0.77	
23	0%	0.77	
24	3%	0.79	
25	0%	0.77	
26	0%	0.77	
27	0%	0.77	
28	0%	0.77	
29	1%	0.78	
30	2%	0.78	
31	0%	0.77	
32	0%	0.77	
33	1%	0.77	
34	0%	0.77	



35	4%	0.80
36	4%	0.80
37	3%	0.79
38	4%	0.80
39	2%	0.79
40	6%	0.81
41	3%	0.80
42	4%	0.80
43	0%	0.77
44	5%	0.81
45	4%	0.80
46	5%	0.81
47	4%	0.80
48	4%	0.80
49	3%	0.79
50	4%	0.80
	5%	0.81
	5%	0.81
	5%	0.81
	3%	0.79
	6%	0.82
	2%	0.79
	4%	0.80
	10%	0.85
	3%	0.80
	19%	0.91
	21%	0.92
	39%	1.03
	76%	1.21
	78%	1.21
	109%	1.34
	100%	1.31

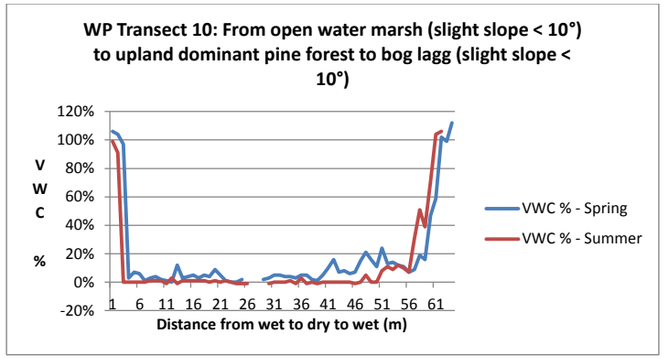
35	2%	0.79
36	2%	0.78
37	1%	0.78
38	0%	0.77
39	1%	0.77
40	0%	0.77
41	1%	0.78
42	1%	0.77
43	2%	0.79
44	3%	0.78
45	7%	0.82
46	3%	0.78
47	0%	0.77
48	1%	0.78
49	0%	0.77
50	0%	0.77
51	1%	0.78
52	0%	0.77
53	0%	0.77
	1%	0.78
	0%	0.77
	1%	0.78
	4%	0.80
	1%	0.77
	1%	0.78
	3%	0.79
	1%	0.77
	1%	0.77
	0%	0.77
	0%	0.77
	1%	0.77
	1%	0.78
	8%	0.84
	34%	1.00
	50%	1.09
	72%	1.19
	77%	1.21
	96%	1.29
	103%	1.32

Date:	Friday, May 07, 2010	Spring Field Research
Location:	Westport (Jevons Property)	
Weather:	Rain (.1cm); High 12C; Low 3C; Rain for previous 4 days - ~1.4cm)	
Description:	Starting in beaver pond (open water marsh) moving through a homogenous white pine stand over to bog (which is shrubby at the edge of the lagg)	
Azimuth (Bearing of Transect):		
Photo #s	3004-3009	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	106%	1.33	
2	104%	1.33	
3	97%	1.29	
4	3%	0.79	
5	7%	0.82	
6	6%	0.82	
7	1%	0.77	
8	3%	0.79	
9	4%	0.80	
10	2%	0.79	
11	1%	0.77	
12	0%	0.77	
13	12%	0.86	
14	3%	0.80	
15	4%	0.80	
16	5%	0.81	
17	3%	0.80	
18	5%	0.81	
19	4%	0.80	
20	9%	0.84	
21	5%	0.81	
22	1%	0.78	
23	0%	0.77	
24	0%	0.77	
25	2%	0.79	
26			rock
27			rock
28			rock
29	2%	0.78	
30	3%	0.80	
31	5%	0.81	
32	5%	0.81	
33	4%	0.80	
34	4%	0.80	
35	3%	0.79	
36	5%	0.81	

Date:	Monday, July 12, 2010	Summer Field Research
Location:	Westport (Jevons Property)	
Weather:	Rain (0.1cm); High 30C; low 14C); no rain the previous days	
Description:	Starts in VP 76 (Open water marsh) moving up slight slope to upland) down slight slope to bog lagg (some deciduous) end point is VP 77	
Azimuth (Bearing of Transect):		
Photo #s	3799 - 3804	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	99%	1.30	
2	91%	1.27	
3	0%	0.77	
4	0%	0.77	
5	0%	0.77	
6	0%	0.77	
7	0%	0.77	
8	1%	0.77	
9	1%	0.77	
10	1%	0.77	
11	-1%	0.76	
12	3%	0.80	
13	-1%	0.76	
14	1%	0.78	
15	1%	0.78	
16	1%	0.77	
17	1%	0.77	
18	1%	0.76	
19	0%	0.77	
20	1%	0.77	
21	0%	0.77	
22	1%	0.77	
23	0%	0.76	
24	-1%	0.76	
25	-1%	0.76	
26	-1%	0.76	
27			rock
28			rock
29			rock
30	-1%	0.76	
31	0%	0.77	
32	0%	0.77	
33	0%	0.77	
34	1%	0.78	
35	-1%	0.76	
36	3%	0.79	



37	5%	0.81
38	2%	0.79
39	1%	0.78
40	5%	0.81
41	10%	0.85
42	16%	0.89
43	7%	0.82
44	8%	0.84
45	6%	0.82
46	7%	0.83
47	15%	0.88
48	21%	0.92
49	16%	0.89
50	11%	0.86
	24%	0.94
	13%	0.87
	14%	0.88
	12%	0.86
	11%	0.86
	7%	0.83
	9%	0.84
	19%	0.91
	16%	0.89
	47%	1.07
	59%	1.13
	102%	1.31
	99%	1.30
	112%	1.35

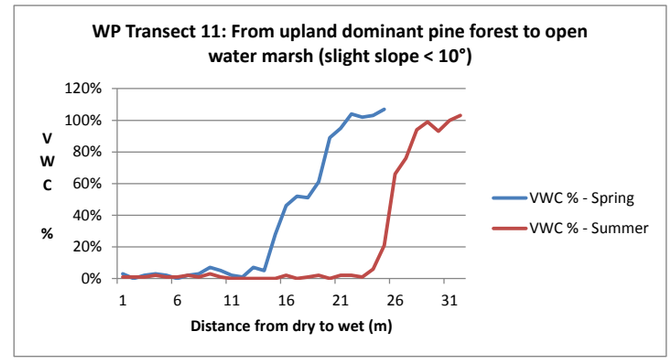
37	-1%	0.76
38	0%	0.76
39	-1%	0.76
40	0%	0.77
41	0%	0.76
42	0%	0.77
43	0%	0.77
44	0%	0.77
45	0%	0.77
46	-1%	0.76
47	0%	0.77
48	5%	0.81
49	0%	0.77
50	0%	0.76
51	8%	0.84
52	11%	0.85
53	9%	0.84
	12%	0.87
	10%	0.85
	7%	0.83
	31%	0.99
	51%	1.09
	39%	1.03
	71%	1.18
	104%	1.32
	106%	1.37

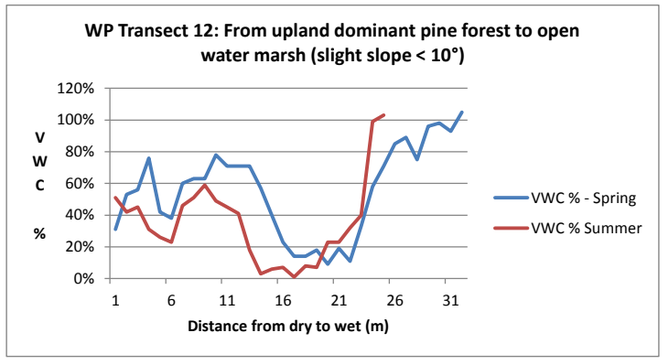
Date:	Friday, May 07, 2010	Spring Field Research
Location:	Westport (Jevons Property)	
Weather:	Rain (.1cm); High 12C; Low 3C; Rain for previous 4 days - ~1.4cm)	
Description:	Transect from an rocky pine dominated but with maples mixed forest stand grading into open water marsh; saplings and tall shrubs at the edge of the wetland	
Azimuth (Bearing of Transect):		
Photo #s	3010	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	3%	0.80	
2	0%	0.77	
3	2%	0.79	
4	3%	0.79	
5	2%	0.79	
6	0%	0.77	
7	2%	0.78	
8	3%	0.79	
9	7%	0.82	
10	5%	0.81	
11	2%	0.79	
12	1%	0.77	
13	7%	0.81	
14	5%	0.81	
15	28%	0.96	
16	46%	1.07	
17	52%	1.10	
18	51%	1.09	
19	61%	1.14	
20	89%	1.26	
21	95%	1.29	
22	104%	1.32	
23	102%	1.31	
24	103%	1.32	
25	107%	1.33	
26			
27			
28			
29			
30			
31			
32			

Date:	Monday, July 12, 2010	Summer Field Research
Location:	Westport (Jevons Property)	
Weather:	Rain (0.1cm); High 30C; low 14C); no rain the previous days	
Description:	Goes into VP 75 (start point is the same as spring transect but end point is SMT 11B)	
Azimuth (Bearing of Transect):		
Photo #s	3797 - 3798	

Point #	Volumetric Water Content (%)	Period	Description/Details
1	1%	0.77	
2	1%	0.77	
3	1%	0.78	
4	2%	0.78	
5	1%	0.77	
6	1%	0.77	
7	2%	0.78	
8	1%	0.76	
9	3%	0.79	
10	1%	0.78	
11	0%	0.77	
12	0%	0.77	
13	0%	0.77	
14	0%	0.77	
15	0%	0.77	
16	2%	0.78	
17	0%	0.77	
18	1%	0.78	
19	2%	0.79	
20	0%	0.78	
21	2%	0.78	
22	2%	0.78	
23	1%	0.78	
24	6%	0.81	
25	21%	0.91	
26	66%	1.16	
27	76%	1.21	
28	94%	1.28	
29	99%	1.30	
30	93%	1.28	
31	100%	1.30	
32	103%	1.31	



Date:	Friday, May 07, 2010	Spring Field Research		
Location:	Westport (Jevons Property)			
Weather:	Rain (.1cm); High 12C; Low 3C; Rain for previous 4 days - ~1.4cm)			
Description:	From mixed forest stand into open water grassy marsh; on very rocky ground and a very short transect (slope ~ 5°)			
Azimuth (Bearing of Transect):				
Photo #s	3016 - 3020			
Point #	Volumetric Water Content (%)		Period	Description/Details
1		31%	0.98	
2		53%	1.10	
3		56%	1.12	
4		76%	1.21	
5		42%	1.04	
6		38%	1.03	
7		60%	1.13	
8		63%	1.15	
9		63%	1.15	
10		78%	1.22	
11		71%	1.18	
12		71%	1.18	
13		71%	1.18	
14		57%	1.12	
15		40%	1.09	
16		23%	0.93	
17		14%	0.88	
18		14%	0.87	
19		18%	0.90	
20		9%	0.84	
21		19%	0.91	
22		11%	0.86	
23		33%	1.00	
24		58%	1.12	
25		71%	1.18	
26		85%	1.24	
27		89%	1.26	
28		75%	1.20	
29		96%	1.29	
30		98%	1.30	
31		93%	1.28	
32		105%	1.32	

Date:	Monday, July 12, 2010	Summer Field Research		
Location:	Westport (Jevons Property)			
Weather:	Rain (0.1cm); High 30C; low 14C); no rain the previous days			
Description:	Starts in VP 69 ends in VP 70; exceptionally short slope			
Azimuth (Bearing of Transect):				
Photo #s	3782 - 3785			
Point #	Volumetric Water Content (%)		Period	Description/Details
1		51%	1.09	
2		42%	1.05	
3		45%	1.06	
4		31%	0.98	
5		26%	0.95	
6		23%	0.93	
7		46%	1.06	
8		51%	1.09	
9		59%	1.13	
10		49%	1.08	
11		45%	1.06	
12		41%	1.04	
13		18%	0.90	
14		3%	0.79	
15		6%	0.81	
16		7%	0.83	
17		1%	0.78	
18		8%	0.84	
19		7%	0.83	
20		23%	0.93	
21		23%	0.93	
22		32%	0.99	
23		40%	0.03	
24		99%	1.30	
25		103%	1.31	
26				
27				
28				
29				
30				
31				
32