CLEVELAND METROPARKS Plant Community Assessment Program: Quality Control Form	(Cleveland Metroparks
10	-(

Project Label:	РСАР	Plot No	: 1093 Date Sampled: 8/19/15 Lead: CKM
			Comment required if item answer is NO
Parking/Access outsi	de of Park Boundaries:	Y (N)	If yes, write details in Comments section below
Field journals comple	eted	(Y) N	
Site sketch made on	1:3000 map?	N (V)	(2.3%) (2.3%)
Check cover page	X-axis Bearing of plot recorded	(Y) N	
	GPS coords. Recorded	N Q	
	North direction recorded	N (C)	
	Photographs taken?	(Y) N	
	Relocated Pins Mapped	Y N	
Plot No., Date agreer	nent on all pages?	W N	
Header data complete		₩ N	
Cover classes recorde	ed in all Intensive modules	W N	
Browse Level By Spe	ecies	(Y) N	
Woody stem quality	control check	N (X	Check every line and cross check with the Tree Cover Sheet
Invasive plant quality	control check	XW	MA
Ash trees mapped		(V) N	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Completed Forest Pe	st/Pathogen Datasheet	Ø N	
Cover by Strata? (cor	ıfirm cover type)	(Y) N	
Soil samples collecte	d with matching plot #.	YN	NA
Cross check 2010 int	formation	(Y) N	Highlight any changes from 2010 information
Vouchers labeled on	datasheet with initials and number	N (Y)	
Vouchers labeled on	collection bag	(Y) N	
Pink flags removed	Allege we have a section of the sect	Ви	
Data sheet QA before	e leaving site?	(Y)N	
Common equipment	returned to tub.	N	
Data sheets scanned?			Enter date to left
Final data sheets scar	nned?	3	Enter date to left
Buffer Widths measu	red?	YN	
Web Soil Survey	1	YN	29/5110
Voucher Location	Refrigerator	YN	
(# vouchers collected)	Press (#)		Enter number to left
CKM386-	Drier	YN	
760	Identified	Y N	
388	Mounted	Y N	
<u> </u>	Thrown away	Y N	

GRTS point verificat	tion: Is plot sampleable?
□ Yes	Original GRTS point is sampleable
□ No	Original GRTS point lands in a non-sampleable area (fill in category below)
	Point falls in a water (i.e. river, lake)
	Managed mowed area (i.e. golf course, picnic area, right-of-way)
	□ Paved area (i.e. parkinglot, road)
	Unsafe to sample (i.e. steep slope)
	Other Other

Additional Comments:
8/17/15 - All Pins found

# F XX = 2

CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet SAMPLING QUALITY\* PLOT NOT SAMPLED: Plot Name: Stingers on the GENERAL INFORMATION Minimum required fields in Bold and Underlined TAXONOMIC STANDARD TAXONOMIC ACCURACY Plot No.: vascul Effort Level: Humed Perm. water Roles: Co-leader, Asst., Guide, Owner, Taxonomist, etc. nd date (if > 1 day): roject Name: 02 BR 2015 Accurate Very thorough ate (mm/dd/yyyy): 😽 Level 5 (nested corners sampled) Level 4 (no nested corners sampled) □ Paved □ Slope □ Safety modera. may still provide good sampling. Hurried plots how much effort put into subjective evaluation of Pub Date: Role\*\* Plot leader low o Other not smp 1998 State Camera No.: GPS location in plot x=0 to 5, y=-1,0,+1) Check one: Public data Private Date Plot placement: XGRTS Photo Nos.: (4846 GPS File Name: Source of coordinates o MAP o Fuzz 100m o Fuzz 250m o Fuzz 500m Data Confidentiality: Quadrangle: Non-this ld Depth: (1-5): Plot size for cover data: Coord. Accuracy: Datum: ■ NAD83/WGS84 □ NAD27 Other (specify ■ Lat/Long □ UTM □ StatePlane Coordinate system: If data not public why? Jak Mill Historic LOCATION atitude: Landowner: (M) Local Place Names: Suckeye Iral ntensive modules: 2, 3, 8, 9 \*Definitions and values in CM PCAP FOM v. 1.0 and CVS Field Guide Random | Stratified Random | Transect component X-axis Bearing of plot: y = 0 (base of plot x=0, y=0) 693 58172 X m o ft County: Luya hoga deg o deg mir □ Representative Coord. Units ■ GPS 254] ° (EDIT IF MODIFIED (hectares) second is several Rd. There two grave) pull offs.

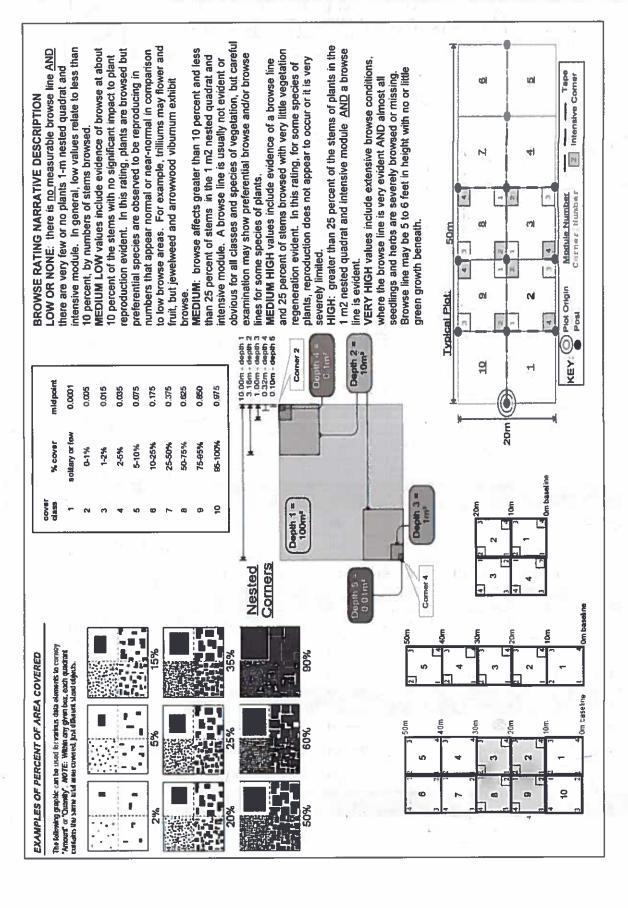
NW of Jaile Mill (bllow houses), content), Rationale (why here), and Veg Characterization (description of community, 9 2.10 module plot: by Tulip and Maple. The shrub layer is Rationale: GRTS dominants, strata, BROWSE). Additional notes in space on back NOTES: Include Layout (any unusual shape details), Location (directions and landscape NW of interrection is Veg Characterization: The canopy is dominated dominated by Maple. Location: Jainte Mill Historic Distric is Layout: 2x5 Ney: Plot origin sparse and dominated by Ash seedlings. Som distance #10 <u>\*\*</u> GPS location V Western woods 8 悉 hundred ket fur ther a north and from this second spot the flat photo taken, with direction Rverview Rd and of son the east side. #8 The herb layer is MOODS The Arst ~ 700 At ŧ #7 KNETVICE Page 1/6/12 location of permanent posts OVER oca ed THE ൊ #6 。形长汉 115 250 m The plot to the Strip SW arrd. Fillow . general Continued. これとうる ~700 m

grassland

COMMUNITY NAME:  COMMUN	CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet PCAP Project Label: $\frac{PCAP}{PCAP}$ Project Label:	munity Assessment F PCAP	Program - Background Data Sheet Project Name: 028R2015	und Data Ser Co. O. C. BR	heet 2015		Plot No.: 1093	1043	(Actumination parts   Page 2 of 2
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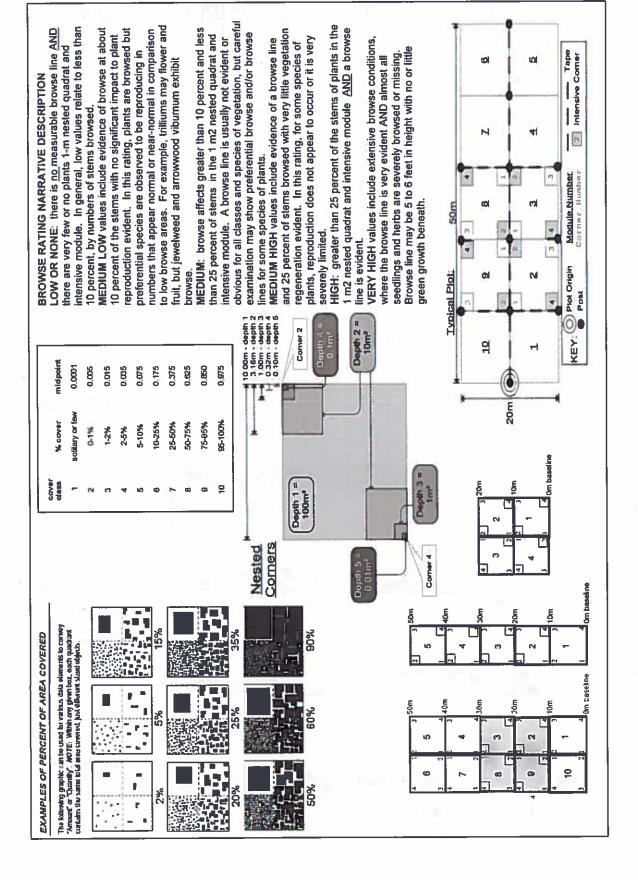
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158-05847	71	4	,	<del> </del>			-		X ckm386	SRF 17-16-15			CH847 - 648	France						2"	HIT STATE	-	c Voucher#	Minued litter (hare litter)	%unvegetated open water	%open water	intensive module:	Estimate for each			Intensive modules:	ment Program Speci	
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				·																			depth		İ		depth	20	mod			1	7

Conopholis americana



CLEVELAND METROPARKS Plant Community Assessment Program Species Cover Data Sheet Strata - Cov. entire plot Cleveland Metroparks Total modules: Project Label: S H (F)(A) Br . 09 Everythous alatus Parthenoissus Panenculus Cornus 50 Polystichum acrostichoides Hackelia Virginiana Querus alba GIVERTIA eiguid ambar styraciflua describe amount of browse per species over δ estrain prainice Arex MUS SO Br = Browse Level. Use cover classes to VEWS SD. priodencion tulipitara V550 SWODE Species entire plot stricto SIMPLEX seeding recurvatis Munque to ດ Intensive modules: 4 %unveg. ground (bare soil) %unvegetated open water intensive module: Estimate for each %unveg. litter (bare litter) CKM387 SRE12-16-15 Project name: 02 BR2015 Voucher # %open water depth 3 H 2 cov depth ş Plot configuration: 8 ş depth B Plot no.: cov i depth mod 2 x 5 1093 corner mod 8 Ş depth depth æ Ş ğ tomer mod depth depth O Plot area (ha): comer 9 ş N Page 2 of Z N ş comer ş ş depth N W

glowers, lax



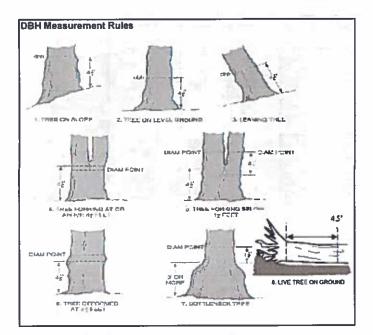
Species (X) 2 3 8 9  Iriodendron tuliortera (Voucher# XXXXX)  Strya intrainia (XXXXXX)  Leer rubrum (XXXXXXX)  Leer saccharum (XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	% COVER	Sample Property Control	Prensence	mod	med mod	под	
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						8.69						49.3									53.2			11 >40 (record each tree)		Sieveland Nebropaiks

After rubrum



#### **Woody Stem Deer Browse**

Record the number of stems/plants between 0.5-1.0 meters tall that exhibit evidence of this years deer browse.

Record using the tally system from 1 to













## **ASH CANOPY CONDITION**

- 1. Healthy, full canopy: A healthy ash canopy is normally thinner than many other trees such as maple.
- 2. Thinning canopy: There aren't as many leaves as there ought to be, but all top branches exposed to sunlight have leaves.
- 3. Dieback: Canopy is thinning and some top branches exposed to sunlight are dead (have no leaves). Lower branches, not exposed to sunlight, die naturally and are not considered.
- 4. >50% Dieback: The canopy has less than half of the leaves that should be there and/or half of the top branches are dead.
- 5. Dead canopy: No leaves remain in the canopy portion of the tree. It still counts as a 5 even if there are epicormic sprouts below the canopy (lowest branch) on the trunk.



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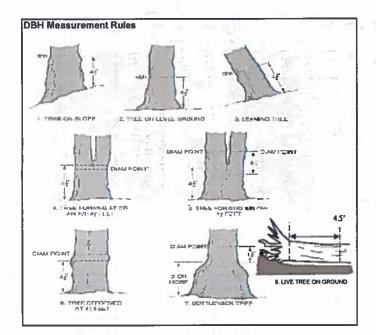
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# ASH CANOPY BREAKUP CONDITION (for dead trees):

(if an ash receives a score of 5 (dead) under canopy condition it must also receive a breakup condition rank as described below)

- A: All main branches contain fine twigs (newly dead).
- B: Over 50% of main branches have fine twigs.
- C: Less than 50% of main branches have fine twigs.
- D: Stem still standing and lertiary main branches present.
- E: Central stem still standing.

CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet 7 Pinus Smoons Attached 10 NO Browse OSTANDING DEAD Fraziones sp. Acer Scicharum Ace rubrum Explain subsample (additional room on back): Ace Suchann STANDING DEAD Linio dendron tulio film Acer Saccharum Fraxinus sp. Lirio dendron thip file STANDING DEAD frunus sentina Arex rubnim Acer Sp. Vitis sp. Frazinus Sp. Lin odendron tulipitus Acer saccharum Euonymus Allighus Ace rubnum Acer Soccharum iscockacima tulipitas species Project Label: voucher# 4 browsed 0-1.4m # stems or super % sub Project Name: OABRAOIS Plot No.: 1093 shrub size class (cm) woody stems >1.4m 0×1 1-<2.5 . 2.5-<5 7 ļĮ 5-<10 0 . \* 8 6 10-<15 . • . X • 15 - <20 • 20 - <25 Page: 25 - <30 30 - <35 • 으 Opereland Hetroparks 35 - <40 5 43.2 >40 (record each tree) 40.2 40.2



## Woody Stem Deer Browse

Record the number of stems/plants between 0.5-1.0 meters tall that exhibit evidence of this years deer browse.

Record using the tally system from 1 to













# ASH CANOPY CONDITION

- 1. Healthy, full canopy: A healthy ash canopy is normally thinner than many other trees such as maple.
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- 3. Dieback: Canopy is thinning and some top branches exposed to sunlight are dead (have no leaves). Lower branches, not exposed to sunlight, die naturally and are not considered.
- 4. >50% Dieback: The canopy has less than half of the leaves that should be there and/or half of the top branches are dead.
- 5. Dead canopy: No leaves remain in the canopy portion of the tree. It still counts as a 5 even if there are epicormic sprouts below the canopy (lowest branch) on the trunk.



В

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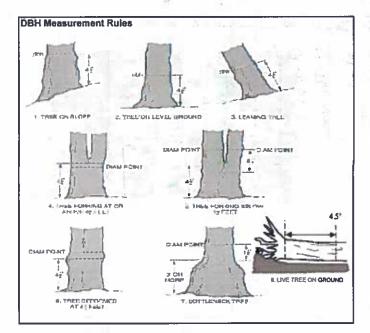
E

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- A: All main branches contain fine twigs (newly dead).
- B: Over 50% of main branches have fine twigs.
- C: Less than 50% of main branches have fine twigs.
- D: Stem still standing and tertiary main branches present.
- E: Central stem still standing.

10'd as rybra 00 CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet 8 Explain subsample (additional room on back): CHECK PRICARBIE Quercus nubra Acer sacchanin Overcus palustris Quercis Valitina STANDING DEAD Heridambar Styrasoth No Browse STANIDINHOTERD Acer rubound Acer Sp. Lindendron William Libuston & Vyigary Acer rubrum Nyssa silvatica Project Label: PCAP voucher# # sterns 0-1.4m 4 or super % sub Project Name: 02 BK 2015 shrub clumps size class (cm) woody stems >1.4m 7 1-<2.5 9 2.5-45 đ Plot No.: 1093 0 . Page: • • è 30 - <35 잌 W Geneland Metroparks 6 判3 >40 (record each tree) Ξ



#### Woody Stem Deer Browse

Record the number of stems/plants between 0.5-1.0 meters tall that exhibit evidence of this years deer browse.

Record using the tally system from 1 to 1













# ASH CANOPY CONDITION

- 1. Healthy, full canopy: A healthy ash canopy is normally thinner than many other trees such as maple.
- 2. Thinning canopy: There aren't as many leaves as there ought to be, but all top branches exposed to sunlight have leaves.
- 3. Dieback: Canopy is thinning and some top branches exposed to sunlight are dead (have no leaves). Lower branches, not exposed to sunlight, die naturally and are not considered.
- 4. >50% Dieback: The canopy has less than half of the leaves that should be there and/or half of the top branches are dead.
- 5. Dead canopy: No leaves remain in the canopy portion of the tree. It still counts as a 5 even if there are epicormic sprouts below the canopy (lowest branch) on the trunk.



В

C

D

E

## ASH CANOPY BREAKUP CONDITION (for dead trees):

(If an ash receives a score of 5 (dead) under canopy condition it must also receive a breakup condition rank as described below)

- A: All main branches contain fine twigs (newly dead).
- B: Over 50% of main branches have fine twigs.
- C: Less than 50% of main branches have fine twigs.
- D: Stem still standing and tertiary main branches present.
- E: Central stem still standing.

If Ash Condition scores 5 (dead) provide breakup score (A-E)
 Count EAB exit holes 1.25m2 x ≥1.5m
 Woodpecker and epicormic marked present (1) or absent (0)

9		1																						1	Module
25	24	23	23	22	8	₩	6	7	6	ö	<u>=</u>	햐	12	=	6	0	00	7	6	ű	*	ω	N	-	Tree ID.
																								NONT CARE	Species
																									Dead
				-																					o
															111										Voucher #
																									(cm)
																							1 7		HBQ HEQ
																									Ash condition
																Ī									*Dead condition
																									# Euit Epic
					3																				ormic Sent
																									Woodpecker holes
	1	14.18	-	1			ا ا				B	seli	10												

# CLEVELAND METROPARKS Plant Community Assessment Program: Invasive Species Survey



	I Baraldanasanas				100000	cae	1
Tier 1: Early detection/	Rapid response	200	_	sence	- nac	GPS	
	I	NE	SE	SW	NW		Presence
Microstegium vimineum	Japanese stiltgrass	-	<del> </del>	-	$\vdash$		X: yes
lanunculus ficaria	Lesser Celandine	-	+	-	$\vdash$		-
	Black Swallow-wort	+	+-	-	$\vdash$		-
	Flowering Rush	+	+-		$\vdash$		-
leracleum mantegazzianum	Giant Hogweed						
Tier 2: Assess a	s Needed			Plants		comments	[n a - 1 - 1
		NE	SE	SW	NW		# of Plants
cer platanoides	Norway Maple	-	-		$\vdash$		1: 1-10
illanthus altissima	Tree of Heaven		╄	<u> </u>			2: 11-50.
onicera japonica (vine)	Japanese Honeysuckle	_	╄	₩			3: 51-100
			_				4: 101-1,000
legopodium podagraria (G-cover)	<u> </u>	ļ			$\sqcup$		5: >1,000
elastrus orbiculatus (vine)	Asian Bittersweet		1		$\sqcup$		
orilis sp.	Hedgeparsley		╄			·	1
Conium maculatum	Poison Hemlock						
Rhamnus cathartica	Common Buckthorn (shrub	_					1
Berberis thunbergii	Japanese Barberry (shrub	)					1
Alnus glutinosa	European Alder				Ш.		
Dipsacus laciniatus	Cut-leaf Teasel						ļ
laeagnus umbellata	Autumn Olive (shrub)	}					
onicera maackii	Amur Honeysuckle (shrub)	)					]
uonymus fortunei	Wintercreeper						
Tier 3: Presence i	s of interest	No.	# of	Plants		comments	
		NE	SE	SW	NW		# of Plants
Convallaria majalis (G-cover)	Lily of the Valley						1: 1-10
oronilla varia (G-cover)	Crown Vetch						2: 11-50.
leutherococcus pentaphyllus	Five-leaf Aralia (shrub)						3: 51-100
Pachysandra terminalis (G-cover)	Japanese Pachysandra					·	4: 101-1,000
Philadelphus coronarius	Mock Orange (shrub	)					5: >1,000
Pulmonaria officinalis (G-cover)	Lungwort						
Rubus phoenicolasius	Wineberry	Ī	Т		Т		1
ris pseudacorus (wetland)	Yellow Flag Iris						1
Ornithogalum umbellatum	Star of Bethlehem						1
/iburnum opulus var. opulus	European Cranberry (shrub)						1
/iburnum plicatum	Doublefile Viburnum (shrub)						1
Tier 4: Widespread	and abundant	3	Pre	sence	2 - 2	comments	Ī
		NE	SE	SW	NW		# of Plants
Alliaria petiolata	Garlic Mustard						1: 1-10
igustrum vulgare	Common Privet (shrub)					·	2: 11-50.
L. morrowii, L. tatarica	Bush Honeysuckles (shrub)	_					3: 51-100
Phalaris arundinacea	Reed Canarygrass	$\top$	$\top$				4: 101-1,000
Phragmites australis (wetland)	Phragmites					**	5: >1,000
Polygonum cuspidatum	Japanese Knotweed	$\top$	$\top$	1	$\Box$	····	1
Frangula alnus	Glossy Buckthorn (shrub)	1	$\top$				1
Rosa multiflora	Multiflora Rose (shrub)					<del></del>	1
Typha angustifolia, T. x.glauca	Cattails (wetland)	1	1		1 1	·	1
Cirsium arvense	Canada thistle	+	+-	$\top$	<del>     </del>		1
Dipsacus fullonum	Common Teasel	+	<del>                                     </del>	+-	1		1
Hesperis matronalis	Dame's Rocket	+	+	_	╅		1
	Periwinkle	+	+		┤╌╌┤	<del></del>	1
Vinca minor (G-cover)	1. CHAUIVIC				1		1

Note: For Ground-cover plants record "stem #" but in comment field describe # of colonies and patch size (S,M, L)

	10	9	œ	7	o)	ري ن	4	ω	2		mod #				CLEV
									-	Mins Duxnt	species			Project Label:	CLEVELAND METROPARKS Plant Community Assessment Program Forest Pest and Pathogens Data Shee
											voucher#			ק	t Communit
					50		000 III				shrub clumps	#		PCAP	y Assessme
											ᇫ -	size class (cm) woody stems >1m		Projec	nt Program
											2 1-<2.5	m) woody		Project Name: 02 BR2015	Forest
	appropriate and										3 2.5-<5	stems >1r		OJBK	Pest an
									K	-	5-<10	_		2015	d Patho
											5 10 - <15			_	gens Da
											. 6 15 - <20		30°	Plot No.:	ita Shee
	351										7 20 - <25			C93	*
			8						7		e 25 - <30				
											9 30 - <35			Page:	•
											10 35 - <40			Clavela	2
											7 8 9 10 11 20 - <25 25 - <30 30 - <35 35 - <40 >40 (record each tree)			of	
L											-			_	

\* IF EVIDENCE OF PEST OR PATHOGEN RECORD TOTAL SPECIES POPULATION IN THE PLOT EVEN THE NOT INFECTED

Strata	# of stem Infected	Severity (H,M, or L)	* Write None Present if no evidence:	
Tree (size class 3 or above)			Nove Pre Meech (Fungus) None	None Presentan Longhorned Beetle
Shrub (size class 2 or below including shrub clumps)			1 1	Other Pest or Pathogen
			Walnut (Thousand Canker)	

High = more than 50% of leaf/needle cover exhibiting symptoms

Medium = Less than 50% of leaf/needle cover exhibiting symptoms

Low = Only a few leaves or branches are exhibiting symptoms

Severity

SaCM PCAP Plant Cover\_Earth Surface Data sheet Page 1\_ver 3.xls last revised 5/29/2012 ceh

(Convenience Materials Page: 1 of 1

LFI is angle of piot to the horizon. TSI is angles formed by local slopes. For TSI measure

Project Label: PCAP	CLEVELAND METROPARKS Plant (
Project Name: Od BR201	Community Assessment Program - Plant Cover
	er and Earth Surface

Plot No.: 1093

STANDING BIOMASS (required for emergent wettands) collected in 0. Im clip plots (32x32 cm) from corners 1 and 3 in each intensive module. Required for VIBI-E score calculation. C7=check when collected ន

CLASSIFICATION		
(FII = excellent, g Fit and Confidence Hydroscomorphic class (WETLANDS ONLY):		
o DEPRESSION	Fig.	Conf-
n IMPOUNDMENT o Beaver o Human	Fila	Confa
DRIVERINE Offeadwater DMainstern D Channel	1	Conf =
O SLOPE (ground water by drobogy or on a physical slop)	Fit:	Conf=
o FRINGING o Reservoir o Natural Lake	Fil:	Conf
to COASTAL (specify subclass)	Fil=	Conf-
a BOG (strongly, moderately, weekly ombrotrophic)	Fit=	Confr
Ohio EPA VIBI Phot Community Class (WETLANDS ONLY):	:CTIN	
□ FOREST □ swamp forest □ bog forest □ forest seep		Conf=
a EMERGENT a marsh a wet meadow to open bog	======================================	Conf=
o SHRUB o shrub swamp to tall sh. bog to tall sh. fen	File	Confe

	a SHRUB a shrub swamp a tall sh. bog a tall sh. fen	Fit= Confe
MICROTOPOGRAPHIC FEATURE COUNTS Intensive modules only		

while for microhabitet features. Selections or selectives and everage the score, NOTE: If mod falso on a slope automatically gets ranked beased on steepness (1-3) to begin + any features present

Slope 2 = talls on slope -20\*

Slope 3 = maximum steepness that can be safely sampled ~45°

feature is absent or functionally absent from the wetland

spe 1 = slight elevational grade across module (hit)

- feature is present in the wedland in very small emounts or if more common, of low quality
- feature is present in moderate amounts, but not of highest quality, or in small amounts of highest quality
- 10 feature is present in moderate or greater amounts and of highest quality

0	00	W	ىو	modif				
				COUNCY				
0	0	0	0	(count)	lx lm	depth 3	ussocks	no of
0	0	0	0	(count)	3,16x3.16m	uplands (Tip-Ups) depth 2	hummocks	no. of
C	0	0	0	(count)	10x16m	depth 1	depressions	no. macro.
32	46	29	+I	(count)	18x10m	épti i	(2-12 cm)	cw.d
0	0	0	0	(count)	10x10m	depth 1	(12-40cm)	cw.d
0	0	0	0	(opunt)	1051020	depth I	y a cm	cwid
D	D	s)	પ્ર	(rank)	10x10m	depth I	interspers	microhab.
-	_		_	(rank)	10x10m	SLOPE		microhab.

Fil Confr Confr	Fil	(Admit nachalforbox	(men men)	or administration to				Ban made a
" Conf"   " Conf"   " Conf"   " Conf"	" Conf" " Conf	landscape)	on within	m Index (posis	Landic	Confi	# # 	est o forest seep
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Fire Confe	Fire Confe Confe Fire Confe Confe Fire Confe Fire Confe Fire Confe Fire Confe Fire Confe Fire Confe Co		8	+270 degrees	Γ	Conf	Fit=	ombrotrophic
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File Confe	File Confe File Confe Confe		Г	+135 degrees		Conf=	Fire	physical slops
NLX):  Fil* Conf*  Fil* Conf*_	DILXY: Fil* Conf* Fil* Conf*_			+90 degrees	Γ	Conf =	File 	an o Channel
Fit Conf	Fit Conf			+45 degrees	Τ	Confi	Fila	5
			z	Al aspect		Conf-	7	
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MENAG INDICES (GEORGES) + for up - 1	McNAB INDICES (degrees) + for up - f	TRAM - DO NOT	HS P/NOG	PUT USING C	MILLE			
		1 - dh 101 + 15	ABINAN	o interior	merica			

angle from recorders eye to eye of person standing ~10 m

corresponding space (4 dots per grid square)	readings per module facing N, S, E, W. Place dot count in	CROWN COVER (DENSIOMETER): MALe 4	
d square)	W. Place dot count in	ER): Male 4	

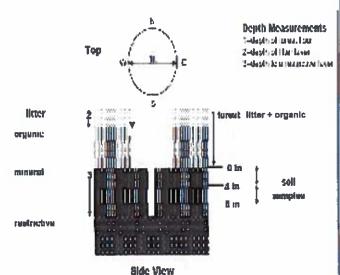
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#### **COVER BY STRATA**

STRATUM	GENERAL FORM
Tree (generally >5 m)	Tree (overstory), very tall shrubs*, liana, epiphyte)
Shrub (generally 0.5 to 5 m)	Tree (sapling), shrub, tiana, epiphyte)
Herb (Field)	Herb, dwarf-shrub**, tree (seedling***)
Floating	Floating
Aquatic (submerged)	Submerged

"Very tall shrubs are sometimes included in the tree stratum
"Can also include seedlings of shrubs, i.e., all shrubs <0.5m

\*\*Tree seedlings are often defined as up to 1.4 m height or as <2,5 cm DBH in which case they would span the herb and shrub layers.



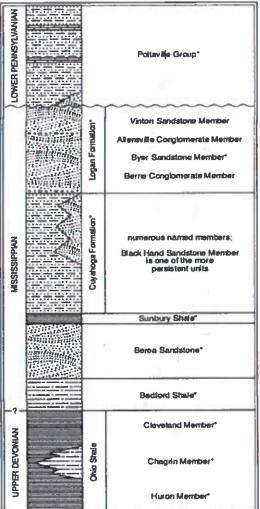


FIGURE 3-20.—Generalized section of Upper Devenian, Mississippian, and Lower Permayivanian formations in northeastern Ohio Asterisks indicate units that are fossiliterous. This composite section represents about 400 meters of rock exposed across the area. The section is not to each, but the thicknesses indicated are proportional. The term "Waveriy" is used in the older literature to refer to Mississippian rocks in Ohio. Some real-cust use the European term "Carboniferous," which encompasses the Mississippian and Pennsylvanian Periods of the U.S. Many until have been named within the Cuyahoga formation, but most units are local and cannot be traced over great shatances. The Black Hand Member is a spectacular massive analisms that is fairly widespread but discontinuous. See Hyde (1953), Hoover (1960), and Collins (1978) for more information on Mississippian rocks in Ohio. See figure 3-16 for explanation of rock types.

CLEVELAND METROPARKS Plant Community Assessment Program - Soils, Crown Cover, Standing Blomass Data Sheet 6a
Project label: PCAP Project Name: 0862015
Plot No.: 1093

(E) Cityresend Metroparks

Page: 1 of 1

SOIL PIT DESCRIPTION: Excavate 20 cm plug with shovel. Describe using Munsell chart, visual exam, texture, and odor.

SOIL SAMPLES Standard procedure: collect a soil

sample of the top 10 cm of soil from center of each intensive module and composite the sample

ection Modul (Herizen (A. B. C)

Solf pit module # (one per entire piot)

modern Constituent 88	lexture*	oxid roots	%mortic	mottle color	matrix color	hydr. cond.***	redox features**	texture*	axid roots	%mottle	mottle color	matrix color
<		×				- s	4	ŀ	<			
Z		z				S M D	z		z			
I more markle surface	Somewhat poorly dr. Uery po	a Well drained a Moderately v	D Excessively dr. D Somewhat ex	DRAINAGE*	Parent Material	Depth to rest. Layer.	Landform type:	Soil Series Source: Ohio Soil Survey	Soil Series/Type:	Web Soll Survey Information:	2,3,8,9 composited	Soil Collection Modul Herizon (A. B.

20 cm

□ Impermeable surface Dogue sively dr that poorly dr. Somewhat excessively Moderately well dr. Very poorty dr

\*\* e.g. hydrogen sulfide odor, gleying, etc. refer to texture classes on reverse side

hydro cond \*\*\*

S M

castings, middens) lotes: include evidence of earthworms (worms, indurdated Sesaturated Memoist Dedry

MODA: Warms not present. Cashings mods: castings and middens presen

mode: coistings

0.1 cm in center of intensive modules. If >30.5 cm, record as >30 SOIL DEPTH MEASUREMENT: Measure to the manu-

a	8	رى	מ	mod#
D. 1	0.3	0.5	0.7	1 litter+ organic depth (cm)
0	0.3	0.5	0.7	2 litter depth (cm)
0	0	0	0	water depth (cm)
0	0	0	0	depth sat

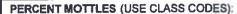
EARTH SURFACE & GROUND COVER	CE & GROU	IND COVER
Underlying Earth Surface*	Surface*	Ground Cover
(Sum - 100%)	percent	(Each ≤ 100%)
Histosol	I	Coarse Woody Debris***
Mineral Soil	PP	Fine Woody Debris****
Gmvel-Cobble*	_	Litter
Boulder**	1	Duff (Ferm + Humus)
Bedrock	1	Bryophyte- Lichen
• Gravel-Cobble = 1/16-10*	1/16-10"	Water
**Boulder = > 10 m	5	Bare Soil
••• >5 cm in diameter	ida	Rosd/Trail

COVER BY STRATA estimate using midpol	COVER BY STRATA estimate using midpoints of 5,ex:3, 8, 13	ex:3, 8, 13
Strata	Height Range (m)	Total Cover (%)
Tree	5.0.1	88
Shrub	.5 . 5.0	43
Herb	05	23
(Floating)*	.]	ſ
(Aquatic)*	• 1	1
" roated and it	roated and floating or slightly emersed	sad
" submersed,	submersed, most plant mass below surface	w surface
SEE BACK O	SEE BACK OF PAGE FOR "TYPICAL"STRATA DESCRIPTIONS. STRATA CAN VARY BY CO	SEE BACK OF PAGE FOR "TYPICAL"STRATA DESCRIPTIONS. STRATA CAN VARY BY COVER TYPE

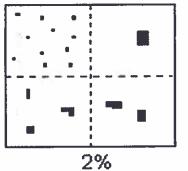
Deer	o Gravel	Bootleg unsanctioned	2 Hiking sanctioned	o Bridle	o All Purpose	Туре	record type and cover for each	TRAIL INFORMATION:
W						%Cover	reach	3

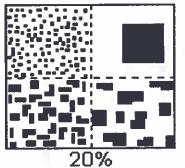
doc	□ < plot size	□ 1-3 x plot size	□ 3-10 x plot size	10-100 x plot size	o > 100 x plot size	□ >600 x plot size	STAND SIZE	
				(AII)				

MOD 4. CUSTINGS PRESUNT
Back PCAP Soils\_Crown out\_Landform\_Standing Biomass\_Data Sheet\_ver 3.xls last revised 6/4/2012 ceh



Class	C	ode	Criteria: % of		
1	Conv.	NASIS	Surface Area Covered		
Few	ſ	#	< 2		
Common	c	#	2 to < 20		
Many		#	≥ 20		



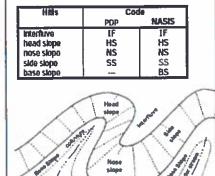


SOIL TEXTURE: Record the code for the soil texture of the 5 cm and 20 cm layers. To estimate texture, collect a soil sample from the appropriate layer and moisten it with water to the consistency of modeling clay/wet newspaper; the sample should be wet enough that all of the particles are saturated but excess water does not freely flow from the sample when squeezed. Attempt to roll the sample into a ball. If the soil will not stay in a ball and has a grainy texture, the texture is either sandy or coarse sandy. If the soil does form a ball, squeeze the sample between your fingers and attempt to form a self-supporting ribbon. Samples which form both a ball and a ribbon should be coded as clayey; samples which form a ball but not a ribbon should be coded as loamy.

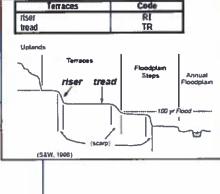
- 0= Organic
- 1= Loamy
- 2= Clayey
- 3= Sandy
- 4= Coarse Sand
- 9= Not measured make plot note

Geomorphic Component - Three-dimensional descriptors of parts of landforms or microleatures that are best applied to areas. Unique descriptors are available for Hills, Terraces, Mountains, and Flat Plains;

e.g., (for Hills) mase slape or NS.

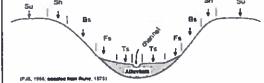


higher order ste



Hillstope - Profile Position (Hillstope Position in PDP) - Twodimensional descriptors of parts of line segments (i.e., stope position) along a transect that runs up and down the stope: e.g., backstope or BS. This is best applied to transects or points, not areas.

Position	Code
summit	SU
shoulder	SH
backslope	BS
footslope	FS
toeslope	TS
-	



HYDROLOGIC REGIME Modified from Grossman et al 1998. (Frequency and duration of flooding.)

UPLAND: Not a wetland. Very rarely flooded.

(P.r.S. 1006; adjusted from Ruber, 1975)

INTERMITTENTLY/SEASONALLY SATURATED: Dry at least once per year. Surface water is seldom present, but substrate is saturated to surface for extended periods during the growing season.

PERMANENTLY/SEMIPERMANENTLY SATURATED: Dry less than once per year. Surface water is seldom present, but substrate is saturated to surface for extended periods during the growing season. Equivalent to Cowardin's Saturated modifier.

OCCASIONALLY FLOODED: Surface water can be present for brief periods during growing season, but not in most years. Often characterizes flood-plain upper terraces.

TEMPORARILY FLOODED: Surface water present for brief periods during growing season, but water table usually lies well below soil surface. Often characterizes flood-plain levees and lower terraces. Equivalent to Cowardin's Temporary modifier.

INTERMITTENTLY FLOODED: Substrate is usually exposed, but surface water can be present for variable periods without detectable seasonal periodicity. Inundation is not predictable to a given season and is dependent upon highly localized rain storms. This modifier was developed for use in the arid West for water regimes of Playa lakes, intermittent streams, and dry washes but can be used in other parts of the U.S. where appropriate. This modifier can be applied to both wetland and non-wetland situations. Equivalent to Cowardin's Intermittently Flooded modifier.

SEMIPERMANENTLY FLOODED (exposed <1/year): Surface water persists throughout the growing season in most years. Land surface is normally saturated when water level drops below soil surface. Includes Cowardin's Intermittently Exposed and Semipermanently Flooded modifiers.

**PERMANENTLY FLOODED**: Water covers the land surface at all times of the year in all years. Equivalent to Cowardin's "permanently flooded".

UNKNOWN: The hydrologic regime cannot be determined from the available information.