

CLEVELAND METROPARKS Plant Community Assessment Program: Quality Control Form



Project Label:

PCAP

Plot No: 3412

Date Sampled: 6/25/12

Lead: S. Evers, brch

Comment required if item answer is NO

Parking/Access outside of Park Boundaries:	Y <input checked="" type="radio"/> N <input type="radio"/>	If yes, write details in Comments section below
Field journals completed	Y <input checked="" type="radio"/> N <input type="radio"/>	
Site sketch made on 1:3000 map?	Y <input checked="" type="radio"/> N <input type="radio"/>	
Check cover page	X-axis Bearing of plot recorded	Y <input checked="" type="radio"/> N <input type="radio"/>
	GPS coords. Recorded	Y <input checked="" type="radio"/> N <input type="radio"/>
	North direction recorded	Y <input checked="" type="radio"/> N <input type="radio"/>
	Photographs taken?	Y <input checked="" type="radio"/> N <input type="radio"/>
Plot No., Date agreement on all pages?	Y <input checked="" type="radio"/> N <input type="radio"/>	
Header data completed all pages?	Y <input checked="" type="radio"/> N <input type="radio"/>	
Cover classes recorded in all Intensive modules	Y <input checked="" type="radio"/> N <input type="radio"/>	
Browse Level By Species	Y <input checked="" type="radio"/> N <input type="radio"/>	
Woody stem quality control check	Y <input checked="" type="radio"/> N <input type="radio"/>	
Invasive plant quality control check	S <input checked="" type="radio"/> N <input type="radio"/>	
Ash trees mapped	Y <input checked="" type="radio"/> N <input type="radio"/>	N/A
Cover by Strata? (confirm cover type)	Y <input checked="" type="radio"/> N <input type="radio"/>	
Soil samples collected with matching plot #.	Y <input checked="" type="radio"/> N <input type="radio"/>	
Vouchers labeled on datasheet with initials and number	Y <input checked="" type="radio"/> N <input type="radio"/>	
Vouchers labeled on collection bag	Y <input checked="" type="radio"/> N <input type="radio"/>	
Pink flags removed	Y <input checked="" type="radio"/> N <input type="radio"/>	
Data sheet QA before leaving site?	Y <input checked="" type="radio"/> N <input type="radio"/>	
Common equipment returned to tub.	Y <input checked="" type="radio"/> N <input type="radio"/>	
Data sheets scanned?	6/29/12	Enter date to left NZ
Final data sheets scanned?		Enter date to left
Buffer Widths measured?	Y <input checked="" type="radio"/> N <input type="radio"/>	NZ 7-6-12
Web Soil Survey	Y <input checked="" type="radio"/> N <input type="radio"/>	NM 6/29/12
Voucher Location	Refrigerator	Y <input checked="" type="radio"/> N <input type="radio"/>
(# vouchers collected) SRE522- SRE530	Press (#)	Enter number to left
	Drier	Y <input checked="" type="radio"/> N <input type="radio"/>
	Identified	Y <input checked="" type="radio"/> N <input type="radio"/>
	Mounted	Y <input checked="" type="radio"/> N <input type="radio"/>
	Thrown away	Y <input checked="" type="radio"/> N <input type="radio"/>

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:

CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet

Page 1 of 2

GENERAL INFORMATION		LOCATION	
Project Label:	PCAP	State:	OH County: Cuyahoga
Project Name:		Quadrangle:	
Plot Name:		Plot No.:	
Tick meignut		3412	
<input type="checkbox"/> Level 4 (no nested corners sampled)		<input checked="" type="checkbox"/> Level 5 (nested corners sampled)	
Date (mm/dd/yyyy):		6/25/2012	
End date (if > 1 day):		/ /	
Party		Role**	
S. Fissbach		Plot leader	
M. Bieger		But Ass't	
J. Pettit		Ass't	
J. Kistler		Ass't	
L. Hoffmann		K. Lewis	
Asst		Asst	
** Refers to Co-leader, Asst., Guide, Owner, 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			
SAMPLING QUALITY*			
Effort Level:			
<input checked="" type="checkbox"/> Very thorough			
<input type="checkbox"/> Accurate			
<input type="checkbox"/> Hurried			
TAXONOMIC ACCURACY			
<input checked="" type="checkbox"/> high	<input type="checkbox"/> modera	<input type="checkbox"/> low	<input type="checkbox"/> not samp
vascul.	✓	✓	n/a
bryo	✓	✓	n/a
lichen	✓	✓	n/a
TAXONOMIC STANDARD			
Authority:			
G&C Pub Date: 1998			

Minimum required fields in Bold and Underlined

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

OVER

Diagram showing plot layout and GPS location. The plot is a rectangle divided into 16 numbered quadrats (#1 to #16). A point labeled '(0,0) point' is marked at the top left corner. A point labeled 'GPS location' is marked near the center of the plot. A compass rose indicates cardinal directions. A legend defines symbols: a circle for 'Plot origin (0,0) point', a cross for 'GPS location', an arrow for 'photo taken, with direction', and a dot for '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.

Rationale: GRTS pt fell near a ly rubus patch transition. pt did not fall in rubus patch so ran plot North in wingstem

Vegetation: No canopy

Shrub: Rubus, Wingstem

Herb: Poa, Quack grass

CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet

Project Label: PCAP

Project Name: Old Bx 2012

Plot No.: 3412

Glacial till

Page 2 of 2

MODIFIED NATURERESERVE CLASS*

CODE (on separate form):

V04a

COMMUNITY NAME:

Old Field Lyng

HOMOGENEITY

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

HYDROLOGIC REGIME*

Former Land Use:

Unknown

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

Current Land Use:

Cm

DISTURBANCES

type*	severity**	yrs ago	% of plot	description
Human				
Natural				
Fire				
Cut				
Animal	m	o	100	Dear Browse
Other				

SALINITY*

- | | |
|---|---|
| <input checked="" type="checkbox"/> Upland (seldom flooded) | <input type="checkbox"/> Intermittently/flooded (seldom flooded) |
| <input type="checkbox"/> Saltwater | <input type="checkbox"/> Semipermanently flooded |
| <input type="checkbox"/> Brackish | <input type="checkbox"/> Permanently/Semipermanently saturated |
| <input type="checkbox"/> Fresh | <input type="checkbox"/> Tidal/Seiche flooded daily (dry <1/yr, seldom flooded) |
| <input checked="" type="checkbox"/> Upland (n/a) | <input type="checkbox"/> Occasionally flooded (<1/yr) |
| | <input type="checkbox"/> Tidal/Seiche flooded irregular (e.g. wind, storms) |
| | <input type="checkbox"/> Temporarily flooded |
| | <input type="checkbox"/> Unknown |

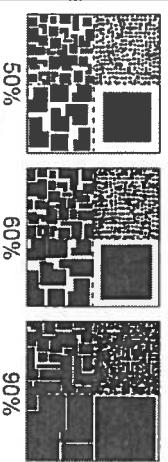
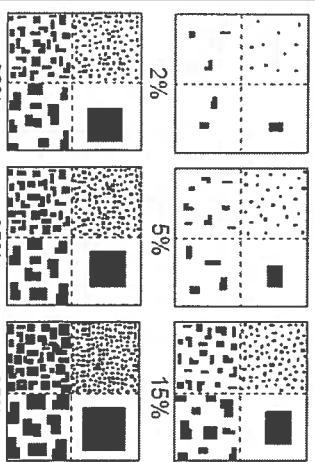
(by default unless plot is a wetland)

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

Plot fell in a meadow covered w/ wingstem and poison ivy. Plot is placed running towards the corner of Sagamore Rd and Canal Road. South of the plot is a large Rubus sp. thicket and more upland community. Browse was heavy on the Juglans, Rose and Rubus sp. There were a lot of dog ticks in the plot so beware when sampling. Meadow had relatively few species/plant diversity.

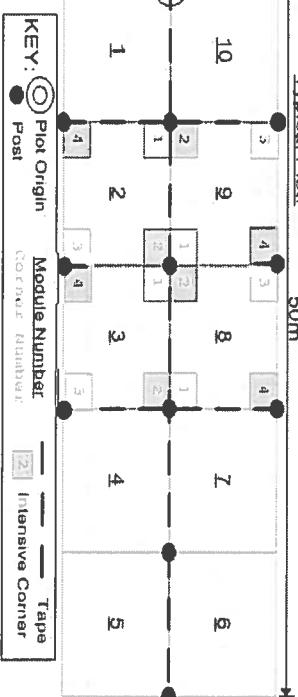
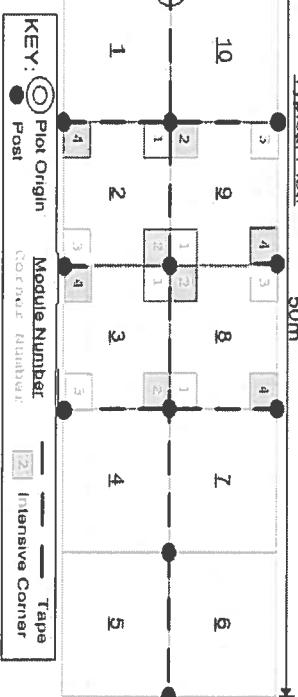
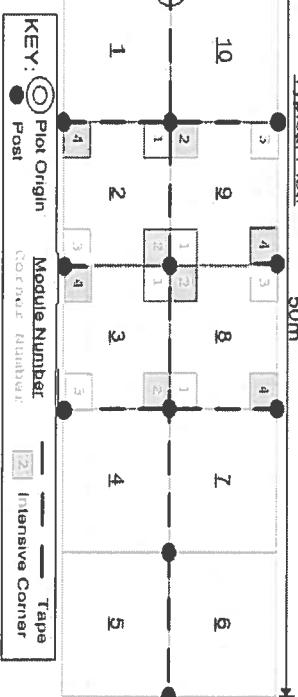
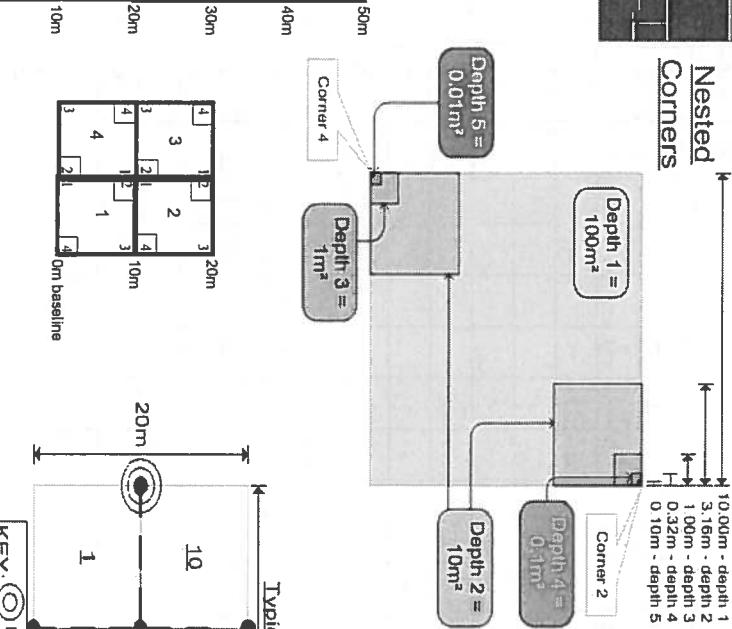
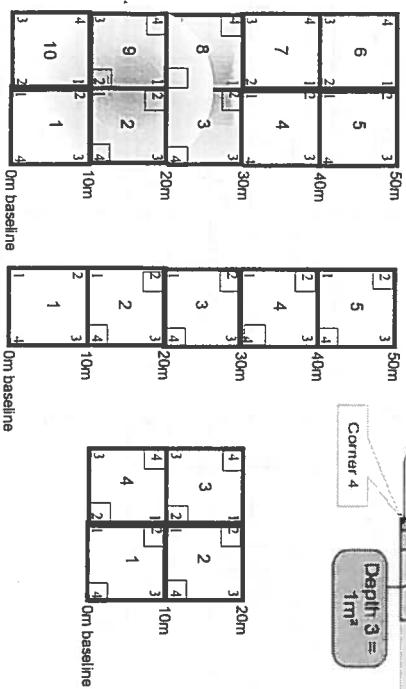
EXAMPLES OF PERCENT OF AREA COVERED

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.



Nested Corners

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



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.

BROWSE RATING NARRATIVE DESCRIPTION

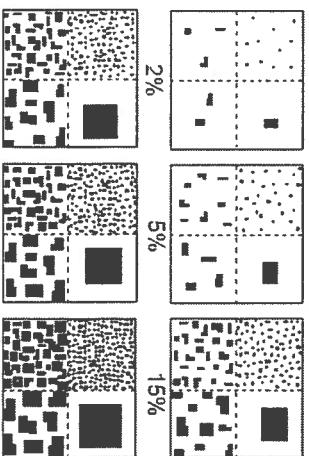
LOW OR NONE: there is no measurable browse line **AND** there are very few or no plants 1-m nested quadrat and intensive module. In general, low values relate to less than 10 percent, by numbers of stems browsed.

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.

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

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.

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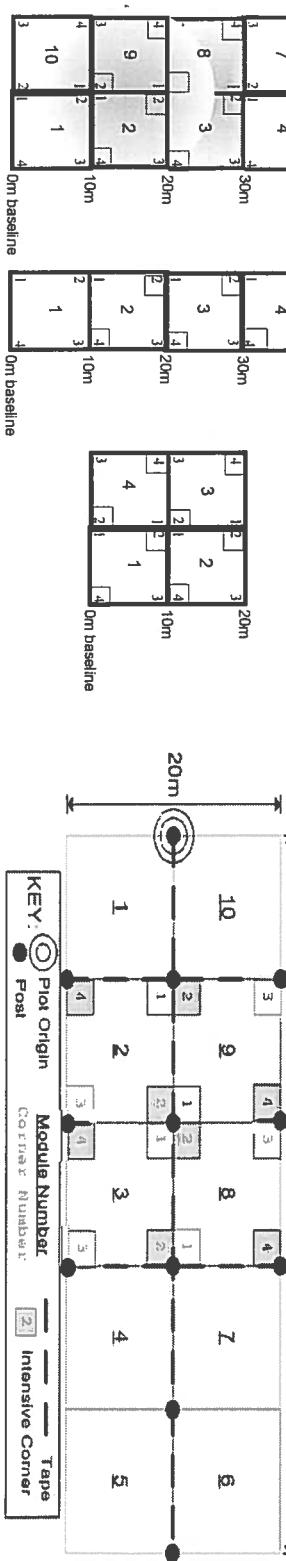
MEDIUM: browse affects greater than 10 percent and less than 25 percent of stems in the 1 m² nested quadrat and intensive module. A browse line is usually not evident or obvious for all classes and species of vegetation, but careful examination may show preferential browse and/or browse lines for some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

Typical Plot:



CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet

Project Label: PCAP

Project Name: O1BE2012 Plot No.: 3412

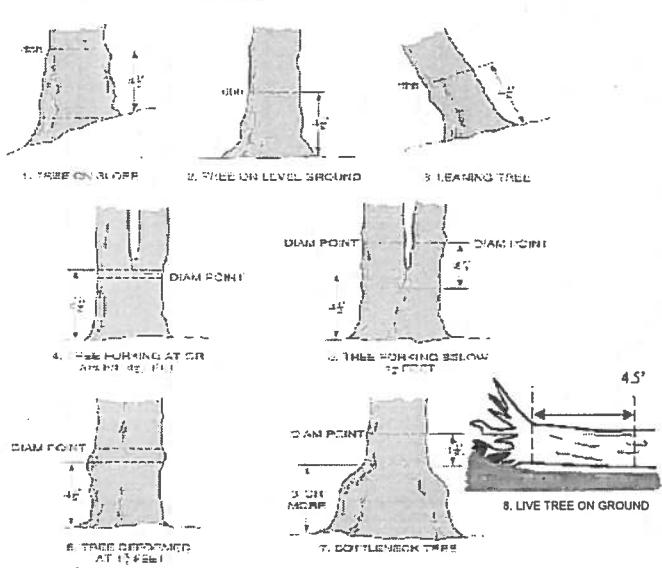
Page: 1 of 1



Explain subsample (additional room on back):

mod #	species	c	voucher#	# stems 0-1.4m browsed	% sub shrub sample	# clumps	size class (cm) woody stems >1.4m										11 >40 (record each tree)
							1	2	3	4	5	6	7	8	9	10	
1	<i>Rubus allegheniensis</i>			15	15												
1	<i>Rosa multiflora</i>			1	1												
1	<i>Juglans nigra</i>			1	1												
2	<i>Juglans nigra</i>			1	1												
2	<i>Frangula alnus</i>			1	1												
2	<i>Rosa multiflora</i>			1	1												
2	<i>Rubus allegheniensis</i>			1	1												
3	<i>Rosa multiflora</i>			1	1												
3	<i>Acer negundo</i>			1	1												
4	<i>Rubus allegheniensis</i>			7	7												
4	<i>Juglans nigra</i>			2	2												
4	<i>Claudena sp.</i>			1	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 Emerald Ash Borer - *Fraxinus* Sheet

Project Label: PCAP

INTENSIVE MODULES ONLY TREES $\geq 10\text{cm}$ ONLY

Page: 1 of 2

Module	Tree ID	Species	Dead c	Voucher #	DBH (cm)	Ht @ DBH condition	Ash condition	Dead condition	# Exit holes	Epicormic present	Woodpecker holes
1	N	A S W									
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											

ASH ONLY

Baseline	9	8
	2	3

N

*** Change intensive module numbers when necessary

Map all ash trees $\geq 10\text{cm}$ in each module using Tree ID number.

- * If Ash Condition scores 5 (dead) provide breakup score (A-E)
- Count EAB exit holes $1.28\text{mm} \times \geq 1.5\text{m}$
- Woodpecker and epicormic marked present (1) or absent (0)

CLEVELAND METROPARKS Plant Community Assessment Program: Invasive Species Survey



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

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 - Plant Cover and Earth Surface

Project Label: PCAP

Project Name: △ LBE 2012

Plot No.: 3412



Page: 1 of 1

STANDING BIOMASS (required for emergent wetland): collected in 1' in clip plots (32x32 cm) from corners 1 and 3 in each intensive module. Required for VIBI-E score calculation. C? = check when collected

Module #	C?	Corner	Corner

CARTOGRAPHY

MICROTOPOGRAPHIC FEATURE COUNTS - Intensive modules only

Ranks for microhabitat features. Select one or select two and average the score. NOTE: If mod falls on a slope automatically gets ranked based on steepness (1-3) to begin + any features present

Slope 1 = slight elevational grade across module (mod)

Slope 2 = falls on slope ~20°

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

0 feature is absent or functionally absent from the wetland

3 feature is present in the wetland in very small amounts or if more common, of low quality

7 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

C.W.D. - count for pieces with minimum 1m length											
no of tussocks		no of hummocks		no macro depressions		c.w.d (2-12 cm)		c.w.d (12-40cm)		microhab. interspers.	microhab. microhab.
depth 3		depth 2		depth 1		depth 1		depth 1		SLOPE	
1x1m		3.16x3.16m		10x10m		10x10m		10x10m		(rank)	(rank)
mod#	corner	(count)	(count)	(count)	(count)	(count)	(count)	(count)	(count)		
1	-	0	0	0	0	0	0	1	0		
2	-	0	0	0	0	0	0	1	0		
3	-	0	0	0	0	0	0	1	0		
4	-	0	0	0	0	0	0	1	0		

NOTE: tussock and hummocks are counted in BOTH nested quadrate corners but counts are aggregated.

Module	N	S	E	W
2	96	96	96	96
3	96	96	96	96
4	96	96	96	96
4	96	96	96	96

L.FI* TSI**
L.FI is angle of plot to the horizon. TSI is angles formed by local slopes. For TSI measure angle from recorder's eye to eye of person standing ~10 m away.

CROWN COVER (DENSITOMETER) Make 4 readings per module facing N, S, E, W Place dot count in corresponding space (4 dots per grid square)				
Module	N	S	E	W

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.

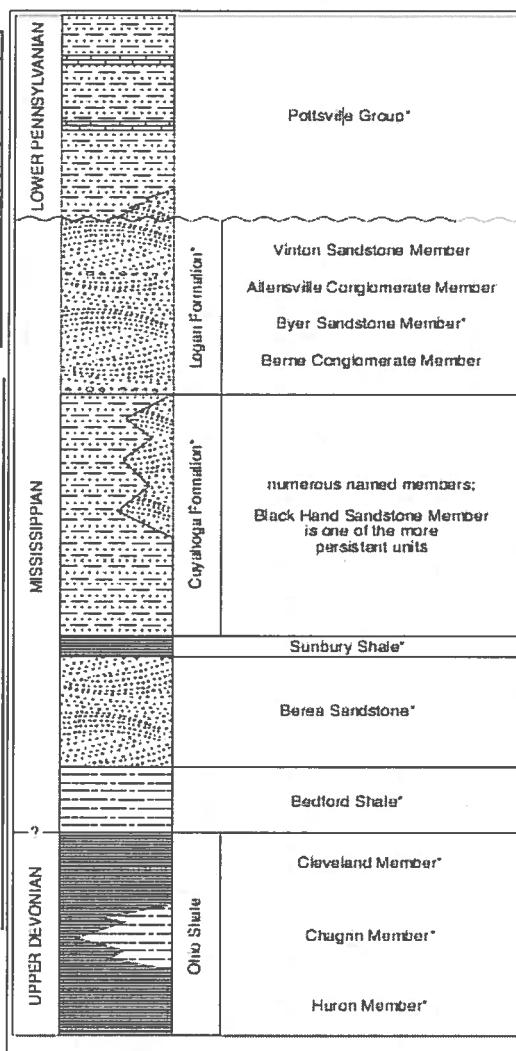
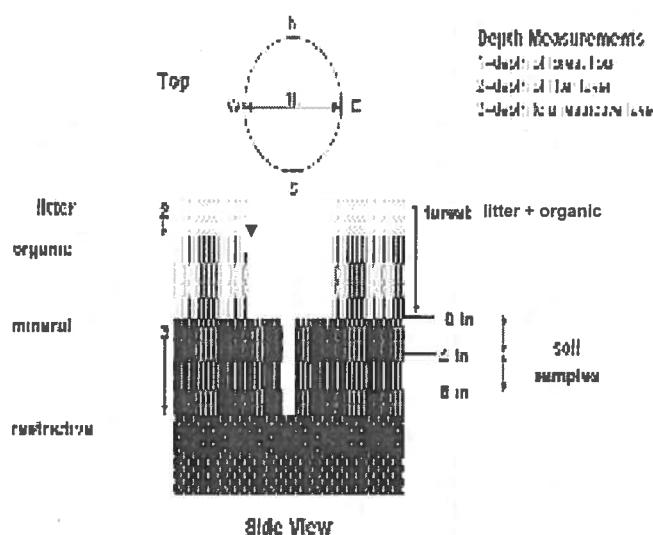


FIGURE 3-20.—Generalized section of Upper Devonian, Mississippian, and Lower Pennsylvanian formations in northeastern Ohio. Asterisks indicate units that are fossiliferous. This composite section represents about 400 meters of rock exposed across the area. The section is not to scale, but the thicknesses indicated are proportional. The term "Waverly" is used in the older literature to refer to Mississippian rocks in Ohio. Some geologists use the European term "Carboniferous" which encompasses the Mississippian and Pennsylvanian Periods of the U.S. Many units have been named within the Cuyahoga Formation, but most units are local and cannot be traced over great distances. The Black Hand Member is a spectacular massive sandstone that is fairly widespread but discontinuous. See Hyde (1953), Hoover (1960), and Collins (1979) for more information on Mississippian rocks in Ohio. See figure 3-18 for explanation of rock types.

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 # 2 (one per entire plot)

6 cm
 matrix color 2.5Y3/2
 mottle color N/A

%mottle 0
 oxid roots Y ND

texture* 2
 redox features** Y ND

hydr cond*** 1 S M ND

matrix color 2.5Y 3/2
 mottle color N/A

%mottle Y ND

oxid roots Y ND

texture* 2
 redox features** Y ND

hydr cond*** 1 S M ND

matrix color 2.5Y 3/2
 mottle color N/A

%mottle Y ND

oxid roots Y ND

texture* 2
 redox features** Y ND

hydr cond*** 1 S M ND

matrix color 2.5Y 3/2
 mottle color N/A

%mottle Y ND

oxid roots Y ND

texture* 2
 redox features** Y ND

hydr cond*** 1 S M ND

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

COVER BY STRATA
 estimate using midpoints of 5, ex: 3, 8, 13 %

STAND SIZE

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

Soil Collection Module(Horizon A, B, C)	A
1/3-2/3 composted	
Histosol	0
Mineral Soil	100%
Gravel-Cobble*	0
Boulder**	0
Bedrock	0
* Gravel-Cobble = 1/6-10"	Water
** Boulder = > 10 in	Bare Soil
*** >5 cm in diameter	Round/Trail
**** <5 cm in diameter	Other

Soil Series/Type: Chagrin silt loam	Landform type: Flood plains
Soil Series Source: Ohio Soil Survey	
Depth to rest: Layer: >80"	

Parent Material: Alluvium

Excessively dr.
 Somewhat excessively dr.
 Well drained
 Somewhat poorly dr.
 Very poorly dr.
 Impermeable surface

NM E 6/29/12

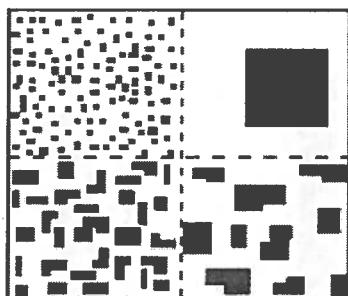
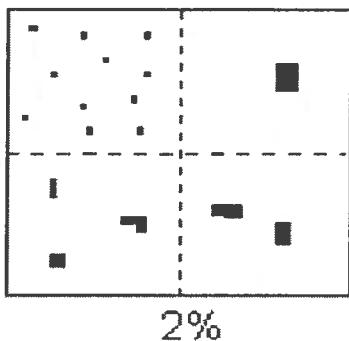
SEE BACK OF PAGE FOR "TYPICAL" STRATA DESCRIPTIONS. STRATA CAN VARY BY COVER TYPE.

Strata	Height Range (m)	Total Cover (%)
Tree	7.5 - 1	0
Shrub	1 - 5	8
Herb	0 - 1	98

(Aquatic)*	-
• rooted and floating or slightly emersed	
• submersed most plant mass below surface	

PERCENT MOTTLES (USE CLASS CODES):

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

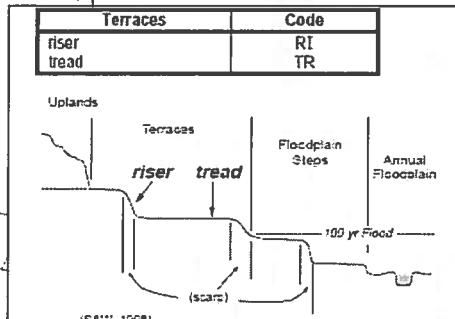
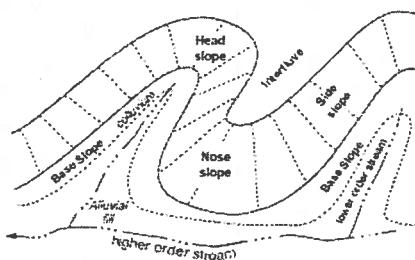
3= Sandy

4= Coarse Sand

9= Not measured - make plot note

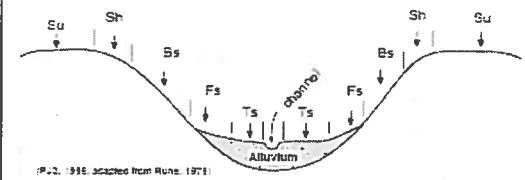
Geomorphic Component - Three-dimensional descriptors of parts of landforms or microfeatures that are best applied to areas. Unique descriptors are available for Hills, Terraces, Mountains, and Flat Plains; e.g., (for Hills) nose slope or NS.

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



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/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.

FORM B-1: BUFFER SAMPLE PLOTS - TARGETED ALIEN SPECIES (Back)

Reviewed by (initial): _____

Site ID: **PCAP Be3412**

DATE: **06 / 25 / 2012**

● Confirm a filled data bubble indicates presence and an unfilled bubble indicates absence by filling in this bubble:

Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Eurasian Watermilfoil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Purple Loosestrife	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Johnson Grass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Water hyacinth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Knotweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Kudzu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Yellow Floating Heart	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Japanese Knotweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Multiflora Rose	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	
Giant Salvinia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Perennial Pepperweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Common Buckthorn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Garlic Mustard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Giant Reed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Himalayan Blackberry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Poison Hemlock	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Cheatgrass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tamarisk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Mile-A-Minute Weed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Reed Canary Grass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Birdsfoot Trefoil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Common Reed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Canada Thistle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Leafy Spurge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
										Other:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

PLOT COORDINATES

Provide GPS coordinates at the center of the Buffer Plot (#3) at the far end of each Buffer Transect and for the Buffer Plot at the AA CENTER. Indicate the location of the plot coordinates by filling in the appropriate bubble.

If Buffer Plot 3 can not be accessed, take the coordinates at the nearest practicable location ALONG THE TRANSECT. This is important because all Buffer Plots are centered on the Buffer Transects and the coordinates will indicate the location of the transect. Fill in the "nearest practicable location" bubble, fill in the flag box, and describe where the coordinates were taken and why in the comment section below. The coordinates of the nearest practicable location can be either placed as close to the center of Plot 3 as possible or at the center of the last accessible Buffer Plot.

Location of coordinates (choose one):

AA CENTER N3 S3 E3 W3 Nearest practicable location (flag and comment below)

Flag

Latitude North **41 35 099**

Longitude West **81 58 997**

Use Decimal Degrees; NAD83

Flag	Comments

FORM B-1: BUFFER SAMPLE PLOTS - TARGETED ALIEN SPECIES (Back)

Reviewed by (Initials):

Site ID: PCAPBe3412

DATE: 06 / 25 / 2012

● Confirm a filled data bubble indicates presence and an unfilled bubble indicates absence by filling in this bubble.

Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Eurasian Watermilfoil	○	○	○		Purple Loosestrife	○	○	○		Johnson Grass	○	○	○	
Water hyacinth	○	○	○		Knotweed	○	○	○		Kudzu	○	○	○	
Yellow Floating Heart	○	○			Japanese Knotweed	○	○	○		Multiflora Rose	●	○	○	
Smartweed	○	○	○		Perennial Pepperweed	○	○	○		Common Buckthorn	○	○	○	
Garlic Mustard	○	○	○		Giant Reed	○	○	○		Himalayan Blackberry	○	○	○	
Poison Hemlock	○	○	○		Cheatgrass	○	○	○		Tamarisk	○	○	○	
Mile-A-Minute Weed	○	○	○		Reed Canary Grass	○	○	○		Other:	○	○	○	
Birdsfoot Trefoil	○	○	○		Common Reed	○	○	○		Other:	○	○	○	
Canada Thistle	○	○	○		Leafy Spurge	○	○	○		Other:	○	○	○	
										Other:	○	○	○	

PLOT COORDINATES

Provide GPS coordinates at the center of the Buffer Plot (#3) at the far end of each Buffer Transect and for the Buffer Plot at the AA CENTER. Indicate the location of the plot coordinates by filling in the appropriate bubble.

If Buffer Plot 3 can not be accessed, take the coordinates at the nearest practicable location ALONG THE TRANSECT. This is important because all Buffer Plots are centered on the Buffer Transects and the coordinates will indicate the location of the transect. Fill in the "nearest practicable location" bubble, fill in the flag box, and describe where the coordinates were taken and why in the comment section below. The coordinates of the nearest practicable location can be either placed as close to the center of Plot 3 as possible or at the center of the last accessible Buffer Plot.

Location of coordinates (choose one):

AA CENTER N3 S3 E3 W3 Nearest practicable location (flag and comment below)

Flag

Latitude North

4 1 3 5 0 7 7

Longitude West

8 1 5 9 1 4 5

Use Decimal Degrees; NAD83

Flag	Comments
1	Plot is on the corner of Canal and Sagamore, AA center is ~ 40m from Canal.

7966623548

FORM B-1: BUFFER SAMPLE PLOTS - TARGETED ALIEN SPECIES (Back)

Reviewed by [Initials]:

Site ID:

PCAP Be 3412

DATE:

06/25/2012

● Confirm a filled data bubble indicates presence and an unfilled bubble indicates absence by filling in this bubble.

Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Eurasian Watermilfoil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Purple Loosestrife	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Johnson Grass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Water hyacinth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Knotweed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Kudzu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Yellow Floating Heart	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Japanese Knotweed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Multiflora Rose	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Giant Salvinia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Perennial Pepperweed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Common Buckthorn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Garlic Mustard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Giant Reed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Himalayan Blackberry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Poison Hemlock	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Cheatgrass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Tamarisk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mile-A-Minute Weed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Reed Canary Grass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Birdsfoot Trefoil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Common Reed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Canada Thistle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Leafy Spurge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
										Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

PLOT COORDINATES

Provide GPS coordinates at the center of the Buffer Plot (#3) at the far end of each Buffer Transect and for the Buffer Plot at the AA CENTER. Indicate the location of the plot coordinates by filling in the appropriate bubble.

If Buffer Plot 3 can not be accessed, take the coordinates at the nearest practicable location ALONG THE TRANSECT. This is important because all Buffer Plots are centered on the Buffer Transects and the coordinates will indicate the location of the transect. Fill in the "nearest practicable location" bubble, fill in the flag box, and describe where the coordinates were taken and why in the comment section below. The coordinates of the nearest practicable location can be either placed as close to the center of Plot 3 as possible or at the center of the last accessible Buffer Plot.

Location of coordinates (choose one):

AA CENTER N3 S3 E3 W3 Nearest practicable location (flag and comment below)

Flag

--

Latitude North

4.1 - 35.0.5.9.

Longitude West

0.8.1 - 5.9.0.3.2.

Use Decimal Degrees; NAD83

Flag	Comments
1	Plot one falls directly on valley view road.
2	Plot 3 falls in a creek bed.

7966623548

PLOT COORDINATES											
Flag			Flag			Flag			Flag		
1	2	3	1	2	3	1	2	3	1	2	3
EUASIAN WALLMILLER	<input type="checkbox"/>	<input type="checkbox"/>	Furple Loosetissue	<input type="checkbox"/>	<input type="checkbox"/>	Knotweed	<input type="checkbox"/>	<input type="checkbox"/>	Johnson Grass	<input type="checkbox"/>	<input type="checkbox"/>
WATER HYACINTH	<input type="checkbox"/>	<input type="checkbox"/>	Knotweed	<input type="checkbox"/>	<input type="checkbox"/>	Kudzu	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
YELLOW FLOATING HEAT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Japanese Knotweed	<input type="checkbox"/>	<input type="checkbox"/>	Multiflora Rose	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Giant Sallow	<input type="checkbox"/>	<input type="checkbox"/>	Pennisetum Pepperweed	<input type="checkbox"/>	<input type="checkbox"/>	Common Buckthorn	<input type="checkbox"/>	<input type="checkbox"/>	Himalayan Blackberry	<input type="checkbox"/>	<input type="checkbox"/>
Giant Mustard	<input type="checkbox"/>	<input type="checkbox"/>	Giant Reed	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Chenopodium	<input type="checkbox"/>	<input type="checkbox"/>
FOLIAR HEMLOCK	<input type="checkbox"/>	<input type="checkbox"/>	Common Weeds	<input type="checkbox"/>	<input type="checkbox"/>	Tamnisk	<input type="checkbox"/>	<input type="checkbox"/>	Rabbit-ear Grass	<input type="checkbox"/>	<input type="checkbox"/>
MILE-A-MINUTE WEED	<input type="checkbox"/>	<input type="checkbox"/>	Reed Canary Grass	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Common Reed	<input type="checkbox"/>	<input type="checkbox"/>
BIRDSFOOT TREFOIL	<input type="checkbox"/>	<input type="checkbox"/>	Common Reed	<input type="checkbox"/>	<input type="checkbox"/>	Other	<input type="checkbox"/>	<input type="checkbox"/>	Leaky Spurge	<input type="checkbox"/>	<input type="checkbox"/>
CANADA THISTLE	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Other	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Provide GPS coordinates at the center of the Buffer Plot (G3) at the end of each Buffer Transect and for the Buffer Plot at the AA CENTER. Indicate the location of the Plot coordinates by filling in the appropriate bubble.											
Provide GPS coordinates at the center of the Buffer Plot (G3) at the end of each Buffer Transect and for the Buffer Plot at the AA CENTER. Indicate the location of the Plot coordinates by filling in the appropriate bubble.											
Flag											
Location of coordinates (choose one):											
Latitude North A.1 - 35.1.3.9 Longitude West 0.81 - 59.1.6.1 Use Decimal Degrees; NAD83											
AA CENTER ● N3 ○ S3 ○ E3 ○ W3 ○ Nearest practicable location (flag and comment below)											
Comments											
Flag											

Flag	Comments
3	Plot #2 falls over in a mowed edge of 2 lanes road
2	Plot #3 falls 10m from 2 lane road (paved)
3	Plot #3 visually assessed from 10m away,
	it was located in a ravine thick with Honeyuckle/Rosel.

Flag	Location of coordinates (choose one):
3	Latitude North 41° 34' 45.3" Longitude West 81° 59' 13.5"
Use Decimal Degrees: NAD83	

If Buffer Plot 3 can not be accessed take the coordinates at the nearest practicable location ALONG THE TRANSCECT. This is important because all Buffer Plots are centered on the Buffer Transects and the coordinates will indicate the location of the transect. Fill in the nearest practicable location below. If Buffer Plot 3 can not be accessed take the coordinates at the nearest practicable location ALONG THE TRANSCECT. This is important because all Buffer Plots are centered on the Buffer Transects and the coordinates will indicate the location of the transect. Fill in the nearest practicable location below. The coordinates of the nearest practicable location can be either placed as close to the center of Plot 3 as possible or at the center of the nearest practicable Buffer Plot. The coordinates of the nearest practicable location can be either placed as close to the center of Plot 3 as possible or at the center of the nearest practicable Buffer Plot.

PLOT COORDINATES									
Flag	1	2	3	Flag	Flag bubble if present - Plot 1	2	3	Flag	Flag bubble if present - Plot 1
Eurasian Watermilfoil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Furple loosestrife	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Johnson Grass	<input type="radio"/>
Water Hyacinth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Knotweed	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Kudzu	<input type="radio"/>
Yellow Floating Heart	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Japanese knotweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Multiflora Rose	<input type="radio"/>
Giant Salvinia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Perennial Pepperweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Common Buckthorn	<input type="radio"/>
Garlic Mustard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Giant Reed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fimbristylis Blackberry	<input type="radio"/>
Poison Hemlock	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Reed Canary Grass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Ferns	<input type="radio"/>
Mile-A-Minute Vine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Cheatgrass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Thistle	<input type="radio"/>
Birdsfoot Trefoil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Reed Canary Grass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Common Reed	<input type="radio"/>
Canada Thistle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Common Reed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Leymus Spurgle	<input type="radio"/>
3									

Count a filled data bubble indicates presence and an unfilled bubble indicates absence by filling in this bubble

Site ID: CAP3412 Date: 06/25/2012

FORM B-1- BUFFER SAMPLE PLOTS - TARGETED ALIEN SPECIES (Back)
Reviewed by _____