

CORRECTED
APPENDIX B EXAMPLE CALCUATIONS
VEGETATION FIELD MANUAL

Falling Tree Vinton Co. 23 July 2002
Buttonbush swamp; beaver Impoundment
Western Allegheny Plateau

Plot 20 x 40 meters, 4 intensive modules,
Plot area: 0.08 ha

1ST DATA REDUCTION PRESENCE - FIELD DATA SHEET 1

		mod#	corner#	mod#	corner#	mod#	corner#	mod#	corner#	mod#	corner#	mod#	corner#	mod#	corner#	mod#	corner#	mod#	corner#
	voucher #	2	2	2	4	3	2	3	4	8	2	8	4	9	2	9	4	R	R
		depth	cover	depth	cover	depth	cover	depth	cover	depth	cover	depth	cover	depth	cover	depth	cover	depth	cover
Alnus serrulata	2182			1	5			1	5										
Ilex verticillata				2	6			2	4										
Cephalanthus occidentalis				2	5			2	7	4		4	9	4		4	8		
Bidens sp.	prob. discoidea			1	3	4	3			2		3	4	4		3	3		
unknown grass sp.				1	4	2	3												
Moss sp. #1	2184 on buttonbush			1	3			2	2										
Lemna minor	2180			3	2	3	2			2		3	3			1	3		
Utricularia gibba	2181	4	8			4		2	8			1	5	4		3	6		
Betula nigra	2183			3	4	4		2	6										
Galium tinctorium		3	3							3		2	3			2	3		
Polygonum sp.				1	2														
Rosa palustris				1	3														
Osmunda regalis				1	4			4	5										
Sparganium americanum				1	2														
Carex sp.	no fruits			1	1														
Triadenum sp.	see # 2176			1	1														
Moss sp. #2	2185 on buttonbush									3		3	3	2	3				
Moss sp. #3	2186 on buttonbush									3		2	3	2	2				
Juncus effusus								2	2										
Acer rubrum																			
Spiraea tomentosa																		R	2
Scirpus cyperinus																		R	2
Carex crinita	crinita																	R	1
Boehmeria cylindrica																		R	1
Smilax sp.																		R	1
Thelypteris noveboracensis																		R	2

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2ND DATA REDUCTION - FIELD DATA SHEET 1

species	authority	cover1	cover2	cover3	cover4	cover5	cover6	cover7	cover8	cover9	cover10	total cover	relative cover
Acer rubrum	L.	*	*	*	*	*	*	*	*	*	*	*	*
Alnus serrulata	(Aiton) Willd.	*	0.075	*	0.075	*	*	*	*	*	*	0.15	3.4204%
Betula nigra	L.	*	0.035	*	0.175	*	*	*	*	*	*	0.21	4.7885%
Bidens sp.	ND	*	0.015	0.015	*	*	0.035	*	0.015	*	*	0.08	1.8242%
Boehmeria cylindrica	(L.) Sw.	*	*	*	*	*	*	*	*	0.0001	*	0.0001	0.0023%
Bryophyte	ND	*	0.015	*	0.005	*	0.015	0.015	*	0.015	0.005	0.07	1.5962%
Carex crinita	Lam.	*	*	*	*	*	*	*	*	0.0001	*	0.0001	0.0023%
Carex sp.	ND	*	0.0001	*	*	*	*	*	*	*	*	0.0001	0.0023%
Cephalanthus occidentalis	L.	*	0.075	*	0.375	*	0.85	*	0.625	*	*	1.925	43.8947%
Galium tinctorium	(L.) Scop.	0.015	*	*	*	*	0.015	*	0.015	*	*	0.045	1.0261%
Ilex verticillata	(L.) A. Gray	*	0.175	*	0.035	*	*	*	*	*	*	0.21	4.7885%
Juncus effusus	L.	*	*	*	0.005	*	*	*	*	*	*	0.005	0.1140%
Lemna minor	L.	*	0.005	0.005	*	*	0.015	*	0.015	*	*	0.04	0.9121%
Osmunda regalis	L.	*	0.035	*	0.075	*	*	*	*	*	*	0.11	2.5083%
Polygonum sp.	ND	*	0.005	*	*	*	*	*	*	*	*	0.005	0.1140%
Rosa palustris	Marshall	*	0.015	*	*	*	*	*	*	*	*	0.015	0.3420%
Scirpus cyperinus	(L.) Kunth	*	*	*	*	*	*	*	*	0.005	*	0.005	0.1140%
Smilax sp.	ND	*	*	*	*	*	*	*	*	0.0001	*	0.0001	0.0023%
Sparganium americanum	Nutt.	*	0.005	*	*	*	*	*	*	*	*	0.005	0.1140%
Spiraea tomentosa	L.	*	*	*	*	*	*	*	*	0.005	*	0.005	0.1140%
Thelypteris noveboracensis	(L.) Nieuwl.	*	*	*	*	*	*	*	*	0.005	*	0.005	0.1140%
Triadenum sp.	ND	*	0.0001	*	*	*	*	*	*	*	*	0.0001	0.0023%
Utricularia gibba	L.	0.625	*	*	0.625	*	0.075	*	0.175	*	*	1.5	34.2036%
												4.3855	

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3RD DATA REDUCTION - FIELD DATA SHEET 1

species	citation	genus code	family	family code	C of C	lifeform	shade tolerance	habit	native	group	4 indicator	total cover	relative cover
Acer rubrum	L.	other	Aceraceae	other	2	tree	tree	WOODY	native	dicot	FAC	*	*
Alnus serrulata	(Aiton) Willd.	other	Betulaceae	other	6	shrub	full	WOODY	native	dicot	OBL	0.1500	0.03420
Betula nigra	L.	other	Betulaceae	other	9	tree	tree	WOODY	native	dicot	FACW	0.2100	0.04789
Bidens sp.	ND	other	Asteraceae	other	*	forb	full	AN	ND	dicot	ND	0.0800	0.01824
Boehmeria cylindrica	(L.) Sw.	other	Urticaceae	other	4	forb	shade	PE	native	dicot	FACW	0.0001	0.00002
Bryophyte	ND	other	ND	moss	*	moss	bryophyte	ND	ND	bryophyte	ND	0.0700	0.01596
Carex crinita var. crinita	Lam.	carex	Cyperaceae	cyper	3	sedge	shade	PE	native	monocot	OBL	0.0001	0.00002
Carex sp.	ND	carex	Cyperaceae	cyper	*	sedge	ND	PE	native	monocot	ND	0.0001	0.00002
Cephalanthus occidentalis	L.	cephalanthus	Rubiaceae	other	6	shrub	full	WOODY	native	dicot	OBL	1.9250	0.43895
Galium tinctorium	(L.) Scop.	other	Rubiaceae	other	4	forb	full	PE	native	dicot	OBL	0.0450	0.01026
Ilex verticillata	(L.) A. Gray	other	Aquifoliaceae	other	6	shrub	shade	WOODY	native	dicot	FACW	0.2100	0.04789
Juncus effusus	L.	other	Juncaceae	other	1	forb	full	PE	native	monocot	FACW	0.0050	0.00114
Lemna minor	L.	other	Lemnaceae	other	3	forb	full	AN	native	monocot	OBL	0.0400	0.00912
Osmunda regalis	L.	other	Osmundaceae	other	7	fern	partial	PE	native	svp	OBL	0.1100	0.02508
Polygonum sp.	ND	other	Polygonaceae	other	*	forb	ND	ND	ND	dicot	ND	0.0050	0.00114
Rosa palustris	Marshall	other	Rosaceae	other	5	shrub	full	WOODY	native	dicot	OBL	0.0150	0.00342
Scirpus cyperinus	(L.) Kunth	other	Cyperaceae	cyper	1	sedge	full	PE	native	monocot	FACW	0.0050	0.00114
Smilax sp.	ND	other	Smilacaceae	other	*	ND	ND	PE	native	monocot	ND	0.0001	0.00002
Sparganium americanum	Nutt.	other	Sparganiaceae	other	6	forb	full	PE	native	monocot	OBL	0.0050	0.00114
Spiraea tomentosa	L.	other	Rosaceae	other	4	shrub	full	WOODY	native	dicot	FACW	0.0050	0.00114
Thelypteris noveboracensis	(L.) Nieuwl.	other	Thelypteridaceae	other	4	fern	shade	PE	native	svp	FAC	0.0050	0.00114
Triadenum sp.	ND	other	Clusiaceae	other	*	forb	ND	PE	native	dicot	OBL	0.0001	0.00002
Utricularia gibba	L.	other	Lentibulariaceae	other	8	forb	full	PE	native	dicot	OBL	1.5000	0.34204
					sum CofC =	79						TOTAL COVER ALL SPECIES AT SITE	4.3855
					FQAI N =	17							
					FQAI score =	19.2							

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1ST REDUCTION WOODY STEM - FIELD DATA SHEET 2

mod #	species	vouch #	area (ha)	%subsample	size class (cm) woody stems >1m												
					0	1	2	3	4	5	6	7	8	9	10	>40 (record each tree)	
2	Ilex verticillata		0.1	0.50	7												
2	Betula nigra		0.1	0.50		4											
2	Alnus serrulata		0.1	0.50		1	2	1									
2	Cephalanthus occidentalis		0.1	0.50	2												
2	Standing dead		0.1	0.50							2	1					
1	Alnus serrulata		0.1	0.50	7												
1	Standing dead		0.1	0.50						1							
1	Acer rubrum		0.1	0.50						2	3						
1	Cephalanthus occidentalis		0.1	0.50	2												
3	Acer rubrum		0.1	0.50												1	42.5
3	Ilex verticillata		0.1	0.50	3												
3	Standing dead		0.1	0.50							1						
3	Betula nigra		0.1	0.50		6											
3	Alnus serrulata		0.1	0.50	1												
3	Cephalanthus occidentalis		0.1	0.50	5												
4	Cephalanthus occidentalis		0.1	0.50	7												
4	Alnus serrulata		0.1	0.50	6												
4	Betula nigra		0.1	0.50		3											
4	Standing dead		0.1	0.50										1			
4	Acer rubrum		0.1	0.50			3	1	2								
5	Acer rubrum		0.1	0.50		3			4		1			1			
5	Alnus serrulata		0.1	0.50	4			1									
5	Ilex verticillata		0.1	0.50	4												
5	Standing dead		0.1	0.50													51
5	Cephalanthus occidentalis		0.1	0.50	3												
5	Betula nigra		0.1	0.50		11		1									

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2nd REDUCTION WOODY STEM - FIELD DATA SHEET 2

species	shade spp	lifeform	indicator	area (ha)	%subsample	clumps	0-<1	1-<2.5	2.5-<5	5-<10	10-<15	15-<20	20-<25	25-<30	30-<35	35-<40	>40 all	>40-1
Acer rubrum	tree	tree	FAC	0.08	0.50	c0	c1	c2	c3	c4	c5	c6	c7	c8	c9	c10	1	42.5
Alnus serrulata	full sun	shrub	OBL	0.08	0.50	18	1	2	2	0	0	0	0	0	0	0	0	0
Betula nigra	tree	tree	FACW	0.08	0.50	24	0	0	1	0	0	0	0	0	0	0	0	0
Cephalanthus occidentalis	full sun	shrub	OBL	0.08	0.50	19	0	0	0	0	0	0	0	0	0	0	0	0
Ilex verticillata	shade	shrub	FACW	0.08	0.50	14	0	0	0	0	0	0	0	0	0	0	0	0
Standing dead	dead	ND	ND	0.08	0.50	0	0	0	0	0	1	3	1	1	0	0	1	51

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3rd REDUCTION WOODY STEM - FIELD DATA SHEET 2

species	class frequency	relative class freq	c5 density stems/ha	c6 density stems/ha	c7 density stems/ha	c5 relative density	c6 relative density	c7 relative density	relative density	dominance m2/ha	relative dominance	importance value
Acer rubrum	9	0.750	50	100	0	0.01818	0.03636	0.00000	0.20000	0.4608	0.53961	0.497
Alnus serrulata	4	0.333	0	0	0	0.00000	0.00000	0.00000	0.20909	0.0031	0.00359	0.182
Betula nigra	2	0.167	0	0	0	0.00000	0.00000	0.00000	0.22727	0.0016	0.00184	0.132
Cephalanthus occidentalis	1	0.083	0	0	0	0.00000	0.00000	0.00000	0.17273	0.0004	0.00044	0.085
Ilex verticillata	1	0.083	0	0	0	0.00000	0.00000	0.00000	0.12727	0.0003	0.00032	0.070
Standing dead	5	0.417	25	75	25	0.00909	0.02727	0.00909	0.06364	0.3879	0.45420	0.312

metric value

Relative density of C5-C7 stems(pole timber metric) = 0.099
subcanopy IV metric = 0.0703
canopy IV metric = 0.314

VIBI SUMMARY TABLE

	value	score
Carex metric =	2	3
Dicot metric =	11	3
Shrub metric =	5	10
Hydrophyte metric =	16	7
SVP metric =	2	7
FQAI score metric =	19.2	7
%bryophyte metric	0.016	3
%tolerant metric =	0.002	10
%sensitive metric =	0.464	10
subcanopy IV metric =	0.070	7
VIBI score =		67