

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



Project Label: PCAP Plot No: 1318 Date Sampled: 7-1-13 Lead: Lance

Comment required if item answer is NO

Parking/Access outside of Park Boundaries:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	If yes, write details in Comments section below
Field journals completed	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Site sketch made on 1:3000 map?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Check cover page	X-axis Bearing of plot recorded	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
	GPS coords. Recorded	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
	North direction recorded	<input checked="" type="checkbox"/> X <input type="checkbox"/> N
	Photographs taken?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Plot No., Date agreement on all pages?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Header data completed all pages?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Cover classes recorded in all Intensive modules	<input checked="" type="checkbox"/> X <input type="checkbox"/> N	
Browse Level By Species	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Woody stem quality control check	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Invasive plant quality control check	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Ash trees mapped	<input checked="" type="checkbox"/> X <input type="checkbox"/> N	
Cover by Strata? (confirm cover type)	<input checked="" type="checkbox"/> V <input type="checkbox"/> N	
Soil samples collected with matching plot #.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Vouchers labeled on datasheet with initials and number	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Vouchers labeled on collection bag	<input checked="" type="checkbox"/> X <input type="checkbox"/> N	
Pink flags removed	<input checked="" type="checkbox"/> V <input type="checkbox"/> N	
Data sheet QA before leaving site?	<input checked="" type="checkbox"/> X <input type="checkbox"/> N	
Common equipment returned to tub.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Data sheets scanned?	<input checked="" type="checkbox"/> 7/5/13	Enter date to left AB
Final data sheets scanned?		Enter date to left
Buffer Widths measured?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	AB 6-20-13
Web Soil Survey	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	AB 7/5/13
Voucher Location	Refrigerator	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
(# vouchers collected)	Press (#)	Enter number to left
ACL 021-	Drier	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
ACL 029	Identified	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
	Mounted	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
	Thrown away	<input checked="" type="checkbox"/> Y <input type="checkbox"/> 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:



# 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:	<b>D1 M5 2013</b>	Quadangle: <b>Berea</b> <i>BB &gt; 11/13</i>	
Plot Name:	<b>Barberry Central</b>		
Plot No.:	<b>1318</b>		
		<input type="checkbox"/> Level 4 (no nested corners sampled)	<input checked="" type="checkbox"/> Level 5 (nested corners sampled)
Date (mm/dd/yyyy):		<b>07/01/2013</b>	
End date (if > 1 day):		/ /	
Party		Role**	
<b>A. Lance</b> Plot Leader		<b>R. Eagle</b> Botany Assistant	
<b>A. Schaufnagel</b> Liberty Crew		<b>R. Chesla</b> Worley Crew	
* Roles: Co-leader, Asst., Guide, Owner, Taxonomist, etc.			
<b>PLOT NOT SAMPLED:</b> <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: <input checked="" type="checkbox"/> Very thorough <input type="checkbox"/> Accurate <input type="checkbox"/> Hesitant			
subjective evaluation of how much effort put into sampling. Hunted plots may still provide good data			
TAXONOMIC ACCURACY			
high	moder.	low	not samp
vascul.	✓	✓	n/a
bryo	✓	✓	✓
lichen	✓	✓	✓
TAXONOMIC STANDARD			
Authority: <b>G&amp;C</b> Pub Date: <b>1998</b>			
Minimum required fields in Bold and Underlined			
* Definitions and values in CM PCAP FOM v. 1.0 and CVS Field Guide			
<b>OVER</b>			

**CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet**Project Label: PCAP Project Name: 01 MS 2013Plot No.: 1318

Page 2 of 2

**MODIFIED NATURE RESERVE CLASS\***CODE (on separate form):  
L-01**PROJECT CLASS**Proj# Conf# \_\_\_\_\_**COMMUNITY NAME:**Mesic Floodplain Forest**HOMOGENEITY** Homogeneous Compositional trend across the plot Conspicuous inclusions Irregular/pattern mosaic**HYDROLOGIC REGIME\***

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

(by default unless plot is a wetland)

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

<b>DISTURBANCES</b>					
	type*	severity**	yrs ago	% of plot	description
Human	<u>L</u>	<u>0</u>	<u>100%</u>	<u>garbage</u>	
Natural	<u>M</u>	<u>0</u>	<u>100%</u>	<u>EAB impact</u>	
Fire					
Cut					
Animal	<u>M</u>	<u>0</u>	<u>100%</u>	<u>browse</u>	
Other					

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

Current Land Use: Park  
Former Land Use: Unknown

**CLEVELAND METROPARKS Plant Community Assessment Program Species Cover Data Sheet 2a**

Project Label: PCAP

Project name: QIMS 2013

Page 1 of 3

Total modules: 10

Intensive modules: 4 Plot configuration: 2x5

Plot area (ha): .01



**Cleveland  
Metroparks**

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

%

unveg.

ground

(bare soil)

%

unveg.

litter

(bare litter)

%

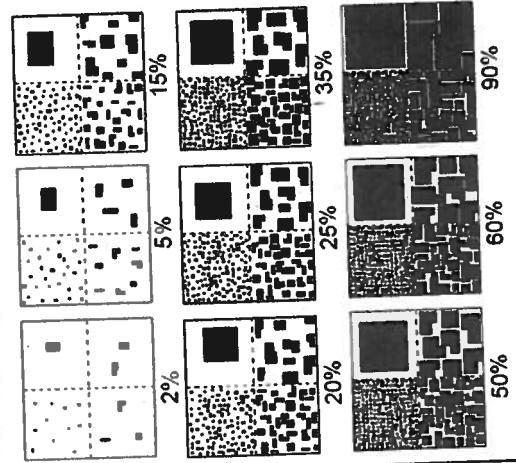
cov.

depth

cov.

#### 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.



#### 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 m<sup>2</sup> 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 m<sup>2</sup> 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.

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

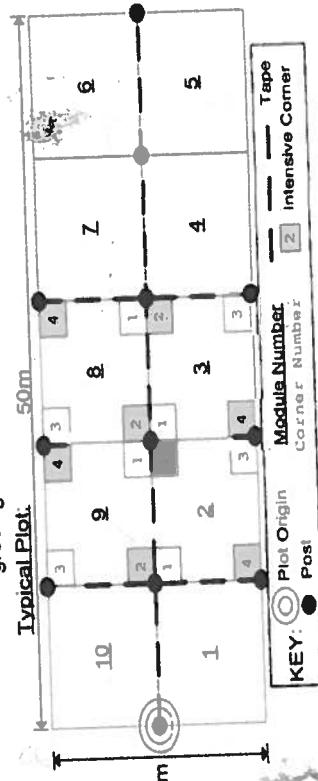
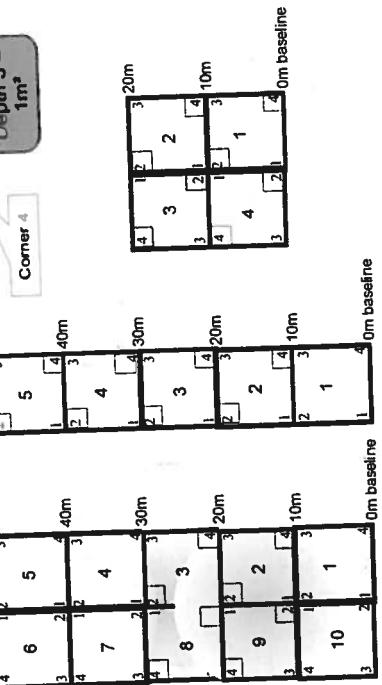
10.00m - depth 1  
3.16m - depth 2  
1.00m - depth 3  
0.32m - depth 4  
0.10m - depth 5

Depth 1 = 100m<sup>2</sup>  
Corner 2

Depth 2 = 10m<sup>2</sup>  
Corner 4 = 0.1m<sup>2</sup>

Depth 3 = 1m<sup>2</sup>  
Corner 4 = 0.01m<sup>2</sup>

Depth 4 = 0.1m<sup>2</sup>  
Corner 4 = 0.001m<sup>2</sup>



CLEVELAND METROPARKS Plant Community Assessment Program Species Cover Data Sheet 2a

Project Label: PCAP

Project Name: 01 MS 2013

Page 2 of 3

Total modules: 10

Intensive modules: 4 Plot configuration: 2x5

Plot area (ha): .1



Cleveland  
Metroparks

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

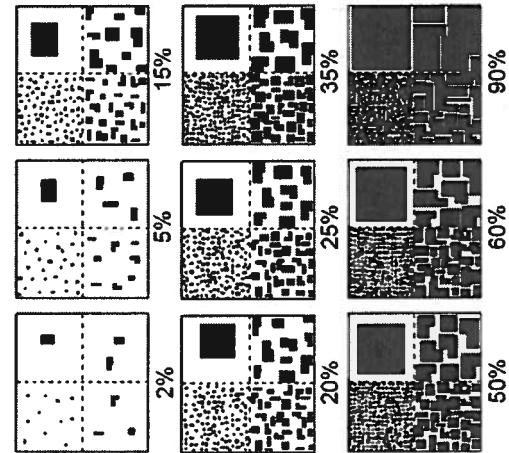
Strata - Cov. entire plot

T	S	H	(F)	(A)	Br	Species	C	Voucher #	mod	corner																										
3	2	1				Toxicodendron radicans			1	6	2	2	2	2	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
4	3	1				Acer rubrum			1	6	3	3	2	2	2	2	3	4	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
3	3	1				Circaea lutetiana			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
3	3	1				Oxalis stricta	SE	9	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
1	1	1				Asteraceae sp.	Polygonum sp.	C4-366	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
4	3	1				Lindera benzoin			1	4	4	4	3	4	3	4	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
3	2	1				Boehmeria cylindrica			1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	
1	1	1				Hovenia dulcis	sp.	SYC4-1023	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
6	4	1				Quercus rubra			1	6	4	6	1	6	1	6	1	6	1	6	1	6	1	6	1	6	1	6	1	6	1	6	1	6	1	
1	1	1				Dryopteris vestita	Polygonatum		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
1	1	1				Acer sp. seedling			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
1	1	1				Unknown # 4	juv.	C4-367	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
1	1	1				Hedera helix			1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	
5	4	1				Unknown # 5	Vitis sp. (Isabella)	C4-369	1	5	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
4	2	1				Carya cordiformis			1	4	1	5	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	2	1				Prunus alnifolia			1	4	1	5	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	2	1				Gaultheria sp. triflorum		X ACL 024	1	4	1	5	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
2	2	1				Lonicera mackii			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	1				Prunella vulgaris			1	4	1	5	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	1				Elymus hystrix			1	4	1	5	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	1				Epipactis helleborine			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
1	1	1				Ranunculus repens			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	2	1				Unknown fern			1	4	1	5	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	2	1				Carica sp.			1	4	1	5	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Entry stop

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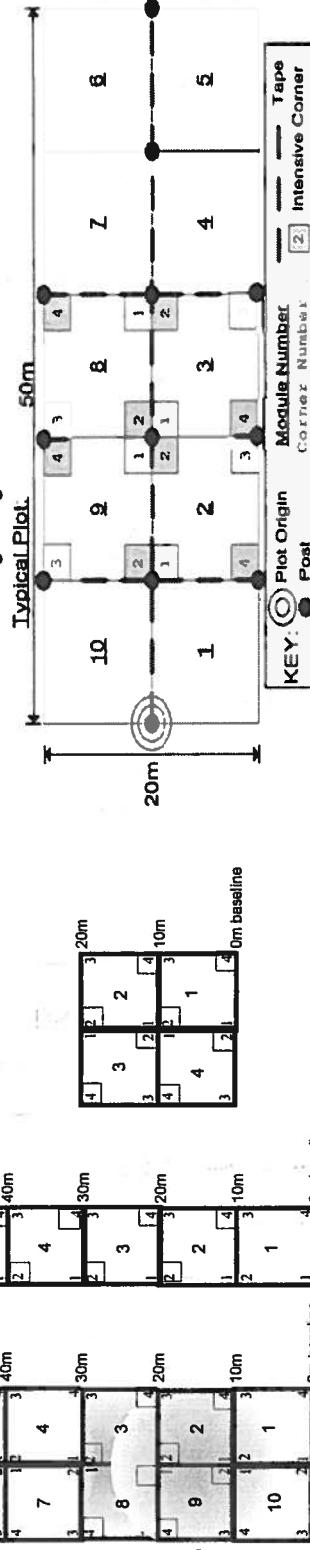
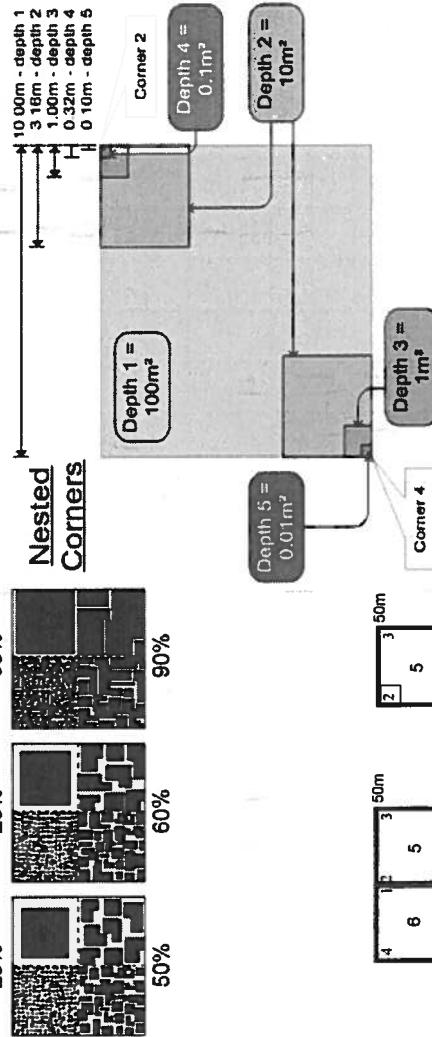
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CLEVELAND METROPARKS Plant Community Assessment Program Species Cover Data Sheet 2a

Project name: O1 MS 2013

Plot no.: 1318

Page 3 of 3

Total modules: 10

Intensive modules: 4

Plot configuration: 2x5

Plot area (ha): .1



Cleveland  
Metroparks

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

Estimate for each  
intensive module:

%open water

1

%unvegetated open water

1

%unveg. ground (bare soil)

1

%unveg. litter (bare litter)

1

Strata - Cov. entire plot

T S H (F)(A) Br

Species

c Voucher #

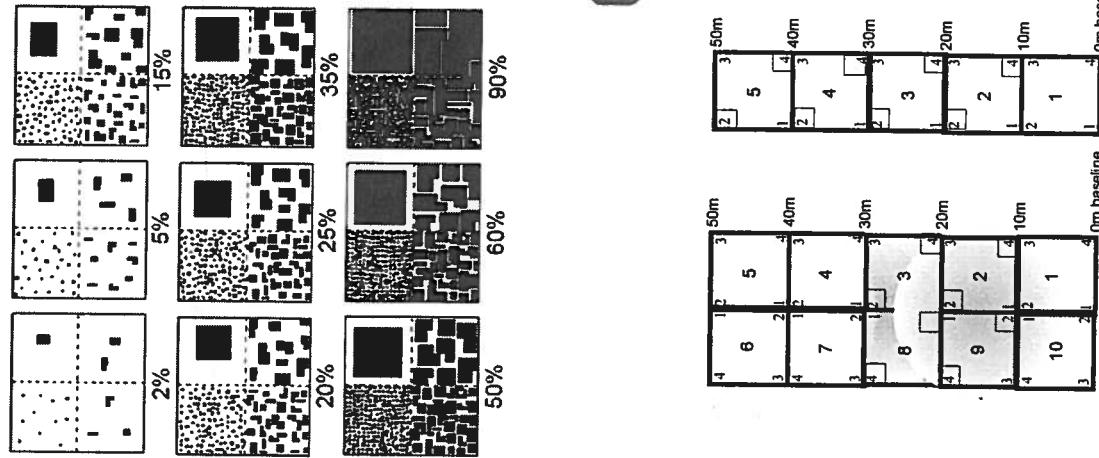
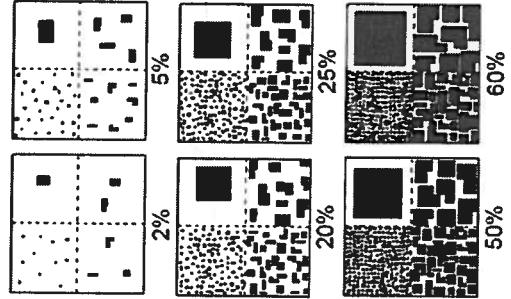
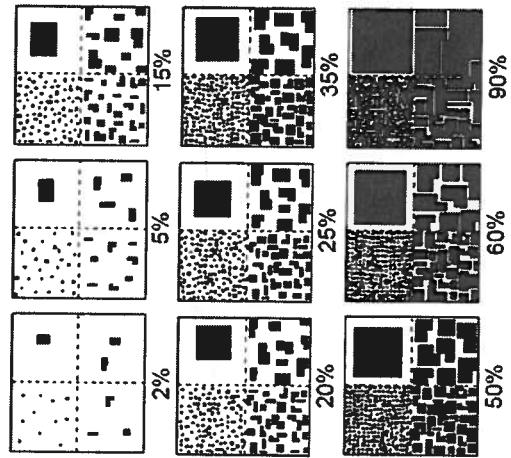
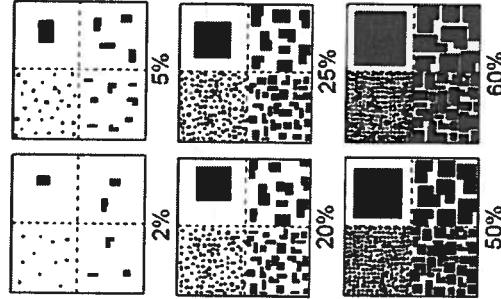
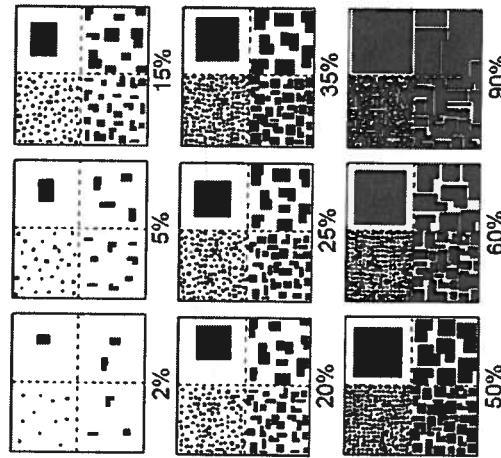
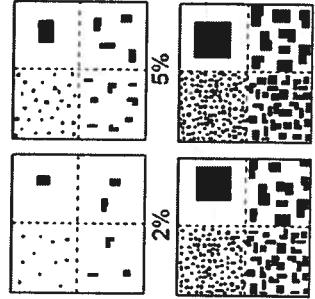
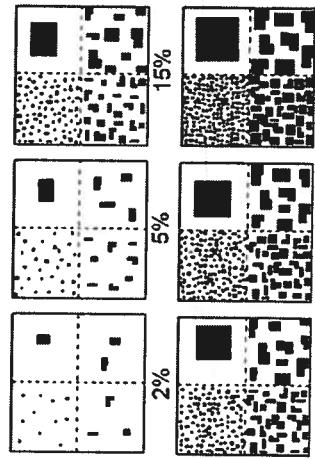
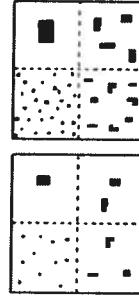
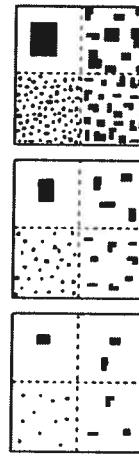
depth

cov

depth

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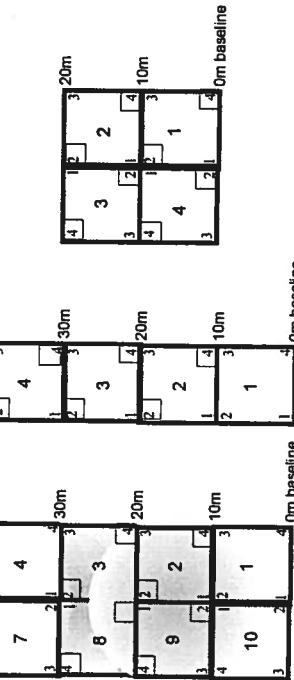
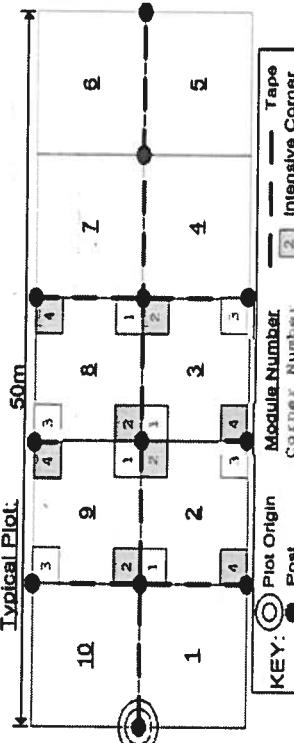
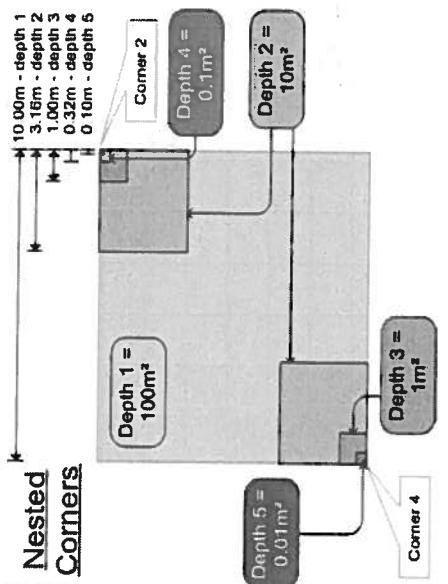
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7	25-50%	0.375
8	50-75%	0.625
9	75-95%	0.850
10	95-100%	0.975



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

Project Label: PCAP

Project Name: OMS2013

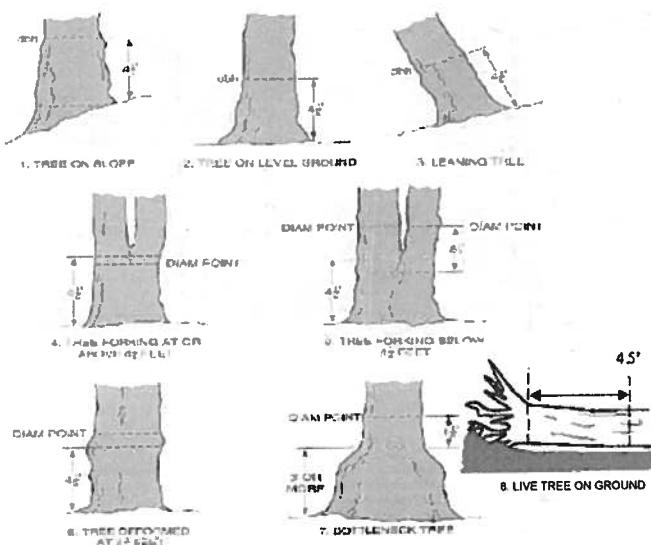
Page: 1 of 4

Cleveland Metroparks

Explain subsample (additional room on back):

mod #	species	c	voucher#	# stems 0-1.4m browsed	% sub sample	# shrub clumps	size class (cm) woody stems > 1.4m											>40 (record each tree)
							1	2	3	4	5	6	7	8	9	10	11	
1	Carya sp.								•									
1	Prunus serotina								•									
1	Carya cordiformis								•									
1	Aesculus glabra								•									
1	Acer negundo								•									
1	Standing dead								•									
1	Acer rubrum								•									
1	Toxicodendron radicans								•									
1	Fraxinus sp.								•									
1	Berberis thunbergii								•									
1	Lindera benzoin								•									
2	Acer negundo								•									
2	Berberis thunbergii								•									56.0
2	Lindera benzoin								•									
2	Standing dead								•									
2	Acer rubrum								•									
2	Prunus serotina								•									
2	Fraxinus sp.								•									
3	Aesculus glabra								•									
3	Berberis thunbergii								•									
3	Quercus rubra								•									
3	Prunus serotina								•									50.2
3	Acer negundo								•									
3	Standing dead								•									53.5,58.3

#### 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: OMSA013

Plot No.: 1318

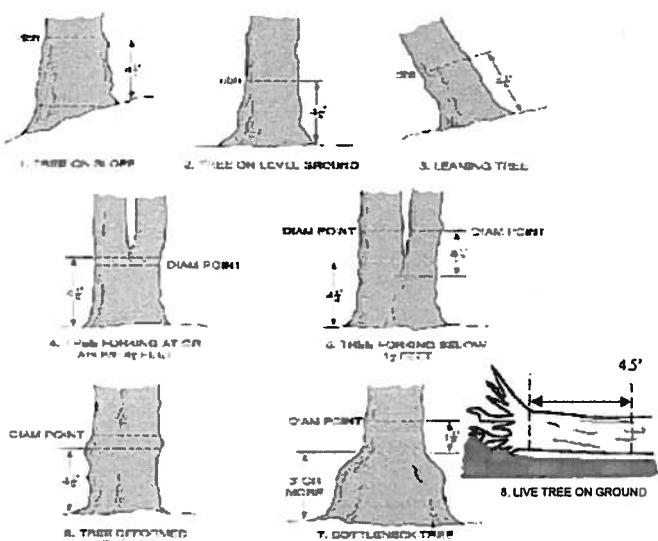
Page: 2 of 4

Cleveland Metroparks

Explain subsample (additional room on back):

mod #	species	c	voucher#	browsed	# stems 0-1.4m or super sample	# shrub clumps	size class (cm) woody stems >1.4m										>40 (record each tree)
							1	2	3	4	5	6	7	8	9	10	
3	Fraxinus sp.																
3	Carya cordiformis																
3	ROSA MULTIFLORA																
3	Lindera benzoin																
4	Prunus serotina																
4	BERBERIS THUNBERGII																
4	Carya sp.																
4	Aesculus glabra																
4	Acer negundo																
4	Fraxinus sp.																
4	Standing dead																
4	ROSA MULTIFLORA																
5	Acer negundo																
5	Standing dead																
5	Fraxinus sp.																
5	Vitis <del>sp</del> labrusca																
5	IONICERANTHUS																
5	Prunus serotina																
5	BERBERIS THUNBERGII																
5	Rubus allegheniensis																
5	LIGUSTRUM VULGARE																
5	Acer negundo																
6	Acer saccharinum																
6	Vitis <del>sp</del> labrusca																
																	50.1

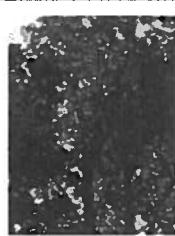
### DBH Measurement Rules



### 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.
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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)

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

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

Project Label: PCAP

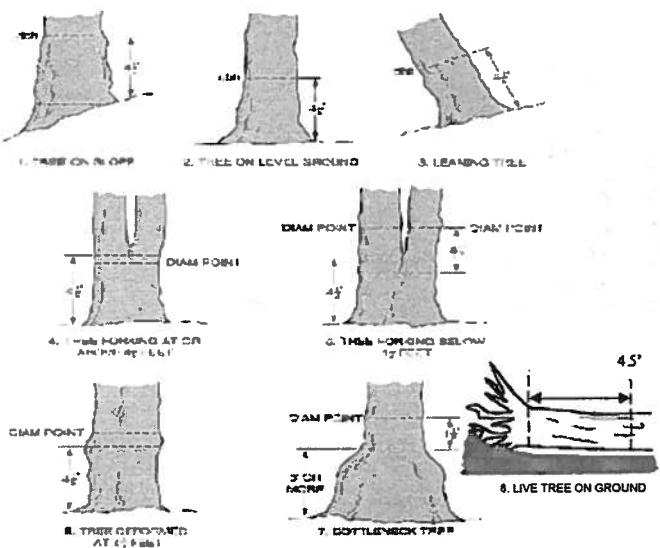
Project Name: DIMSDO13 Plot No.: 1318

Page: 3 of 4

Explain subsample (additional room on back):

mod #	species	c	voucher#	# stems 0-1.4m browsed	% sub sample	# shrub clumps	size class (cm) woody stems >1.4m										11 >40 (record each tree)
							0-1	2	3	4	5	6	7	8	9	10	
16	BERBERIS THUNBERGII			0	0	0											
16	Ostrya virginiana			0	0	0											
16	Standing dead			0	0	0											
16	Prunus serotina			0	0	0											
16	LIGUS TRUMLVULGARE			0	0	0											
16	FRAXINUS SP.			0	0	0											
16	ROSACEA TIFLORA			0	0	0											
X6	Parthenocissus quinquefolia			0	0	0											
17	Prunus serotina			0	0	0											
16	Lindera benzoin			0	0	0											
17	Vitis <del>splendens</del> americana			0	0	0											
17	BERRBERIS THUNBERGII			0	0	0											
7	ACER negundo			0	0	0											
7	LIGUS TRUMLVULGARE			0	0	0											
7	Lindera benzoin			0	0	0											
7	Fraxinus sp.			0	0	0											
8	Acer negundo			0	0	0											
8	Prunus serotina			0	0	0											
16	BERBERIS THUNBERGII			0	0	0											
16	Lindera benzoin			0	0	0											
16	LONICERA MELAKILLI			0	0	0											
16	Standing dead			0	0	0											
16	Fraxinus sp.			0	0	0											

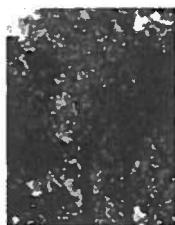
### DBH Measurement Rules



### 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.
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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)

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- 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: OMS2013 Plot No.: 1318

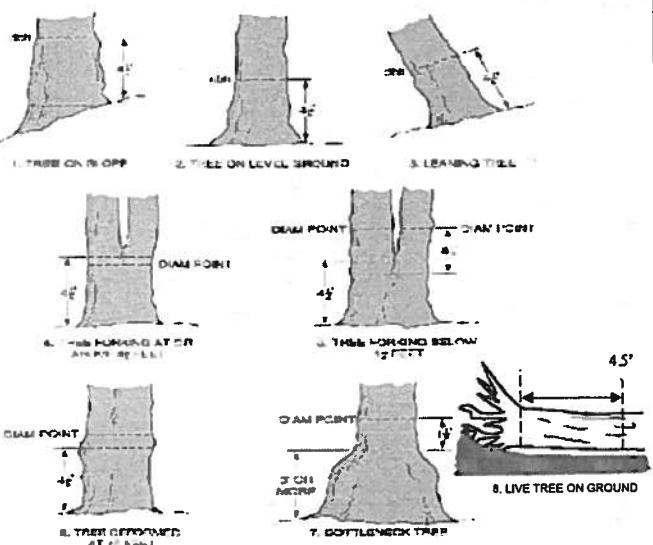
Page: 4 of 4

Cleveland Metroparks

Explain subsample (additional room on back):

mod #	species	c voucher#	# stems browsed	% sub sample	# shrub clumps	size class (cm) woody stems > 1.4m 0-<1	woody stems > 1.4m										>40 (record each tree)
							1	2	3	4	5	6	7	8	9	10	
9	LONICERA MACKNII		6			•			•	•							
9	Standing dead																
9	Acer negundo		60			•											
9	BERBERIS THUNBERGII					•											
9	Fraxinus sp.																
9	Quercus rubra																
9	Prunus serotina																
9	Carya sp.																
9	Lindera benzoin		20			•											
10	Prunus serrulata		60			•											
10	Carya cordiformis																
10	Acer negundo					•											
10	BERBERIS THUNBERGII																
10	Fraxinus sp.																
10	Standing dead																
10	Aesculus glabra																
10	Lindera benzoin		60														

#### 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.
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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).
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- 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

Project Name: QMMS2013

INTENSIVE MODULES ONLY TREES ≥ 10CM ONLY  
Plot No.: 1318 Date: 7/1/13

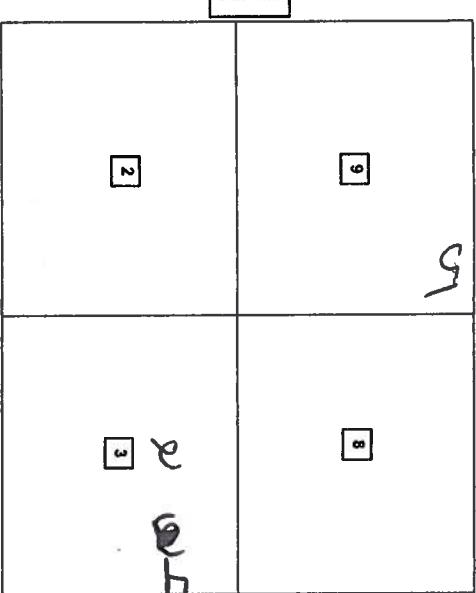
Page: 1 of 2

Module	Tree ID	Species	Dead c	Voucher #	DBH (cm)	Ht @ DBH	Ash condition	*Dead holes	# Exit present	Epicormic holes	Woodpecker holes	ASH Only
1	1	Fraxinus sp.	✓		53.5	13	5	C	33	1	1	
2	2	Fraxinus sp.	✓		17.2	37	4	n/a	4	0	1	
3	3	Fraxinus sp.			58.3	37	5	C	21	0	1	
4	4	Fraxinus sp.	✓		41.8	13	4	n/a	0	0	1	
5	5	Fraxinus sp.										
6	6											
7	7											
8	8											
9	9											
10	10											
11	11											
12	12											
13	13											
14	14											
15	15											
16	16											
17	17											
18	18											
19	19											
20	20											
21	21											
22	22											
23	23											
24	24											
25	25											

More  
Live

- \* If Ash Condition scores 5 (dead) provide breakup score (A-E)
- Count EAB exit holes 1.25m² x 21.5m
- Woodpecker and epicormic marked present (1) or absent (0)

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



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

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		# of Plants
<i>Acer platanoides</i>	Norway Maple						1: 1-10
<i>Ailanthus altissima</i>	Tree of Heaven						2: 11-50.
<i>Lonicera japonica</i> (vine)	Japanese Honeysuckle						3: 51-100
<i>Lythrum salicaria</i> (wetland)	Purple Loosestrife						4: 101-1,000
<i>Aegopodium podagraria</i> (G-cover)	Bishop's Goutweed						5: >1,000
<i>Celastrus orbiculatus</i> (vine)	Asian Bittersweet						
<i>Torilis</i> sp.	Hedgeparsley						
<i>Conium maculatum</i>	Poison Hemlock						
<i>Rhamnus cathartica</i>	Common Buckthorn (shrub)						
<i>Berberis thunbergii</i>	Japanese Barberry (shrub)	2	2	3	2		
<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)			1	1	SRF 11-18-13	
<i>Euonymus fortunei</i>	Wintercreeper						
Tier 3: Presence is of Interest		# of Plants		comments			
		NE	SE	SW	NW		# of Plants
<i>Convallaria majalis</i> (G-cover)	Lily of the Valley						1: 1-10
<i>Coronilla varia</i> (G-cover)	Crown Vetch						2: 11-50.
<i>Eleutherococcus pentaphyllus</i>	Five-leaf Aralia (shrub)						3: 51-100
<i>Pachysandra terminalis</i> (G-cover)	Japanese Pachysandra						4: 101-1,000
<i>Philadelphus coronarius</i>	Mock Orange (shrub)						5: >1,000
<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		# of Plants
<i>Alliaria petiolata</i>	Garlic Mustard	2	1	3	2		1: 1-10
<i>Ligustrum vulgare</i>	Common Privet (shrub)	1		1	1	SRF 11-18-13	2: 11-50.
<i>L. morrowii</i> , <i>L. tatarica</i>	Bush Honeysuckles (shrub)	1	1	1	1	SRF 11-18-13	3: 51-100
<i>Phalaris arundinacea</i>	Reed Canarygrass						4: 101-1,000
<i>Phragmites australis</i> (wetland)	Phragmites						5: >1,000
<i>Polygonum cuspidatum</i>	Japanese Knotweed						
<i>Frangula alnus</i>	Glossy Buckthorn (shrub)						
<i>Rosa multiflora</i>	Multiflora Rose (shrub)	2	2	2	1		
<i>Typha angustifolia</i> , <i>T. x. glauca</i>	Cattails (wetland)						
<i>Cirsium arvense</i>	Canada thistle						
<i>Dipsacus fullonum</i>	Common Teasel						
<i>Hesperis matronalis</i>	Dame's Rocket	1	1	3	1	SRF 11-18-13	
<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)



#### 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.

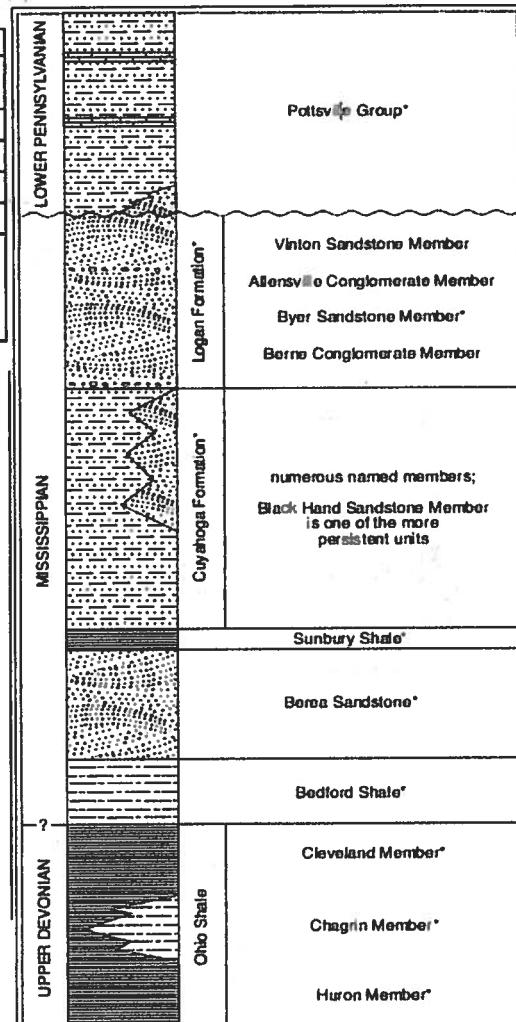
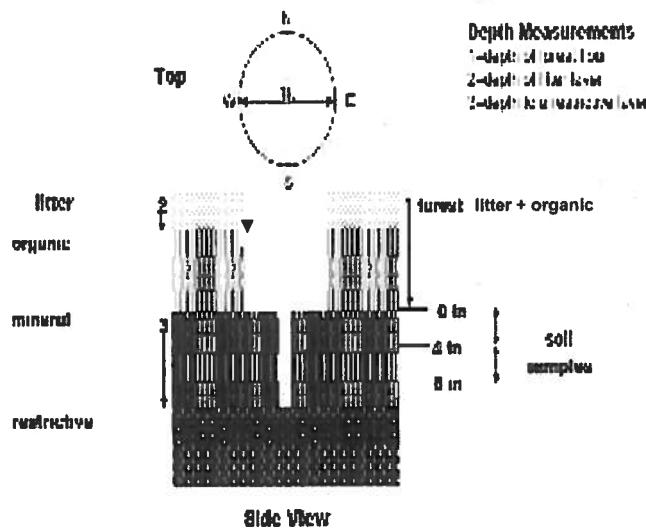


FIGURE 3-20.—Generalized section of Upper Devonian, Mississippian, and Lower Pennsylvanian formations in northeastern Ohio. Asterisks indicate units that are fossiliferous. This composite section represents about 400 meters of rock exposed across the area. The section is not to scale, but the thicknesses indicated are proportional. The term "Wavy" 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 # 3 (one per entire plot)

5 cm	matrix color <u>2.5 Y 4/2</u>
moisture color	<u>none</u>
%smotile	<u>0</u>
oxid roots	<u>Y</u> <u>N</u>
texture*	<u>2</u>
redox features**	<u>Y</u> <u>N</u>
hydr cond ***	<u>I</u> <u>S</u> <u>M</u> <u>D</u>

Soil Collection Module	Horizon (A, B, C)
2,3,8,9	<u>composted</u>
Web Soil Survey Information:	A
Soil Series/Type:	<u>Ch-Chagrin Silt Loam</u>
Soil Series Source:	<u>Ohio Soil Survey</u>
Landform Type:	<u>Flood Plains</u>
Depth to rest. Layer:	<u>Rocky Knob. 10 cm</u>

Parent Material: Alluvium

DRAINAGE*	
<input checked="" type="checkbox"/> Excessively dr.	<input type="checkbox"/> Somewhat excessively
<input checked="" type="checkbox"/> Well drained	<input type="checkbox"/> Moderately well dr.
<input type="checkbox"/> Somewhat poorly dr.	<input type="checkbox"/> Very poorly dr.
<input type="checkbox"/> Impermeable surface	

AB 715/13

COVER BY STRATA		
estimate using midpoints of 5, ex: 3, 8, 13 %		
Strata	Height Range (m)	Total Cover (%)
Tree	<u>5</u> - <u>5</u>	<u>68%</u>
Shrub	<u>1</u> - <u>5</u>	<u>13%</u>
Herb	<u>0</u> - <u>1</u>	<u>83%</u>
(Floating)*	-	<u>0%</u>
(Aquatic)*	-	<u>0%</u>

STAND SIZE

<input type="checkbox"/> >600 x plot size
<input type="checkbox"/> > 100 x plot size
<input type="checkbox"/> 10-100 x plot size
<input checked="" type="checkbox"/> 3-10 x plot size
<input type="checkbox"/> 1-3 x plot size
<input type="checkbox"/> < plot size

SOIL DEPTH MEASUREMENT: Measure to the nearest 0.1 cm in center of intensive modules. If >30.5 cm, record as >30				
... e.g. hydrogen sulfide odor, gleying, etc.				
*** Circle one:				
I=Indurated S=saturated M=moist D=dry				
Notes: include evidence of earthworms (worm castings, middens)				

No worms found

mod#	1 litter <sup>*</sup> organic depth (cm)	2 litter depth (cm)	water depth (cm)	depth sat soil (cm)
2	0.1	0.1	0.0	730
3	0.1	0.1	0.0	730
8	0.1	0.1	0.0	730
9	0.1	0.1	0.0	730

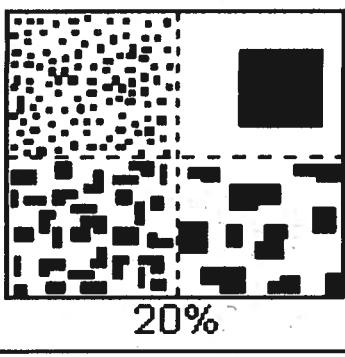
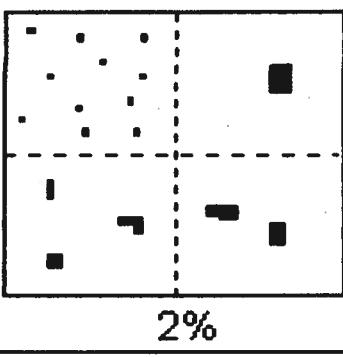
\* rooted and floating or slightly emersed

\*\* submersed, most plant mass below surface

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

### 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

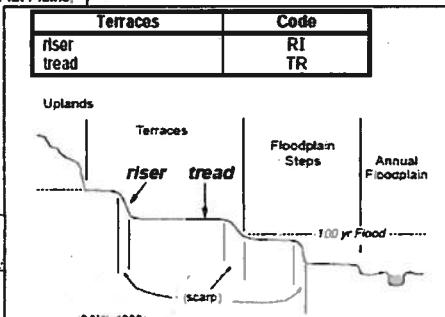
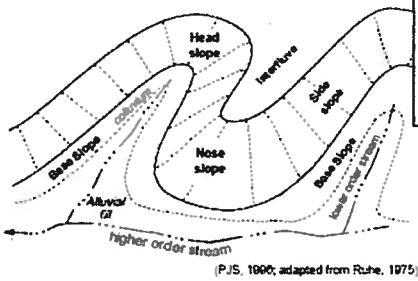
3= Sandy

4= Coarse Sand

5= Not measured - make plot note

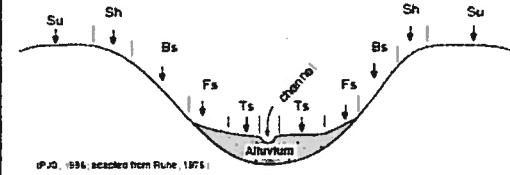
**Geomorphic Component** - Three-dimensional descriptors of parts of landforms or microfeatures that are best applied to areas. Unique descriptors are available for Hills, Terraces, Mountains, and Flat Plains; e.g., (for Hills) nose slope or NS.

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/SEMPERMANENTLY 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 (Front)**

Reviewed by (Initial): \_\_\_\_\_

Site ID: PCAP MS #1318

DATE: 07 / 01 / 2013

Location:

AA Center     ON     OS     OE     OW

Fill in bubble(s) if plot(s) could not be sampled and flag →

Plot 1     Plot 2     Plot 3

**Buffer Natural Cover Strata**

Fill in bubbles for all that apply. Canopy Type: D = Deciduous; E = Evergreen. Leaf Type: B = Broadleaf, N = Needle Leaf. Absent: No tree canopy.

Strata Section: Fill in appropriate cover class bubble for each strata type for each plot. 0 = Absent; 1 = Sparse(<10%); 2 = Moderate(10-40%); 3 = Heavy (40-75%); 4 = Very Heavy (>75%)

Buffer Plot 1	Canopy Type: <input type="radio"/> D <input checked="" type="radio"/> L		Absent: <input type="radio"/>	Buffer Plot 2	Canopy Type: <input type="radio"/> D <input type="radio"/> E		Absent: <input type="radio"/>	Buffer Plot 3	Canopy Type: <input type="radio"/> D <input type="radio"/> E		Absent: <input type="radio"/>
	Leaf Type: <input type="radio"/> B <input checked="" type="radio"/> N	Flag	Leaf Type: <input type="radio"/> B <input type="radio"/> N		Leaf Type: <input type="radio"/> B <input type="radio"/> N	Flag	Leaf Type: <input type="radio"/> B <input type="radio"/> N		Leaf Type: <input type="radio"/> B <input type="radio"/> N	Flag	
Big Trees (>0.3m DBH)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 3	<input type="radio"/> 4		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 3	<input type="radio"/> 4
Small Trees (<0.3m DBH)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 3	<input type="radio"/> 4		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 3	<input type="radio"/> 4
Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 3	<input type="radio"/> 4		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 3	<input type="radio"/> 4
Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 3	<input type="radio"/> 4
Herbs, Forbs and Grasses	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bare ground	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 3	<input type="radio"/> 4
Litter, duff	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 3	<input type="radio"/> 4
Rock	<input checked="" type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 3	<input type="radio"/> 4
Water	<input checked="" type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 3	<input type="radio"/> 4
Submerged Vegetation	<input checked="" type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 3	<input type="radio"/> 4

Stressor Presence/Absence - Confirm that a filled data bubble indicates presence and an unfilled bubble indicates absence by filling this bubble.

Residential and Urban Stressors				Hydrology Stressors				Agricultural & Rural Stressors							
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	
Road - gravel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Ditches, Channelization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Pasture/Hay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Road - two lane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Dike/Dam/Road/RR Bed (IMPEDE FLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Range	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Road - four lane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Water Level Control Structure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Row Crops	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Parking Lot/Pavement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Excavation, Dredging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Fallow Field (RECENT-RESTING ROW CROP FIELD)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Golf Course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Fill/Soil Banks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Fallow Field (OLD - GRASS, SHRUBS, TREES)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Lawn/Park	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Freshly Deposited Sediment (UNVEGETATED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Nursery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Suburban Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Soil Loss/Root Exposure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Dairy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Urban/Multifamily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Wall/Riprap	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Orchard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Landfill	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Inlets, Outlets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Confined Animal Feeding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Dumping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Point Source/Pipe (EFFLUENT OR STORMWATER)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Rural Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Trash	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		Impervious surface Input (SHEETFLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Gravel Pit	<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"/>		Irrigation	<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"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		

Industrial Development Stressors				Habitat/Vegetation Stressors											
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	
Oil Drilling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Forest Clear Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Herbicide Use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Gas Wells	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Forest Selective Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Mowing/Shrub Cutting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Mine (surface)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tree Plantation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Trails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Mine (underground)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tree Canopy Herbivory (INSECT)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Soil Compaction (ANIMAL OR HUMAN)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Military	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Shrub Layer Browsed (WILD OR DOMESTIC)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		Offroad vehicle damage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Highly Grazed Grasses (OVERALL <3' HIGH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Soil erosion (FROM WIND, WATER, OR OVERUSE)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Recently Burned Forest Canopy	<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"/>		Recently Burned Grassland BLACKENED	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		

Flag codes: K = No measurement made, U = Suspect measurement., F1,F2, etc. = misc. flags assigned by each field crew.

Explain all flags in comment section on the back of this form

2428168304

Buffer Sample Plots 05/27/2011

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

Reviewed by (Initial): \_\_\_\_\_

Site ID: PCAP MS B18

DATE: 07/01/2013

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 type="radio"/>	<input type="radio"/>	<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"/>	<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)

Latitude North 41.35745

### Longitude West

81.84922

**Use Decimal Degrees: NAD83**

Buffer Sample Points - Targeted Alien Species 05/27/2011

7966623548

**FORM B-1: BUFFER SAMPLE PLOTS (Front)**

Reviewed by (Initial): \_\_\_\_\_

Site ID: PCAP  
DMSI31B

DATE: 07 / 01 / 2013

<b>Location:</b> <input type="radio"/> AA Center <input checked="" type="radio"/> N <input type="radio"/> OS <input type="radio"/> OE <input type="radio"/> OW	Fill in bubble(s) if plot(s) could not be sampled and flag →			3
	<input type="radio"/> Plot 1	<input type="radio"/> Plot 2	<input checked="" type="radio"/> Plot 3	

**Buffer Natural Cover Strata**

Fill in bubbles for all that apply: Canopy Type: D = Deciduous; E = Evergreen. Leaf Type: B = Broadleaf, N = Needle Leaf. Absent: No tree canopy.  
Strata Section: Fill in appropriate cover class bubble for each strata type for each plot. 0 = Absent; 1 = Sparse(<10%); 2=Moderate(10-40%); 3 = Heavy (40-75%); 4 = Very Heavy (>75%)

Buffer Plot 1	Canopy Type: <input type="radio"/> D <input checked="" type="radio"/> E		Absent: <input type="radio"/>	Buffer Plot 2	Canopy Type: <input type="radio"/> D <input checked="" type="radio"/> E		Absent: <input type="radio"/>	Buffer Plot 3	Canopy Type: <input type="radio"/> D <input checked="" type="radio"/> E		Absent: <input type="radio"/>
	Leaf Type: <input type="radio"/> B <input checked="" type="radio"/> N	Flag	Leaf Type: <input type="radio"/> B <input checked="" type="radio"/> N		Leaf Type: <input type="radio"/> B <input checked="" type="radio"/> N	Flag	Leaf Type: <input type="radio"/> B <input checked="" type="radio"/> N		Leaf Type: <input type="radio"/> B <input checked="" type="radio"/> N	Flag	
Big Trees (>0.3m DBH)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	Big Trees (>0.3m DBH)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	Big Trees (>0.3m DBH)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>
Small Trees (<0.3m DBH)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	Small Trees (<0.3m DBH)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	Small Trees (<0.3m DBH)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>
Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>
Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>
Herbs, Forbs and Grasses	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	Herbs, Forbs and Grasses	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	Herbs, Forbs and Grasses	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>
Bare ground	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	Bare ground	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	Bare ground	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>
Litter, duff	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	Litter, duff	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	Litter, duff	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>
Rock	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	Rock	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	Rock	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>
Water	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	Water	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	Water	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>
Submerged Vegetation	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	Submerged Vegetation	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	Submerged Vegetation	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>

**Stressor Presence/Absence -** Confirm that a filled data bubble indicates presence and an unfilled bubble indicates absence by filling this bubble. ☺

Residential and Urban Stressors				Hydrology Stressors				Agricultural & Rural Stressors						
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
Road - gravel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Ditches, Channelization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Pasture/Hay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Road - two lane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Dike/Dam/Road/RR Bed (IMPEDE FLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Range	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Road - four lane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Water Level Control Structure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Row Crops	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Parking Lot/Pavement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Excavation, Dredging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Fallow Field (RECENT-RESTING ROW CROP FIELD)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Golf Course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Fill/Spoil Banks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Fallow Field (OLD - GRASS, SHRUBS, TREES)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Lawn/Park	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Freshly Deposited Sediment (UNVEGETATED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Nursery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Suburban Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Soil Loss/Root Exposure	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Dairy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Urban/Multifamily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Wall/Riprap	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Orchard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Landfill	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Inlets, Outlets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Confined Animal Feeding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Dumping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Point Source/Pipe (EFFLUENT OR STORMWATER)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Rural Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Trash	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Impervious surface input (SHEETFLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Gravel Pit	<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"/>		Irrigation	<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"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Industrial Development Stressors				Habitat/Vegetation Stressors										
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
Oil Drilling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Forest Clear Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Herbicide Use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Gas Wells	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Forest Selective Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Mowing/Shrub Cutting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Mine (surface)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tree Plantation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Trails	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	1
Mine (underground)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tree Canopy Herbivory (INSECT)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Soil Compaction (ANIMAL OR HUMAN)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Military	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Shrub Layer browsed (WILD OR DOMESTIC)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		Offroad vehicle damage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Highly Grazed Grasses (OVERALL <3' HIGH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Soil erosion (FROM WIND WATER, OR OVERUSE)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Recently Burned Forest Canopy	<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"/>		Recently Burned Grassland (BLACKENED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Flag codes: K = No measurement made, U = Suspect measurement., F1,F2, etc. = misc. flags assigned by each field crew.  
Explain all flags in comment section on the back of this form

2428168304

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

Reviewed by (initials):

Site ID: ~~QIAMS2013~~ PCAPMS20B DATE: 07/01/2013

 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 type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Giant Salvinia	<input checked="" 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' 8" N

Longitude West 0° 81' : 849.37

**Use Decimal Degrees: NAD83**

Flag	Comments
1	Deer Trail present
N1	Plot @ North & Steep slope
3	Slope too steep to get more than 10m into Plot 3

## FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial):

Site ID: PCAP 01/MS2013 PCAP MS 1318

DATE: 07/01/2013

Location:

Fill in bubble(s) if plot(s) could not be sampled and flag →  
○ Plot 1 ○ Plot 2 ○ Plot 3

O AA Center O N O S O E O W

## Buffer Natural Cover Strata

Fill in bubbles for all that apply: Canopy Type: D = Deciduous; E = Evergreen. Leaf Type: B = Broadleaf, N = Needle Leaf. Absent: No tree canopy.  
 Strata Section: Fill in appropriate cover class bubble for each strata type for each plot. 0 = Absent; 1 = Sparse(<10%); 2=Moderate(10-40%); 3 = Heavy (40-75%); 4 = Very Heavy (>75%)

Buffer Plot 1	Canopy Type: D		Absent: 0	Buffer Plot 2	Canopy Type: D		Absent: 0	Buffer Plot 3	Canopy Type: D		Absent: 0		
	Leaf Type: B	N	Flag		Leaf Type: B	N	Flag		Leaf Type: B	N	Flag		
Big Trees (>0.3m DBH)	0	1	2	3	4			Big Trees (>0.3m DBH)	0	1	2	3	4
Small Trees (<0.3m DBH)	0	1	2	3	4			Small Trees (<0.3m DBH)	0	1	2	3	4
Woody Shrubs, Saplings (0.5m-5m HIGH)	0	1	2	3	4			Woody Shrubs, Saplings (0.5m-5m HIGH)	0	1	2	3	4
Woody Shrubs, Saplings (<0.5m HIGH)	0	1	2	3	4			Woody Shrubs, Saplings (<0.5m HIGH)	0	1	2	3	4
Herbs, Forbs and Grasses	0	1	2	3	4			Herbs, Forbs and Grasses	0	1	2	3	4
Bare ground	0	1	2	3	4			Bare ground	0	1	2	3	4
Litter, duff	0	1	2	3	4			Litter, duff	0	1	2	3	4
Rock	0	1	2	3	4			Rock	0	1	2	3	4
Water	0	1	2	3	4			Water	0	1	2	3	4
Submerged Vegetation	0	1	2	3	4			Submerged Vegetation	0	1	2	3	4

Stressor Presence/Absence - Confirm that a filled data bubble indicates presence and an unfilled bubble indicates absence by filling this bubble

Residential and Urban Stressors				Hydrology Stressors					Agricultural & Rural Stressors					
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
Road - gravel	0	0	0		Ditches, Channelization	0	0	0		Pasture/Hay	0	0	0	
Road - two lane	0	0	0		Dike/Dam/Road/RR Bed (IMPEDE FLOW)	0	0	0		Range	0	0	0	
Road - four lane	0	0	0		Water Level Control Structure	0	0	0		Row Crops	0	0	0	
Parking Lot/Pavement	0	0	0		Excavation, Dredging	0	0	0		Fallow Field (RECENT-RESTING ROW CROP FIELD)	0	0	0	
Golf Course	0	0	0		Fill/Spoil Banks	0	0	0		Fallow Field (OLD - GRASS, SHRUBS, TREES)	0	0	0	
Lawn/Park	0	0	0		Freshly Deposited Sediment (UNVEGETATED)	0	0	0		Nursery	0	0	0	
Suburban Residential	0	0	0		Soil Loss/Root Exposure	0	0	0		Dairy	0	0	0	
Urban/Multifamily	0	0	0		Wall/Riprap	0	0	0		Orchard	0	0	0	
Landfill	0	0	0		Inlets, Outlets	0	0	0		Confined Animal Feeding	0	0	0	
Dumping	0	0	0		Point Source/Pipe (EFFLUENT OR STORMWATER)	0	0	0		Rural Residential	0	0	0	
Trash	0	0	0		Impervious surface input (SHEETFLOW)	0	0	0		Gravel Pit	0	0	0	
Other: _____	0	0	0		Other: _____	0	0	0		Irrigation	0	0	0	
Other: _____	0	0	0		Other: _____	0	0	0		Other: _____	0	0	0	

Industrial Development Stressors				Habitat/Vegetation Stressors										
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
Oil Drilling	0	0	0		Forest Clear Cut	0	0	0		Herbicide Use	0	0	0	
Gas Wells	0	0	0		Forest Selective Cut	0	0	0		Mowing/Shrub Cutting	0	0	0	
Mine (surface)	0	0	0		Tree Plantation	0	0	0		Trails	0	0	0	
Mine (underground)	0	0	0		Tree Canopy Herbivory (INSECT)	0	0	0		Soil Compaction (ANIMAL OR HUMAN)	0	0	0	
Military	0	0	0		Shrub Layer browsed (WILD OR DOMESTIC)	0	0	0		Offroad vehicle damage	0	0	0	
Other: _____	0	0	0		Highly Grazed Grasses (OVERALL <3" HIGH)	0	0	0		Soil erosion (FROM WIND, WATER, OR OVERUSE)	0	0	0	
Other: _____	0	0	0		Recently Burned Forest Canopy	0	0	0		Other: _____	0	0	0	
Other: _____	0	0	0		Recently Burned Grassland (BLACKENED)	0	0	0		Other: _____	0	0	0	

Flag codes: K = No measurement made, U = Suspect measurement., F1,F2, etc. = misc. flags assigned by each field crew.  
 Explain all flags in comment section on the back of this form

2428168304

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

Reviewed by (Initial): \_\_\_\_\_

Site ID: ADTMS2013 PCAPMS1318 DATE: 07/01/2013

④ 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 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)

Latitude North

41 35702

Longitude West

081. 8484

**Use Decimal Degrees: NAD83**

## FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial): \_\_\_\_\_

Site ID: DCAP MS # 1318

DATE: 07/01/2013

Location: O AA Center O N O S O E O W	Fill in bubble(s) if plot(s) could not be sampled and flag → O Plot 1 O Plot 2 O Plot 3			
--	--	--	--	--

## Buffer Natural Cover Strata

Fill in bubbles for all that apply: Canopy Type: D = Deciduous; E = Evergreen. Leaf Type: B = Broadleaf, N = Needle Leaf. Absent: No tree canopy.

Strata Section: Fill in appropriate cover class bubble for each strata type for each plot. 0 = Absent; 1 = Sparse(&lt;10%); 2=Moderate(10-40%); 3 = Heavy (40-75%); 4 = Very Heavy (&gt;75%)

Buffer Plot 1	Canopy Type: D				Absent: O	Buffer Plot 2	Canopy Type: E				Absent: O	Buffer Plot 3	Canopy Type: A				Absent: O
	Leaf Type: B	N	Flag	Leaf Type: B	N		Leaf Type: B	N	Flag	Leaf Type: B			N	Flag			
Big Trees (>0.3m DBH)	0	1	2	3	4	Big Trees (>0.3m DBH)	0	1	2	3	4	Big Trees (>0.3m DBH)	0	1	2	3	4
Small Trees (<0.3m DBH)	0	1	2	3	4	Small Trees (<0.3m DBH)	0	1	2	3	4	Small Trees (<0.3m DBH)	0	1	2	3	4
Woody Shrubs, Saplings (0.5m-5m HIGH)	0	1	2	3	4	Woody Shrubs, Saplings (0.5m-5m HIGH)	0	1	2	3	4	Woody Shrubs, Saplings (0.5m-5m HIGH)	0	1	2	3	4
Woody Shrubs, Saplings (<0.5m HIGH)	0	1	2	3	4	Woody Shrubs, Saplings (<0.5m HIGH)	0	1	2	3	4	Woody Shrubs, Saplings (<0.5m HIGH)	0	1	2	3	4
Herbs, Forbs and Grasses	0	1	2	3	4	Herbs, Forbs and Grasses	0	1	2	3	4	Herbs, Forbs and Grasses	0	1	2	3	4
Bare ground	0	1	2	3	4	Bare ground	0	1	2	3	4	Bare ground	0	1	2	3	4
Litter, duff	0	1	2	3	4	Litter, duff	0	1	2	3	4	Litter, duff	0	1	2	3	4
Rock	0	1	2	3	4	Rock	0	1	2	3	4	Rock	0	1	2	3	4
Water	0	1	2	3	4	Water	0	1	2	3	4	Water	0	1	2	3	4
Submerged Vegetation	0	1	2	3	4	Submerged Vegetation	0	1	2	3	4	Submerged Vegetation	0	1	2	3	4

Stressor Presence/Absence - Confirm that a filled data bubble indicates presence and an unfilled bubble indicates absence by filling this bubble. 

Residential and Urban Stressors				Hydrology Stressors				Agricultural & Rural Stressors							
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	
Road - gravel	O	O	O		Ditches, Channelization	O	O	O		Pasture/Hay	O	O	O		
Road - two lane	O	O	O		Dike/Dam/Road/RR Bed (IMPEDE FLOW)	O	O	O		Range	O	O	O		
Road - four lane	O	O	O		Water Level Control Structure	O	O	O		Row Crops	O	O	O		
Parking Lot/Pavement	O	O	O		Excavation, Dredging	O	O	O		Fallow Field (RECENT-RESTING ROW CROP FIELD)	O	O	O		
Golf Course	O	O	O		Fill/Spoil Banks	O	O	O		Fallow Field (OLD - GRASS, SHRUBS, TREES)	O	O	O		
Lawn/Park	O	O	O		Freshly Deposited Sediment (UNVEGETATED)	O	O	O		Nursery	O	O	O		
Suburban Residential	O	O	O		Soil Loss/Root Exposure	O	O	O		Dairy	O	O	O		
Urban/Multifamily	O	O	O		Wall/Riprap	O	O	O		Orchard	O	O	O		
Landfill	O	O	O		Inlets, Outlets	O	O	O		Confined Animal Feeding	O	O	O		
Dumping	O	O	O		Point Source/Pipe (EFFLUENT OR STORMWATER)	O	O	O		Rural Residential	O	O	O		
Trash	O	1	O		Impervious surface input (SHEETFLOW)	O	O	O		Gravel Pit	O	O	O		
Other: _____	O	O	O		Other: _____	O	O	O		Irrigation	O	O	O		
Other: _____	O	O	O		Other: _____	O	O	O		Other: _____	O	O	O		

Industrial Development Stressors				Habitat/Vegetation Stressors											
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	
Oil Drilling	O	O	O		Forest Clear Cut	O	O	O		Herbicide Use	O	O	O		
Gas Wells	O	O	O		Forest Selective Cut	O	O	O		Mowing/Shrub Cutting	O	O	O		
Mine (surface)	O	O	O		Tree Plantation	O	O	O		Trails	O	O	O		
Mine (underground)	O	O	O		Tree Canopy Herbivory (INSECT)	O	O	O		Soil Compaction (ANIMAL OR HUMAN)	O	O	O		
Military	O	O	O		Shrub Layer Browsed (WILD OR DOMESTIC)	O	1	O		Offroad vehicle damage	O	O	O		
Other: _____	O	O	O		Highly Grazed Grasses (OVERALL <3' HIGH)	O	O	O		Soil erosion (FROM WIND, WATER, OR OVERUSE)	O	O	O		
Other: _____	O	O	O		Recently Burned Forest Canopy	O	O	O		Other: _____	O	O	O		
Other: _____	O	O	O		Recently Burned Grassland (BLACKENED)	O	O	O		Other: _____	O	O	O		

Flag codes: K = No measurement made, U = Suspect measurement.. F1,F2, etc. = misc. flags assigned by each field crew.

Explain all flags in comment section on the back of this form

2428168304

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

**Reviewed by (Initials):** \_\_\_\_\_

**Site ID:** PCAP MS #1318

DATE: 07 / 01 / 2013

④ 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 type="radio"/>	<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"/>	<input type="radio"/>	<input type="radio"/>	
Garlic Mustard	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" 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):**

## Flag

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

Latitude North 41° 35.6' 36"      Longitude West 81° 84.9' 75"

**Use Decimal Degrees: NAD83**

## FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial): \_\_\_\_\_

Site ID: PCAP MS #1318

DATE: 07 / 01 / 2013

Location:

O AA Center O N O S O E O W

Fill in bubble(s) if plot(s) could not be sampled and flag →

O Plot 1 O Plot 2 O Plot 3

1

## Buffer Natural Cover Strata

Fill in bubbles for all that apply: Canopy Type: D = Deciduous, E = Evergreen. Leaf Type: B = Broadleaf, N = Needle Leaf. Absent: No tree canopy.

Strata Section: Fill in appropriate cover class bubble for each strata type for each plot. 0 = Absent; 1 = Sparse(&lt;10%); 2=Moderate(10-40%); 3 = Heavy (40-75%); 4 = Very Heavy (&gt;75%)

Buffer Plot 1	Canopy Type: D		Absent: O	Buffer Plot 2	Canopy Type: D		Absent: O	Buffer Plot 3	Canopy Type: D		Absent: O		
	Leaf Type: B	N	Flag		Leaf Type: B	N	Flag		Leaf Type: B	N	Flag		
Big Trees (>0.3m DBH)	0	1	2	3	4			Big Trees (>0.3m DBH)	0	1	2	3	4
Small Trees (<0.3m DBH)	0	1	2	3	4			Small Trees (<0.3m DBH)	0	1	2	3	4
Woody Shrubs, Saplings (0.5m-5m HIGH)	0	1	2	3	4			Woody Shrubs, Saplings (0.5m-5m HIGH)	0	1	2	3	4
Woody Shrubs, Saplings (<0.5m HIGH)	0	1	2	3	4			Woody Shrubs, Saplings (<0.5m HIGH)	0	1	2	3	4
Herbs, Forbs and Grasses	0	1	2	3	4			Herbs, Forbs and Grasses	0	1	2	3	4
Bare ground	0	1	2	3	4			Bare ground	0	1	2	3	4
Litter, duff	0	1	2	3	4			Litter, duff	0	1	2	3	4
Rock	0	1	2	3	4			Rock	0	1	2	3	4
Water	0	1	2	3	4			Water	0	1	2	3	4
Submerged Vegetation	0	1	2	3	4			Submerged Vegetation	0	1	2	3	4

Stressor Presence/Absence - Confirm that a filled data bubble indicates presence and an unfilled bubble indicates absence by filling this bubble. 

Residential and Urban Stressors					Hydrology Stressors					Agricultural & Rural Stressors				
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
Road - gravel	O	O	O		Ditches, Channelization	O	O	O		Pasture/Hay	O	O	O	
Road - two lane	O	O	O		Dike/Dam/Road/RR Bed (IMPEDE FLOW)	O	O	O		Range	O	O	O	
Road - four lane	O	O	O		Water Level Control Structure	O	O	O		Row Crops	O	O	O	
Parking Lot/Pavement	O	O	O		Excavation, Dredging	O	O	O		Fallow Field (RECENT-RESTING ROW CROP FIELD)	O	O	O	
Golf Course	O	O	O		Fill/Spoil Banks	O	O	O		Fallow Field (OLD - GRASS, SHRUBS, TREES)	O	O	O	
Lawn/Park	O	O	O		Freshly Deposited Sediment (UNVEGETATED)	O	O	O		Nursery	O	O	O	
Suburban Residential	O	O	O		Soil Loss/Root Exposure	O	O	O		Dairy	O	O	O	
Urban/Multifamily	O	O	O		Wall/Riprap	O	O	O		Orchard	O	O	O	
Landfill	O	O	O		Inlets, Outlets	O	O	O		Confined Animal Feeding	O	O	O	
Dumping	O	O	O		Point Source/Pipe (EFFLUENT OR STORMWATER)	O	O	O		Rural Residential	O	O	O	
Trash	O	O	O		Impervious surface Input (SHEETFLOW)	O	O	O		Gravel Pit	O	O	O	
Other: _____	O	O	O		Other: _____	O	O	O		Irrigation	O	O	O	
Other: _____	O	O	O		Other: _____	O	O	O		Other: _____	O	O	O	

## Industrial Development Stressors

## Habitat/Vegetation Stressors

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
Oil Drilling	O	O	O		Forest Clear Cut	O	O	O		Herbicide Use	O	O	O	
Gas Wells	O	O	O		Forest Selective Cut	O	O	O		Mowing/Shrub Cutting	O	O	O	
Mine (surface)	O	O	O		Tree Plantation	O	O	O		Trails	O	O	O	
Mine (underground)	O	O	O		Tree Canopy Herbivory (INSECT)	O	O	O		Soil Compaction (ANIMAL OR HUMAN)	O	O	O	
Military	O	O	O		Shrub Layer browsed (WILD OR DOMESTIC)	O	O	O		Offroad vehicle damage	O	O	O	
Other: _____	O	O	O		Highly Grazed Grasses (OVERALL <3" HIGH)	O	O	O		Soil erosion (FROM WIND, WATER, OR OVERUSE)	O	O	O	
Other: _____	O	O	O		Recently Burned Forest Canopy	O	O	O		Other: _____	O	O	O	
Other: _____	O	O	O		Recently Burned Grassland (BLACKENED)	O	O	O		Other: _____	O	O	O	

Flag codes: K = No measurement made, U = Suspect measurement., F1,F2, etc. = misc. flags assigned by each field crew.  
Explain all flags in comment section on the back of this form

2428168304

Buffer Sample Plots 05/27/2011

SW MR DR

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

**Reviewed by (Initial):** \_\_\_\_\_

**Site ID:** PCAP MS #1318

DATE: 6/01/2013

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 type="radio"/>	<input type="radio"/>	<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"/>	<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):**

## Flag

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

Latitude North 41.35739

Longitude West

81.84953

### **Use Decimal Degrees; NAD83**

7966623548