

## CLEVELAND METROPARKS Plant Community Assessment Program: Quality Control Form



Project Label:

PCAP

Plot No:

1015

Date Sampled:

06/22/15

Lead:

LANCE

Comment required if item answer is NO

Parking/Access outside of Park Boundaries:		Y	<input checked="" type="radio"/> N	If yes, write details in Comments section below
Field journals completed		<input checked="" type="radio"/> Y	N	
Site sketch made on 1:3000 map?		<input checked="" type="radio"/> Y	N	
Check cover page	X-axis Bearing of plot recorded	<input checked="" type="radio"/> Y	N	
	GPS coords. Recorded	<input checked="" type="radio"/> Y	N	
	North direction recorded	<input checked="" type="radio"/> Y	N	
	Photographs taken?	<input checked="" type="radio"/> Y	N	
	Relocated Pins Mapped	<input checked="" type="radio"/> Y	N	
Plot No., Date agreement on all pages?		<input checked="" type="radio"/> Y	N	
Header data completed all pages?		<input checked="" type="radio"/> Y	N	
Cover classes recorded in all intensive modules		<input checked="" type="radio"/> Y	N	
Browse Level By Species		<input checked="" type="radio"/> Y	N	
Woody stem quality control check		<input checked="" type="radio"/> Y	N	Check every line and cross check with the Tree Cover Sheet
Invasive plant quality control check		<input checked="" type="radio"/> Y	N	N/A
Ash trees mapped		<input checked="" type="radio"/> Y	N	
Completed Forest Pest/Pathogen Datasheet		<input checked="" type="radio"/> Y	N	
Cover by Strata? (confirm cover type)		<input checked="" type="radio"/> Y	N	
Soil samples collected with matching plot #.		<input checked="" type="radio"/> Y	N	N/A
Cross check 2010 information		<input checked="" type="radio"/> Y	N	Highlight any changes from 2010 information
Vouchers labeled on datasheet with initials and number		<input checked="" type="radio"/> Y	N	N/A
Vouchers labeled on collection bag		<input checked="" type="radio"/> Y	N	N/A
Pink flags removed		<input checked="" type="radio"/> Y	N	
Data sheet QA before leaving site?		<input checked="" type="radio"/> Y	N	
Common equipment returned to tub.		<input checked="" type="radio"/> Y	N	
Data sheets scanned?		DS 6126		Enter date to left
Final data sheets scanned?				Enter date to left
Buffer Widths measured?		<input checked="" type="radio"/> Y	N	
Web Soil Survey		<input checked="" type="radio"/> Y	N	
Voucher Location	Refrigerator	<input checked="" type="radio"/> Y	N	
(# vouchers collected)	Press (#)			Enter number to left
	Drier	<input checked="" type="radio"/> Y	N	
	Identified	<input checked="" type="radio"/> Y	N	
	Mounted	<input checked="" type="radio"/> Y	N	
	Thrown away	<input checked="" type="radio"/> Y	N	

## GRTS point verification: Is plot sampleable?

<input checked="" type="checkbox"/> Yes	Original GRTS point is sampleable
<input type="checkbox"/> No	Original GRTS point lands in a non-sampleable area (fill in category below)
	<input type="checkbox"/> Point falls in a water (i.e. river, lake)
	<input type="checkbox"/> Managed mowed area (i.e. golf course, picnic area, right-of-way)
	<input type="checkbox"/> Paved area (i.e. parkinglot, road)
	<input type="checkbox"/> Unsafe to sample (i.e. steep slope)
	<input type="checkbox"/> Other

## Additional Comments:

--

D

Q

# CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet

<b>GENERAL INFORMATION</b>	
Project Label:	PCAP
Project Name:	02Be2015
Plot Name:	Desolation Row
Plot No.:	1015
<input type="checkbox"/> Level 4 (no nested corners sampled) <input checked="" type="checkbox"/> Level 5 (nested corners sampled)	
Date (mm/dd/yyyy):	06/22/2015
End date (if > 1 day):	/ /
Party:	Role**
A. Lance	Plot leader
S. Fuesebach	"
M. Geitay	Pl. Asst.
T. Cochran	Crew
E. Krauss	Crew
** Roles: Co-leader, Asst. Guide, Observer, Taxonomist, etc.	
PLOT NOT SAMPLED: <input type="checkbox"/> Other	
<input type="checkbox"/> Perm. water <input type="checkbox"/> Paved <input type="checkbox"/> Slope <input type="checkbox"/> Safety	
<b>SAMPLING QUALITY*</b>	
Effort Level:	subjective evaluation of how much effort put into sampling. Hurried plots may still provide good data
<input checked="" type="checkbox"/> Very thorough	
<input type="checkbox"/> Accurate	
<input type="checkbox"/> Hunted	
<b>TAXONOMIC ACCURACY</b>	
	high/modera./low/not simpl.
vascular	n/a
bryo	
lichen	
<b>TAXONOMIC STANDARD</b>	
Authority:	G&C Pub Date: 1998

Minimum required fields in Bold and Underlined

<b>LOCATION</b>	
State:	OH
County:	Cuyahoga
Quadrangle:	
Local Place Names:	Button Road, Emerald Circle
Landowner:	CMP
Data Confidentiality:	<input checked="" type="checkbox"/> Public data <input type="checkbox"/> Private Data
Check one:	<input type="checkbox"/> Fuzz 100m <input type="checkbox"/> Fuzz 250m <input type="checkbox"/> Fuzz 500m
Reason:	
If data not public why?	
Source of coordinates:	<input type="checkbox"/> MAP <input checked="" type="checkbox"/> GPS
Coordinate system:	<input checked="" type="checkbox"/> Lat/Long <input type="checkbox"/> UTM <input type="checkbox"/> StatePlane <input type="checkbox"/> deg <input type="checkbox"/> deg min <input type="checkbox"/> Other (specify)
Datum:	<input checked="" type="checkbox"/> NAD83/WGS84 <input type="checkbox"/> NAD27
GPS location in plot x=0 to 5, y=-1.0 to 1.0:	
x = 0	y = -1 (base of plot x=0, y=0)
Latitude:	41.38154
Longitude:	81.55990
Coord. Accuracy:	m ft +/-
GPS File Name:	1015A
Plot size for cover data:	(hectares)
X-axis Bearing of plot:	
Depth: (1-5):	4
Intensive modules:	2, 3, 8, 9 (EDIT IF MODIFIED)
Camera No.:	3
Photo No.:	088
Plot placement:	<input checked="" type="checkbox"/> CRTS <input type="checkbox"/> Representative
<input type="checkbox"/> Random <input type="checkbox"/> Stratified Random <input type="checkbox"/> Transect component <input type="checkbox"/> Systematic (grid) <input type="checkbox"/> Capture specific feature <input type="checkbox"/> Other	

\*Definitions and values in CM PCAP FOM v. 1.0 and CVS Field Guide

← Bedford  
Goerge

Bedford Rd. →

Layout → 2x5

Location → Approx. 100-125 m Southeast of the end of Button Rd.

Rationale → GRTS - PCAP re-sample Veg. Characteristics → Sparsely vegetated red maple stand close to the end of Button Rd. Canopy is nearly 100% red maple, with a black cherry and a few sassafras also. Virtually no shrub layer and a almost non-existent

Diagram Key: Plot origin (0,0) point, GPS location, photo taken, with direction, location of permanent posts

NOTES: Include Layout (any unusual shape details), Location (directions and landscape content), Rationale (why here), and Veg Characterization (description of community, dominants, strata, BROWSE). Additional notes in space on back.

OVER

## CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet



Project Label: PCAP

Project Name: 02822615

Plot No.: 1015

Page 2 of 2

## MODIFIED NATURESERVE CLASS\*

CODE (on separate form):

Fit= Conf=

w01-d

COMMUNITY NAME:

Red Maple Woodland

## HOMOGENEITY

☒ Homogeneous☐ Compositional trend across the plot☐ Conspicuous inclusions☐ Irregular/pattern mosaic

## DISTURBANCES

type*	severity**	yrs ago	% of plot	description
Human	M	0	100%	trash cut tree
Natural				
Fire				
Cut				
Animal	H	0	100%	browse
Other				

\*\*L=low, ML=med low, M=med, MH=med high, H=high, VH=very high

Current Land Use: PARK

Former Land Use: UNKNOWN

## HYDROLOGIC REGIME\*

☒ Upland (seldom flooded)☐ Intermittently/seasonally saturated

(seldom flooded)

☐ Permanently/Semipermanent saturated

(dry &lt;1/yr. seldom flooded)

☐ Occasionally flooded (<1/yr)☐ Temporarily flooded☐ Intermittently flooded☐ Semipermanently flooded☐ Permanently flooded☐ Tidal/Seiche flooded daily☐ Tidal/Seiche flooded monthly☐ Tidal/Seiche flooded irregular

(e.g. wind, storms)

☐ Unknown

## SALINITY\*

☐ Saltwater☐ Brackish☐ Fresh☒ Upland (n/a)

(by default unless plot is a wetland)

Additional notes &amp; diagrams: (Representativeness of plot to the stand, successional status, maturity, etc.)

herb layer.

\* Residents on Button Rd. were riding dirtbikes on park property during the sample. Several trees in the area seemed to have been cut down.



Project Label:

PCAP

Project name: A2Bo 2015

Plot no. : 1015

**Total modules:**

### Intensive modules:

### Plot configuration:

Plot area (ha)



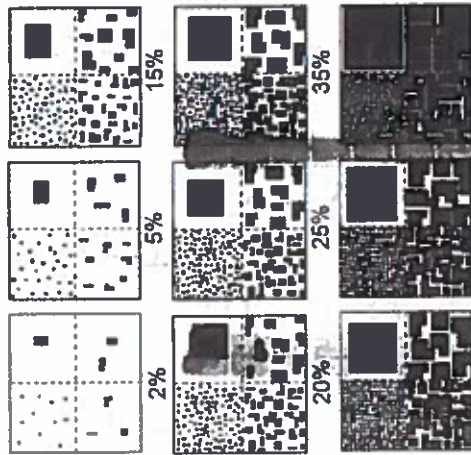
## Cleveland Metroparks

**Br = Browse Level. Use cover classes to describe amount of browse per species over entire plot**

[illegible]

# EXAMPLES OF PERCENT OF AREA COVERED

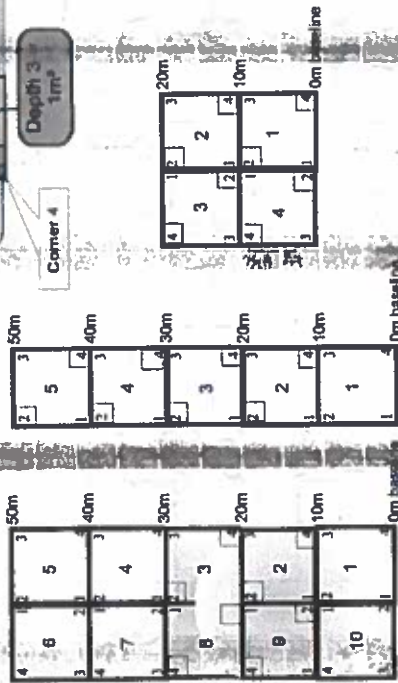
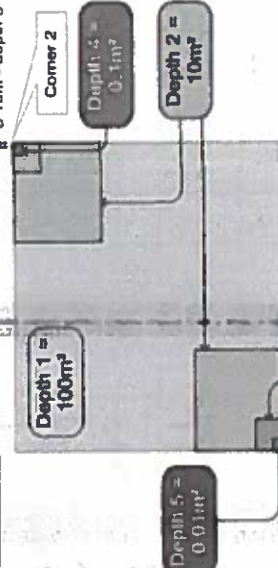
The following graphic can be used for various data elements to convey "Amount" or "Quantity". NOTE: Within any given box, each quadrant contains the same total area covered, just different sized objects.



cover class	% cover	midpoint
1	solitary or few	0.0001
2	0-1%	0.005
3	1-2%	0.015
4	2-5%	0.035
5	5-10%	0.075
6	10-25%	0.175
7	25-50%	0.375
8	50-75%	0.625
9	75-95%	0.850
10	95-100%	0.975

**Nested Corners**

10 00m - depth 1  
3 16m - depth 2  
1 00m - depth 3  
0 32m - depth 4  
0 10m - depth 5



**BROWSE RATING NARRATIVE DESCRIPTION**

**LOW OR NONE:** there is no measurable browse line **AND** there are very few or no plants 1-m nested quadrat and intensive module. In general, low values relate to less than 10 percent, by numbers of stems browsed.

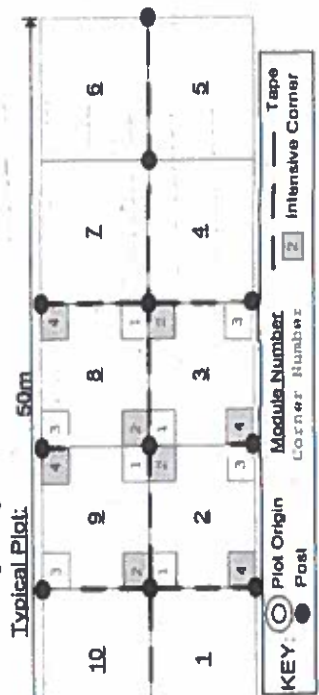
**MEDIUM LOW** values include evidence of browse at about 10 percent of the stems with no significant impact to plant reproduction evident. In this rating, plants are browsed but preferential species are observed to be reproducing in numbers that appear normal or near-normal in comparison to low browse areas. For example, trilliums may flower and fruit, but jewelweed and arrowwood viburnum exhibit browse.

**MEDIUM:** browse affects greater than 10 percent and less than 25 percent of stems in the 1 m2 nested quadrat and intensive module. A browse line is usually not evident or obvious for all classes and species of vegetation, but careful examination may show preferential browse and/or browse lines for some species of plants.

**MEDIUM HIGH** values include evidence of a browse line and 25 percent of stems browsed with very little vegetation regeneration evident. In this rating, for some species of plants, reproduction does not appear to occur or it is very severely limited.

**HIGH:** greater than 25 percent of the stems of plants in the 1 m2 nested quadrat and intensive module **AND** a browse line is evident.

**VERY HIGH** values include extensive browse conditions, where the browse line is very evident **AND** almost all seedlings and herbs are severely browsed or missing. Browse line may be 5 to 6 feet in height with no or little green growth beneath.





## Page 2 of 3

BCAB

COVER DATA 028, 295

Plat No: 124

5

4

Plot configuration:

155

Plot area (ha)

→



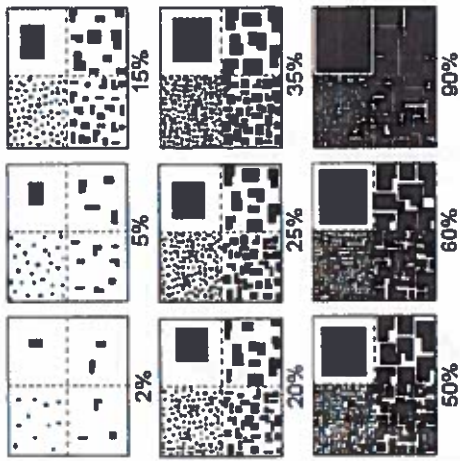
**Br = Browse Level. Use cover classes to describe amount of browse per species over entire plot**

Strata - Cov. entire plot

SRE CM PCAP Species Cover Data.xls last revised 6/10/2015 jim

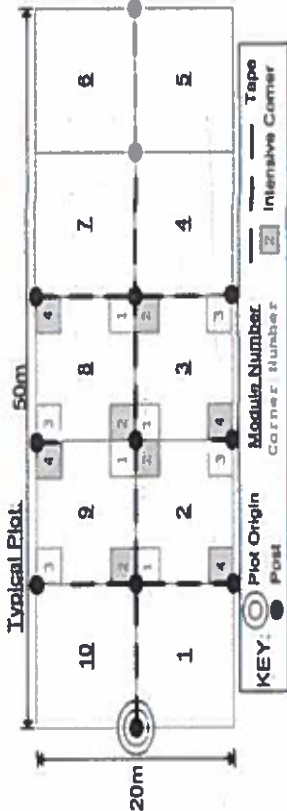
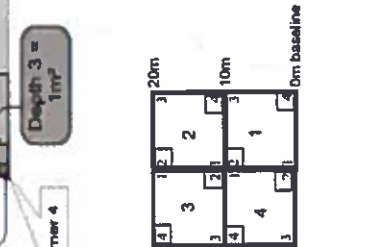
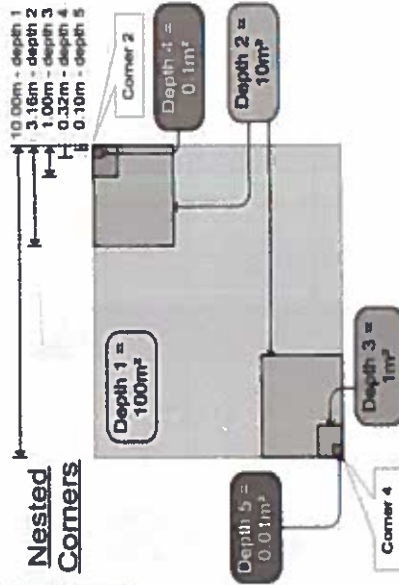
# EXAMPLES OF PERCENT OF AREA COVERED

The following graphics can be used to visualize data *relative to cover*  
 "Amount" or "Density". NOTE: Within any given bar, each quadrant  
 contains the same total area covered, but different sized objects.



cover class	% cover	midpoint
1	solitary or few	0.0001
2	0-1%	0.005
3	1-2%	0.015
4	2-5%	0.035
5	5-10%	0.075
6	10-25%	0.175
7	25-50%	0.375
8	50-75%	0.625
9	75-85%	0.850
10	95-100%	0.975

## Nested Corners



# BROWSE RATING NARRATIVE DESCRIPTION

**LOW OR NONE:** there is no measurable browse line AND there are very few or no plants 1-m nested quadrat and intensive module. In general, low values relate to less than 10 percent, by numbers of stems browsed.

**MEDIUM LOW** values include evidence of browse at about 10 percent of the stems with no significant impact to plant reproduction evident. In this rating, plants are browsed but preferential species are observed to be reproducing in numbers that appear normal or near-normal in comparison to low browse areas. For example, irilliums may flower and fruit, but jewelweed and arrowwood viburnum exhibit browse.

**MEDIUM:** browse affects greater than 10 percent and less than 25 percent of stems in the 1 m2 nested quadrat and intensive module. A browse line is usually not evident or obvious for all classes and species of vegetation, but careful examination may show preferential browse and/or browse lines for some species of plants.

**MEDIUM HIGH** values include evidence of a browse line and 25 percent of stems browsed with very little vegetation regeneration evident. In this rating, for some species of plants, reproduction does not appear to occur or it is very severely limited.

**HIGH:** greater than 25 percent of the stems of plants in the 1 m2 nested quadrat and intensive module AND a browse line is evident.

**VERY HIGH** values include extensive browse conditions, where the browse line is very evident AND almost all seedlings and herbs are severely browsed or missing. Browse line may be 5 to 6 feet in height with no or little green growth beneath.



## Page 1 of 1

Plot no.: 1015

% COVER		Species	c	Presence of tree species (X)	mod	mod	mod	mod	R
T	Br								
10	10	<i>Acer rubrum</i>			X	X	X	X	
4	10	<i>Fraxinus</i> sp.					X	X	
4		<i>Pinus serotina</i>			X				
5		<i>Jasstras albidum</i>					X		
5		<i>Acer saccharum</i>							
4		<i>Quercus rubra</i>							X

[illegible]

# CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet

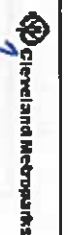
Project Label: PCAP

Project Name: OCBe 2015

Plot No.: 1015

Page: 1

of

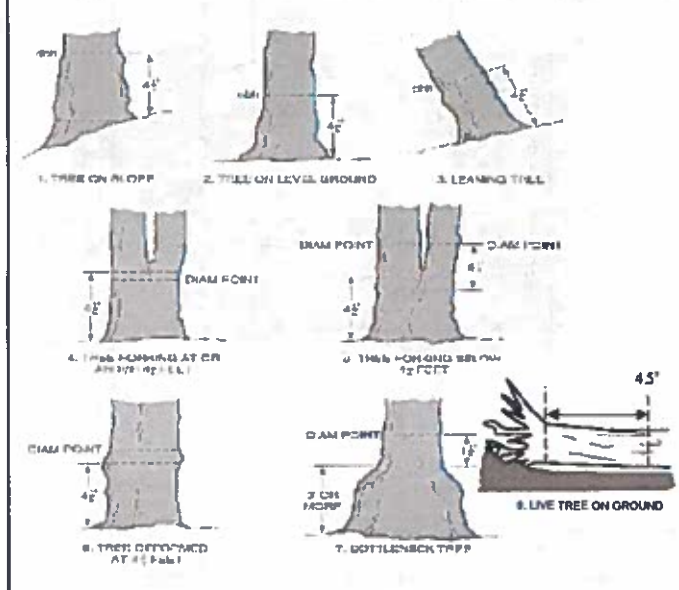


Explain subsample (additional room on back):

Plot #	species	c	voucher#	# stems 0-1.4m browed	% sub or super sample	# shrub clumps	size class (cm) woody stems > 1.4m										11 >40 (record each tree)
							1 0-1	2 1-2.5	3 2.5-5	4 5-10	5 10-15	6 15-20	7 20-25	8 25-30	9 30-35	10 35-40	
1	Acer rubrum																53.5, 113.1, 69.1
1	Acer saccharum																
1	Berberis thunbergii																
1	Quercus rubra			1													
2	Acer rubrum			2													52.5 under DBH
2	Prunus serotina																
2	Rhamnus frangula			1													
3	Acer rubrum			1													45.5
3	Standing dead																
3	Cornus sp.			1													
4	Acer rubrum			1													40.2
4	Saxifraga albidum			1													
4	Standing dead																
4	Liriodendron tulipifera			1													
5	Rosa multiflora			1													
5	Acer rubrum																
5	Prunus serotina			1													
5	Fernandus sp. seedling			2													
6	Berberis thunbergii																45.0
6	Acer rubrum			1													
6	Quercus rubra																
6	Prunus serotina																40.1
6	Standing dead																
7	Berberis thunbergii			1													



### DBH Measurement Rules



### 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.

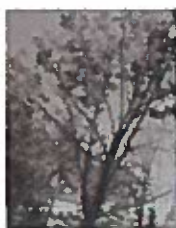
Record using the tally system from 1 to 10



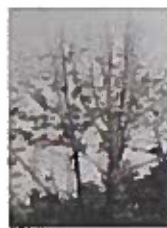
1



2



3



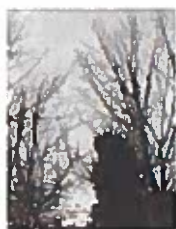
4



5

### 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.



A

B

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.

# CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet

Project Label: PCAP

Project Name: 0282015

Plot No.: 1015

Page: 2 of 2

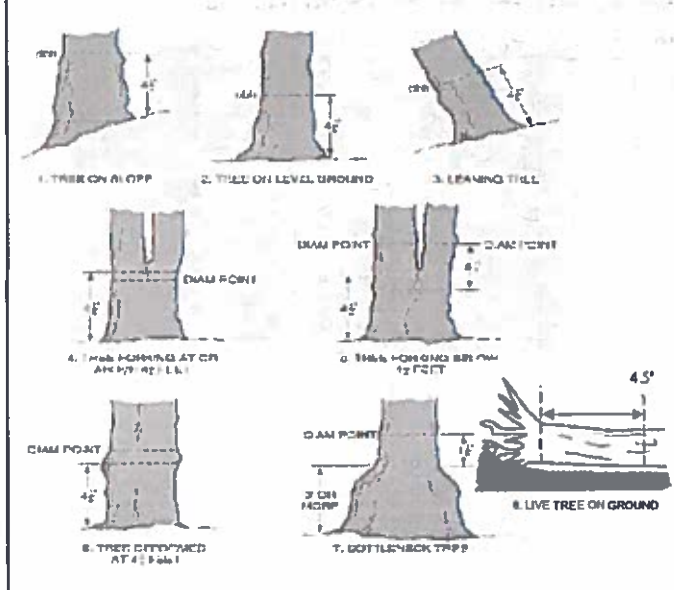


Explain subsample (additional room on back):

mod #	species	c	voucher#	# stems 0-1.4m browsed	% sub or super sample	# shrub clumps	size class (cm) woody stems >1.4m												
							1 0-1	2 1-2.5	3 2.5-5	4 5-10	5 10 - <15	6 15 - <20	7 20 - <25	8 25 - <30	9 30 - <35	10 35 - <40	11 >40 (percent each tree)		
7	Acer rubrum																		43.0
7	standing dead																		
7	Saxifraga albidum			1															
8	standing dead																		
8	Acer rubrum			1															
8	Populus grandidentata seedlings			3															
9	Fragaria sp.			1															
9	standing dead																		
9	Fagus grandifolia																		
9	Rhus serotina																		
9	Acer rubrum																		43.0
10	standing dead																		
10	Fagus grandifolia																		
10	Berberis thunbergii																		
10	Fragaria sp. seedling			2															
10	Rhus serotina seedling			1															
1	Viburnum americana																		

outside of  
plot

### DBH Measurement Rules



### 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 10



1



2



3



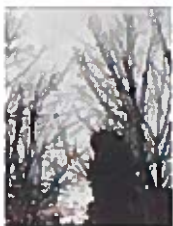
4



5

### 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.



A

B

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.

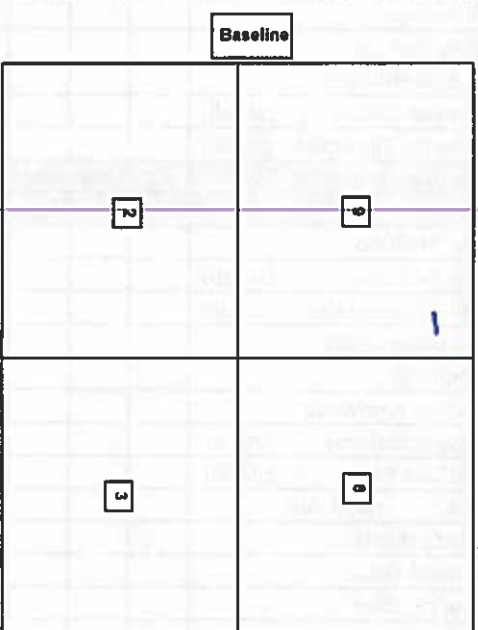


Tree ID	Species	DBH (cm)	HT (m)	Ash condition	Dead condition	# Exit holes	Epitomic present	Woodpecker holes
1	Fraxinus sp.		21.8	2		0	1	0
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								

\* If Ash Condition scores 5 (dead) provide breakup score (A-E)  
 Count EAB exit holes 1.25m<sup>2</sup> x 21.5m  
 Woodpecker and epicornic marked present (1) or absent (0)



\*\*\* Change intensive module numbers when necessary



Map all ash trees ≥ 10cm in each module using Tree ID number

CLEVELAND METROPARKS Plant Community Assessment Program: Invasive Species Survey



Tier 1: Early detection/ Rapid response		Presence				GPS
		NE	SE	SW	NW	
Microstegium vimineum	Japanese stiltgrass					
Ranunculus ficaria	Lesser Celandine					
Cynanchum louiseae (vine)	Black Swallow-wort					
Butomus umbellatus (wetland)	Flowering Rush					
Heracleum mantegazzianum	Giant Hogweed					
Tier 2: Assess as Needed		# of Plants				comments
		NE	SE	SW	NW	
Acer platanoides	Norway Maple					
Ailanthus altissima	Tree of Heaven					
Lonicera japonica (vine)	Japanese Honeysuckle					
Lythrum salicaria (wetland)	Purple Loosestrife					
Aegopodium podagraria (G-cover)	Bishop's Goutweed					
Celastrus orbiculatus (vine)	Asian Bittersweet					
Torilis sp.	Hedgeparsley					
Conium maculatum	Poison Hemlock					
Rhamnus cathartica	Common Buckthorn (shrub)					
Berberis thunbergii	Japanese Barberry (shrub)					
Alnus glutinosa	European Alder					
Dipsacus laciniatus	Cut-leaf Teasel					
Elaeagnus umbellata	Autumn Olive (shrub)					
Lonicera maackii	Amur Honeysuckle (shrub)					
Euonymus fortunei	Wintercreeper					
Tier 3: Presence is of Interest		# of Plants				comments
		NE	SE	SW	NW	
Convallaria majalis (G-cover)	Lily of the Valley					
Coronilla varia (G-cover)	Crown Vetch					
Eleutherococcus pentaphyllus	Five-leaf Aralia (shrub)					
Pachysandra terminalis (G-cover)	Japanese Pachysandra					
Philadelphus coronarius	Mock Orange (shrub)					
Pulmonaria officinalis (G-cover)	Lungwort					
Rubus phoenicolasius	Wineberry					
Iris pseudacorus (wetland)	Yellow Flag Iris					
Ornithogalum umbellatum	Star of Bethlehem					
Viburnum opulus var. opulus	European Cranberry (shrub)					
Viburnum plicatum	Doublefile Viburnum (shrub)					
Tier 4: Widespread and abundant		Presence				comments
		NE	SE	SW	NW	
Alliaria petiolata	Garlic Mustard					
Ligustrum vulgare	Common Privet (shrub)					
L. morrowii, L. tatarica	Bush Honeysuckles (shrub)					
Phalaris arundinacea	Reed Canarygrass					
Phragmites australis (wetland)	Phragmites					
Polygonum cuspidatum	Japanese Knotweed					
Frangula alnus	Glossy Buckthorn (shrub)					
Rosa multiflora	Multiflora Rose (shrub)					
Typha angustifolia, T. x. glauca	Cattails (wetland)					
Cirsium arvense	Canada thistle					
Dipsacus fullonum	Common Teasel					
Hesperis matronalis	Dame's Rocket					
Vinca minor (G-cover)	Periwinkle					

**Presence**  
X: yes

**# of Plants**  
1: 1-10  
2: 11-50.  
3: 51-100  
4: 101-1,000  
5: >1,000

**# of Plants**  
1: 1-10  
2: 11-50.  
3: 51-100  
4: 101-1,000  
5: >1,000

**# of Plants**  
1: 1-10  
2: 11-50.  
3: 51-100  
4: 101-1,000  
5: >1,000

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

# CLEVELAND METROPARKS Plant Community Assessment Program Forest Pest and Pathogens Data Sheet



Project Label: PCAP

Project Name: 02Be2015

Plot No.: 1015

Page: 1 of 1

Explain subsample (additional room on back):

mod #	species	voucher#	% sub or super sample	# shrub clumps	size class (cm) woody stems > 1m										
					1 0-<1	2 1-<2.5	3 2.5-<5	4 5-<10	5 10-<15	6 15-<20	7 20-<25	8 25-<30	9 30-<35	10 35-<40	11 40 (record each tree)
1	None present														
2															
3															
4															
5															
6															
7															
8															
9															
10															

Strata	Total % Cover
Tree	
Shrub	
Herbaceous	

* Write None Present if no evidence:	
None Beech (Fungus)	-Asian Longhorned Beetle
-Hemlock (HWA)	-Other Forest Pest or Pathogen
-Walnut (Thousand Canker)	



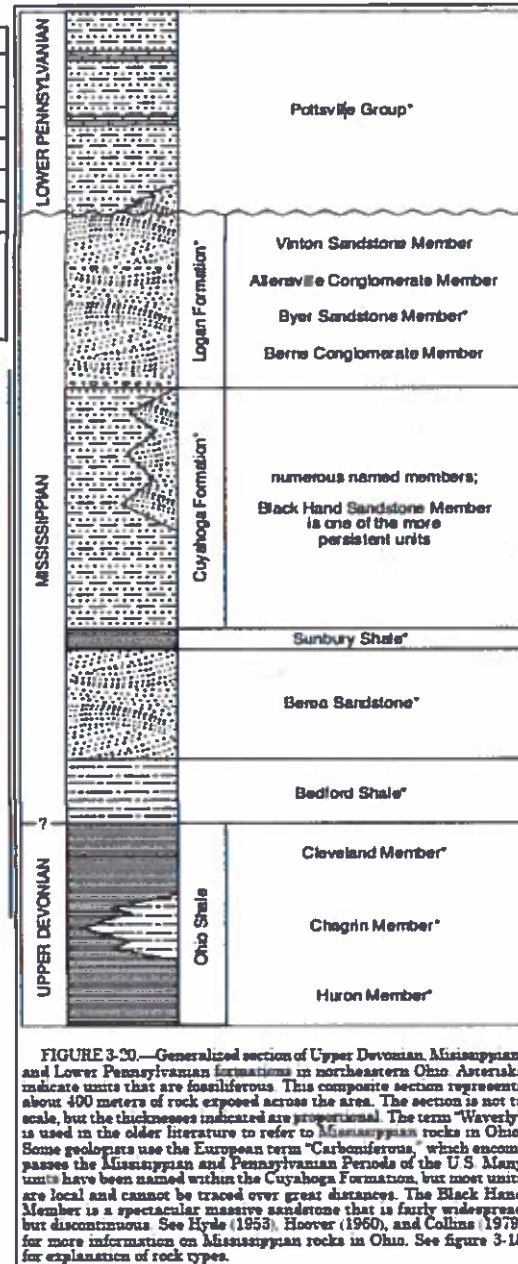
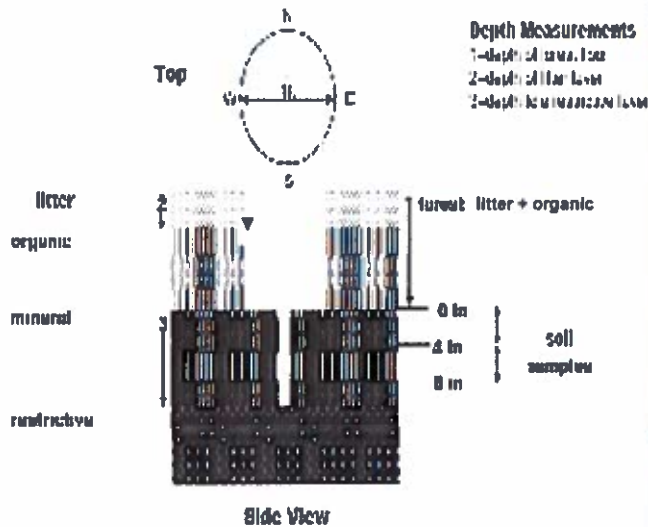




# COVER BY STRATA

STRATUM	GENERAL FORM
Tree (generally >5 m)	Tree (overstory), very tall shrubs*, liana, epiphyte)
Shrub (generally 0.5 to 5 m)	Tree (sapling), shrub, liana, 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.





Project label: PCAP Project Name: 028c2015

Plot No.: 1015

**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

Soil pit module # \_\_\_\_\_ (one per entire plot)

5 cm	matrix color	
	mottle color	
	%mottle	
	oxid roots	Y N
	texture*	
	redox features**	Y N
	hydr. cond.***	I S M D
20 cm	matrix color	
	mottle color	
	%mottle	
	oxid roots	Y N
	texture*	
	redox features**	Y N
	hydr. cond.***	I S M D

\* refer to texture classes on reverse side  
 \*\* e.g. hydrogen sulfide odor, geyline, etc.  
 \*\*\* Circle one:  
 I-indurated S-saturated M-moist D-dry  
 Notes: include evidence of earthworms (worms, castings, middens)  
2-NO EVIDENCE  
3-castings present  
8-worms present  
9-worms present

Soil Collection Method (A, B, C)

2,3,8,9 compooled

A

Wild Soil Survey Information

Soil Series/Type:

Soil Series Source: Ohio Soil Survey

Landform type:

Depth to test. Layer:

Parent Material:

Drainage\*

- ☐ Excessively dr. ☐ Somewhat excessively  
☐ Well drained ☐ Moderately well dr  
☐ Somewhat poorly dr. ☐ Very poorly dr.  
☐ Impermeable surface

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

	1 liter+ organic depth (cm)	2 liter depth (cm)	water depth (cm)	depth sat soil (cm)
model				
2	3.5	3.5	0	0
3	3.0	3.9	0	0
8	3.0	3.0	0	0
9	2.0	2.0	0	0

3.9

# EARTH SURFACE & GROUND COVER

Underlying Earth Surface*	Ground Cover	percent
Grass - /100%	percent (Each ≤ 100%)	percent
Hiswood	Coarse Woody Debris**	5%
Mineral Soil	Fine Woody Debris****	3%
Gravel-Cobble*	Litter	40%
Boulder**	Duff (Ferm. + Humus)	1%
Bedrock	Bryophyte-Lichen	1%
* Gravel-Cobble = 1/16-10"	Water	1%
** Boulder = > 10 in	Bare Soil	1%
*** > 5 cm in diameter	Road/Trail	1%
**** < 5 cm in diameter	Other	1%

## COVER BY STRATA

estimate using midpoints of 6, 9, 13

Strata	Height Range (m)	Total Cover (%)
Tree	5 -	98%
Shrub	1.5 - 5	8%
Herb	0 - 1.5	8%
(Floating)*	-	-
(Aquatic)*	-	-

\* rooted and floating or slightly emersed  
 \*\* submersed, most plant mass below surface

SEE BACK OF PAGE FOR "TYPICAL STRATA DESCRIPTIONS. STRATA CAN VARY BY COVER TYPE"

## TRAIL INFORMATION:

record type and cover for each

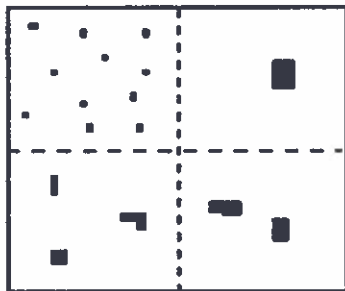
Type	%Cover
All Purpose	
Bridle	
Hiking sanctioned	
Boatleg unsanctioned	
Gravel	
Deer	

## STAND SIZE

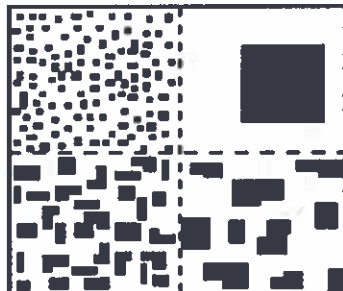
- ☐ >600 x plot size  
☐ > 100 x plot size  
☒ 10-100 x plot size  
☐ 1-10 x plot size  
☐ 1-3 x plot size  
☐ < plot size

**PERCENT MOTTLES (USE CLASS CODES):**

Class	Conv.	Code NASIS	Criteria: % of Surface Area Covered
Few	f	#	< 2
Common	c	#	2 to < 20
Many	m	#	≥ 20



2%

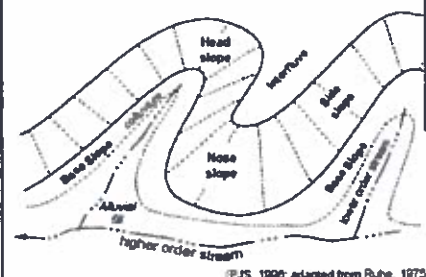
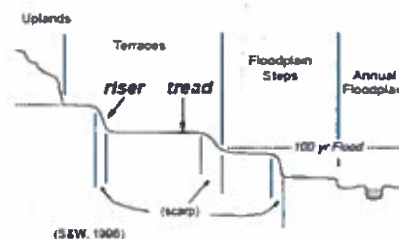


20%

**Geomorphic Component - Three-dimensional descriptors of parts of landforms or microfeatures that are best applied to areas. Unique descriptors are available for Hills, Terraces, Mountains, and Flat Plains; e.g., (for Hills) nose slope or NS.**

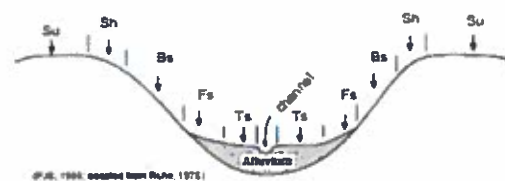
Hills	Code PDP	Code NASIS
interfluvial	IF	IF
head slope	HS	HS
nose slope	NS	NS
side slope	SS	SS
base slope	BS	BS

Terraces	Code
riser	RI
tread	TR



**Hillslope - Profile Position (Hillslope Position in PDP) - Two-dimensional descriptors of parts of line segments (i.e., slope position) along a transect that runs up and down the slope; e.g., backslope 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.

**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/SEMI-PERMANENTLY 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.

**SEMI-PERMANENTLY 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.