

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



Project Label:

PCAP

Plot No:

1210

Date Sampled:

6/19/12

Lead: Barton

Comment required if item answer is NO

Parking/Access outside of Park Boundaries:	<input checked="" type="radio"/> Y <input type="radio"/> N	If yes, write details in Comments section below
Field journals completed	<input checked="" type="radio"/> Y <input type="radio"/> N	
Site sketch made on 1:3000 map?	<input checked="" type="radio"/> Y <input type="radio"/> N	<i>Sketch on only map present, scale not given</i>
Check cover page	X-axis Bearing of plot recorded	<input checked="" type="radio"/> Y <input type="radio"/> N
	GPS coords. Recorded	<input checked="" type="radio"/> Y <input type="radio"/> N
	North direction recorded	<input checked="" type="radio"/> Y <input type="radio"/> N
	Photographs taken?	<input checked="" type="radio"/> Y <input type="radio"/> N
Plot No., Date agreement on all pages?	<input checked="" type="radio"/> Y <input type="radio"/> N	
Header data completed all pages?	<input checked="" type="radio"/> Y <input type="radio"/> N	
Cover classes recorded in all Intensive modules	<input checked="" type="radio"/> Y <input type="radio"/> N	
Browse Level By Species	<input checked="" type="radio"/> Y <input type="radio"/> N	
Woody stem quality control check	<input checked="" type="radio"/> Y <input type="radio"/> N	
Invasive plant quality control check	<input checked="" type="radio"/> Y <input type="radio"/> N	
Ash trees mapped	<input checked="" type="radio"/> Y <input type="radio"/> N	
Cover by Strata? (confirm cover type)	<input checked="" type="radio"/> Y <input type="radio"/> N	
Soil samples collected with matching plot #.	<input checked="" type="radio"/> Y <input type="radio"/> N	
Vouchers labeled on datasheet with initials and number	<input checked="" type="radio"/> Y <input type="radio"/> N	
Vouchers labeled on collection bag	<input checked="" type="radio"/> Y <input type="radio"/> N	
Pink flags removed	<input checked="" type="radio"/> Y <input type="radio"/> N	
Data sheet QA before leaving site?	<input checked="" type="radio"/> Y <input type="radio"/> N	
Common equipment returned to tub.	<input checked="" type="radio"/> Y <input type="radio"/> N	
Data sheets scanned?		Enter date to left <i>N 6/22/12</i>
Final data sheets scanned?		Enter date to left
Buffer Widths measured?	<input checked="" type="radio"/> Y <input type="radio"/> N	<i>JTP 6-22-2012</i>
Web Soil Survey	<input checked="" type="radio"/> Y <input type="radio"/> N	<i>AY 6-21-2012</i>
Voucher Location	Refrigerator	<input checked="" type="radio"/> Y <input type="radio"/> N
(# vouchers collected)	Press (#)	Enter number to left
	Drier	<input checked="" type="radio"/> Y <input type="radio"/> N
	Identified	<input checked="" type="radio"/> Y <input type="radio"/> N
	Mounted	<input checked="" type="radio"/> Y <input type="radio"/> N
	Thrown away	<input checked="" type="radio"/> Y <input type="radio"/> 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:

*Found fort or possible squatter residence 15m E of 3rd North buffer point  
GPS: 41.20730, -81.71346*

D

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# CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet

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Page 1 of 2

GENERAL INFORMATION		LOCATION	
Project Label:	PCAP	State:	OH County: Medina
Project Name:	<u>OH 1210</u>	Quadrangle:	Not on map West Richfield
Plot Name:	<u>Captain Larry's Aquarium</u>		
Plot No.:	<u>1210</u>		
<input type="checkbox"/> Level 4 (no nested corners sampled) <input checked="" type="checkbox"/> Level 5 (nested corners sampled)		Local Place Name:	Warden homestead
Date (mm/dd/yyyy):	<u>6/19/2012</u>		
End date (if > 1 day):	<u>/ /</u>		
Party	<u>Z. Barton</u> Plot leader <u>J. Pettit</u> Woody/Soil <u>K. Hoffman</u> Herbs/Soil <u>N. Zimmerman</u> Bot. Asst.		
Role**	<u>Co-leader</u> <u>Asst. Guide</u> <u>Owner</u> <u>Taxonomist</u> , etc.		
<b>PLOT NOT SAMPLED:</b> <input type="checkbox"/> Perv. water <input type="checkbox"/> Paved <input type="checkbox"/> Slope <input type="checkbox"/> Safety		<b>SAMPLING QUALITY*</b> <input checked="" type="checkbox"/> Very thorough <input type="checkbox"/> Accurate <input type="checkbox"/> Hurned <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">           subjective evaluation of how much effort put into sampling. Hurned plots may still provide good data         </div>	
TAXONOMIC ACCURACY			
high	modera.	low	not samp
vascul.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	n/a
bryo		<input checked="" type="checkbox"/>	
lichen			<input checked="" type="checkbox"/>
TAXONOMIC STANDARD			
Authority:	G&C	Pub Date:	1998
Minimum required fields in Bold and Underlined *Definitions and values in CM PCAP FOM v. 1.0 and CVS Field Guide			

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<div style="position: absolute; right: 0; top:

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

Project Label: PCAP

Project Name: D1H; 2012

**MODIFIED NATURERESERVE CLASS\***

CODE (on separate form):

D

Fit= 6 Conf= H

COMMUNITY NAME:

Mixed Forest

**HOMOGENEITY**

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

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

- Current Land Use: Park  
 Former Land Use: Unk.

DISTURBANCES				
type*	severity**	yrs ago	% of plot	description
Human				
Natural				
Fire				
Cut				
Animal	<u>M</u>	0	100	<u>Browse</u>
Other				

**HYDROLOGIC REGIME\***

- Upland (seldom flooded)       Intermittently flooded  
 Intermittently/seasonally saturated (seldom flooded)       Semipermanently flooded  
 Saltwater       Permanently flooded  
 Brackish       Tidal/Seiche flooded daily  
 Fresh       Tidal/Seiche flooded monthly  
 Upland (n/a)       Tidal/Seiche flooded irregular (e.g. wind, storms)  
 Temporarily flooded       Unknown

(by default unless plot is a wetland)

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

Large depression in mid S, may hold water when there is more rainfall; blackened lvs present

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

Project Label: PCAP

Project name: OH 2012

Plot no.: 1210

Page 1 of 3

Total modules: 10

Intensive modules: 4

Pilot configuration: 2X5

Plot area (ha): 0.1



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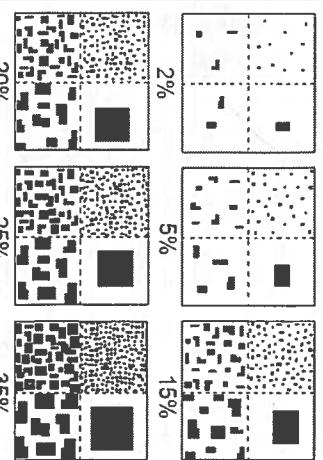
Br = Browse Level. Use cover classes to  
describe amount of browse per species over  
entire plot

		Estimate for each intensive module:																					
T	S	H	(F)	(A)	Br	mod	corner																
depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	R	R	

Strata - Cov. entire plot		Species		c	Voucher #	mod	depth	cov	depth													
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7	2					2	7	1	1	4	7	4	4	7	4	4	7	4	4	7	4	
2	2					4	2	3	2	2	3	4	2	4	4	2	4	4	2	3	4	
2	2					4	3	3	1	4	4	4	4	4	4	4	4	4	2	3	4	
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#### EXAMPLES OF PERCENT OF AREA COVERED

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



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

**Project Label:**

PCAP

Project name: 01H12012

Plot no.: 1210

Page 2 of 3

Total modules:

Intensive modules: 4 Plot configuration: 2X5

Plot area (ha): 0.1

Total modules: 10

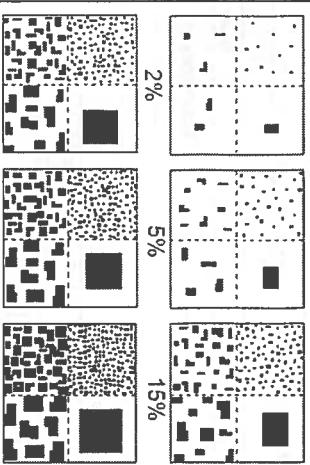
The logo for Cleveland Metroparks, featuring a stylized tree and the text "Cleveland Metroparks".

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

Estimate for each intensive module:

#### 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.



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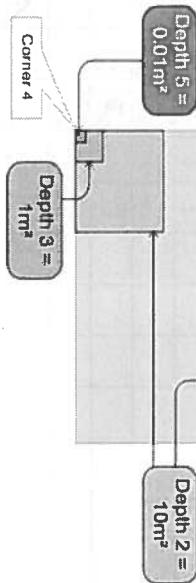
60%

90%

100%

#### Nested Corners

cover class	% cover	mid point
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



Typical Plot:

50m

20m

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0m baseline

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

Project Label: \_\_\_\_\_

Project name: 01/11/2012

Plot no.: 1210

Page 3 of 3

Total modules: 10

Intensive modules: 1 Plot configuration: 2x5

Plot area (ha): 6,1



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

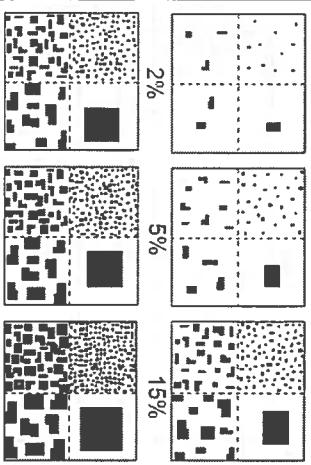
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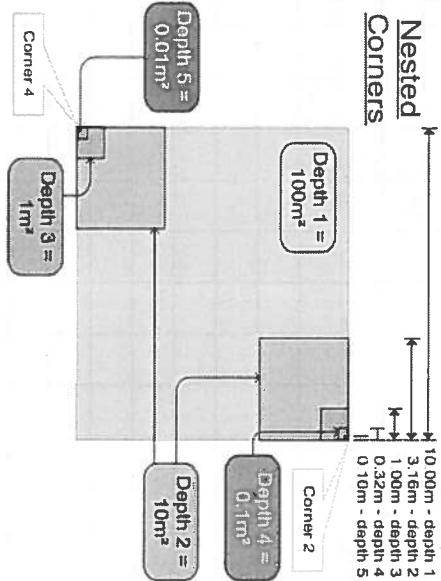
1	<i>Brachythecium acutum</i>	LSB053
1	<i>Brachythecium acutum</i>	LSB053
1	<i>Brachythecium acutum</i>	LSB053

### 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 composed just different sized objects.



### Nested Corners



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

### 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

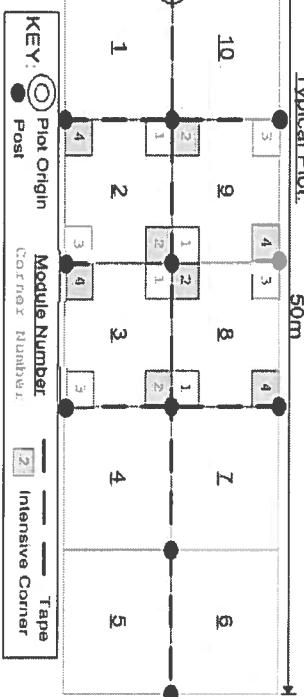
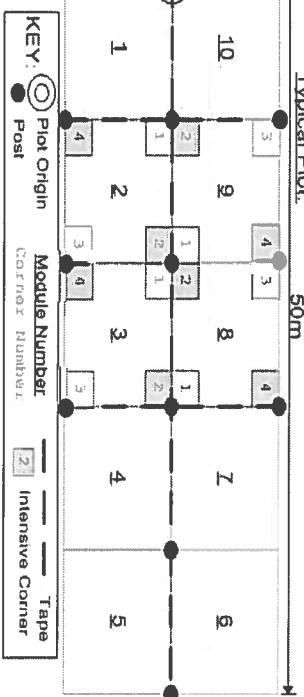
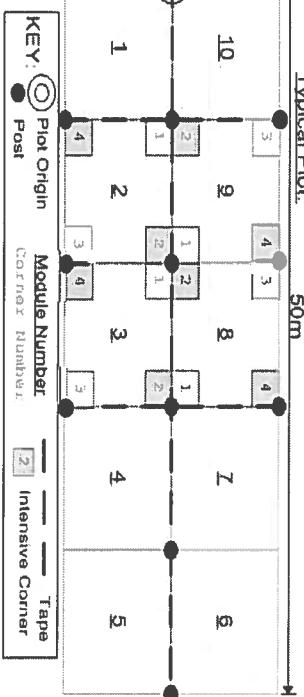
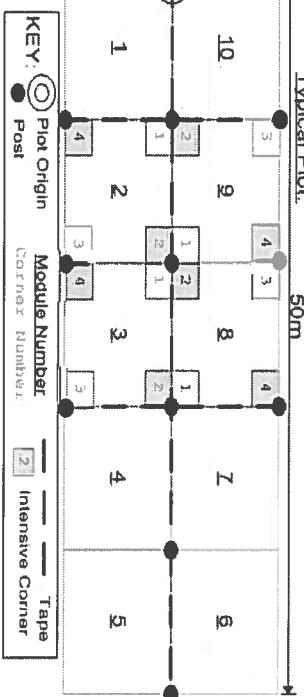
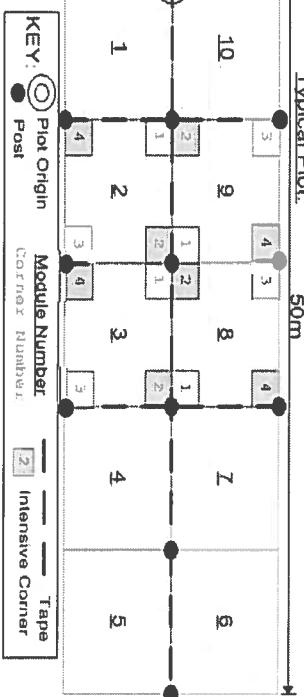
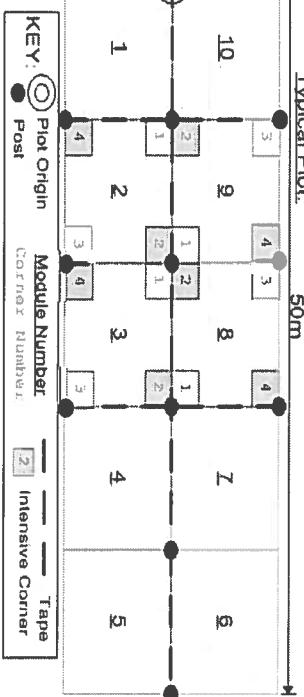
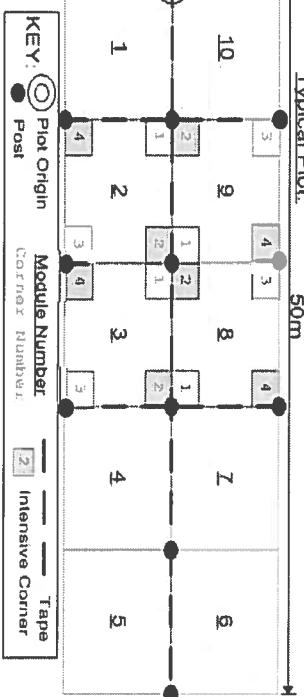
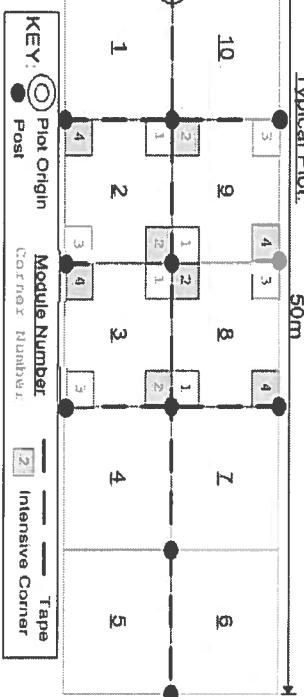
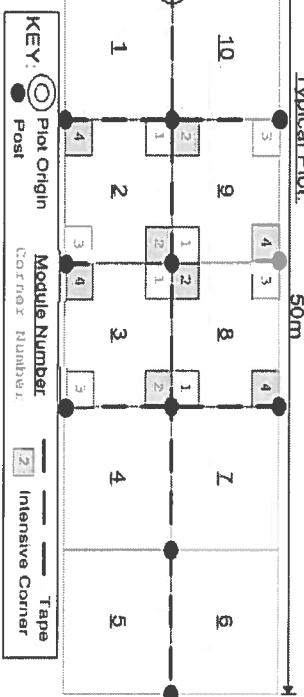
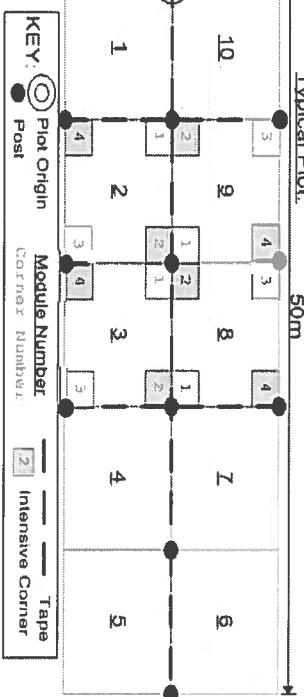
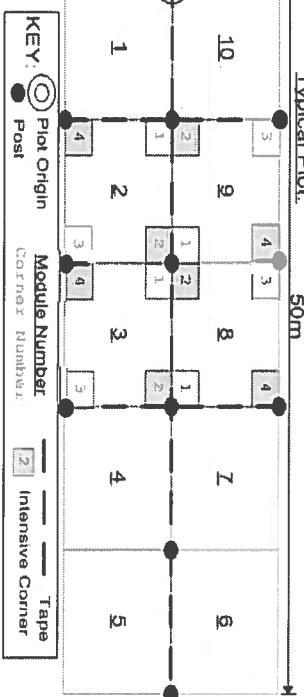
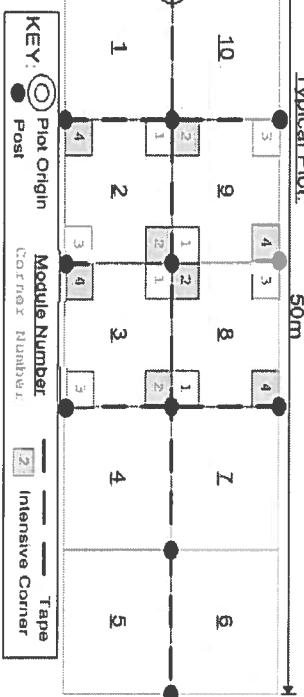
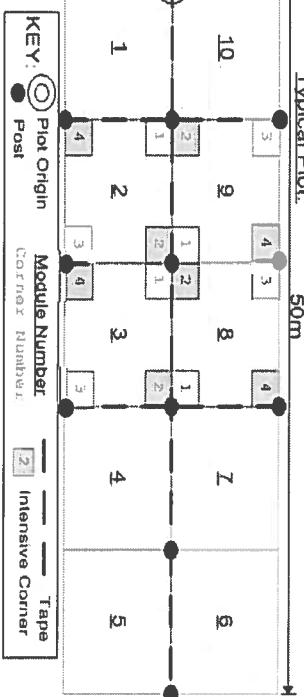
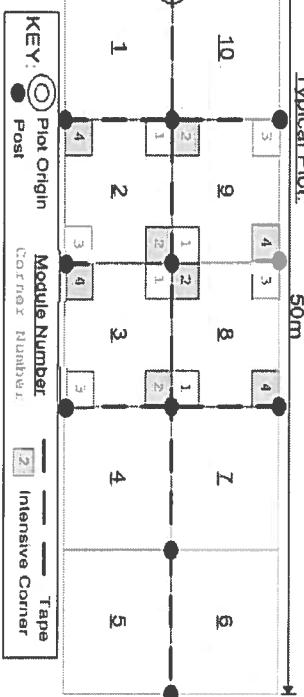
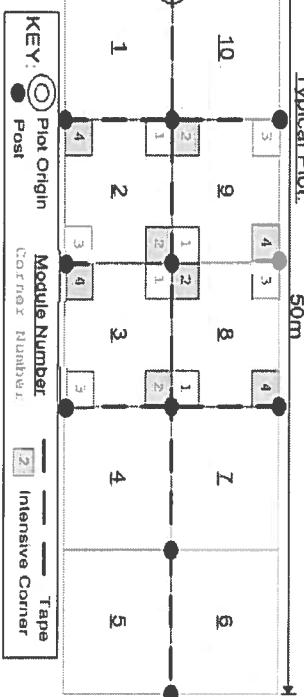
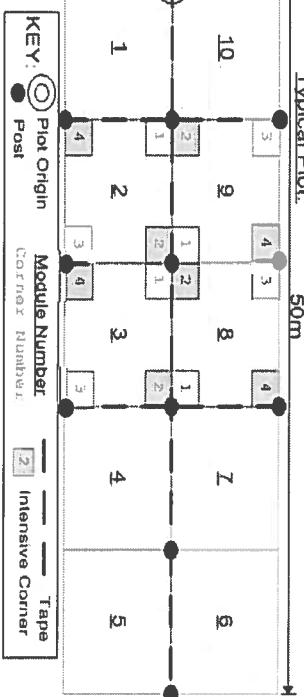
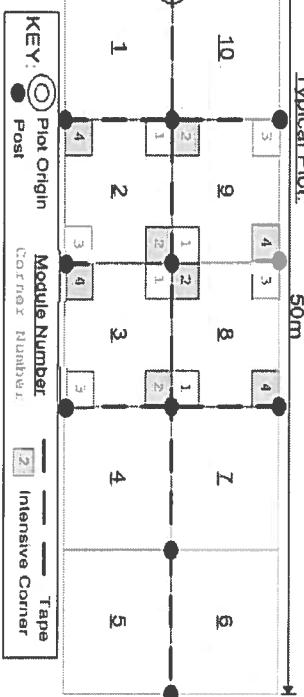
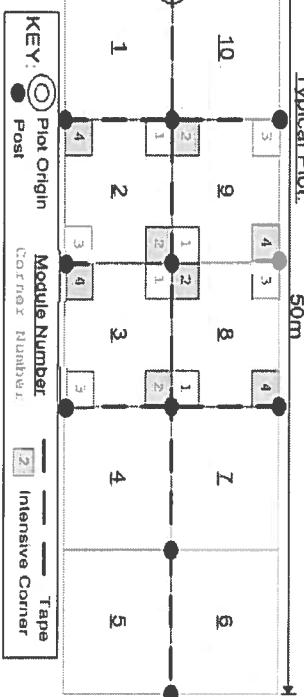
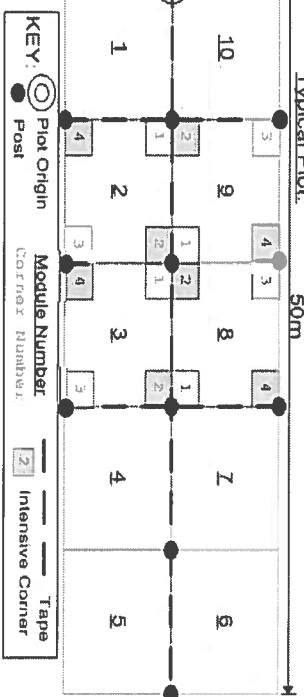
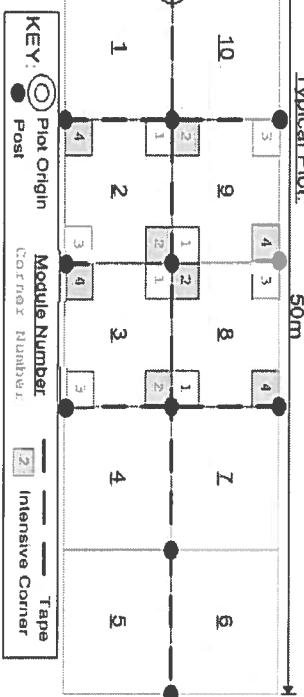
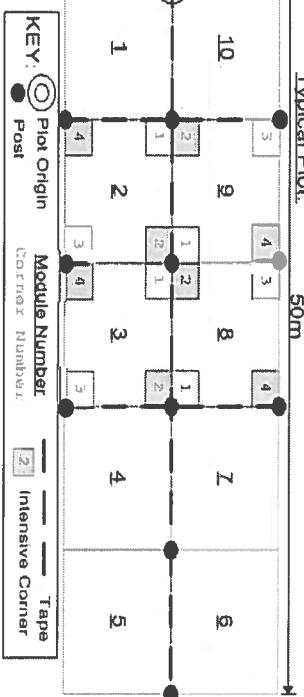
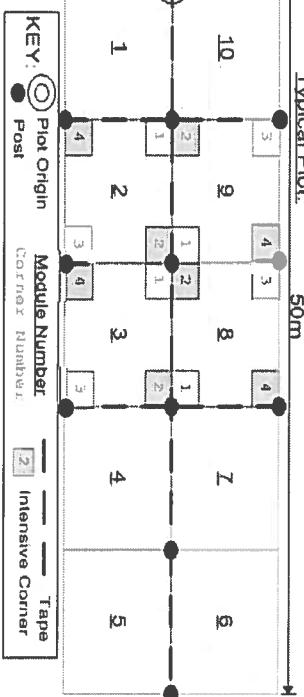
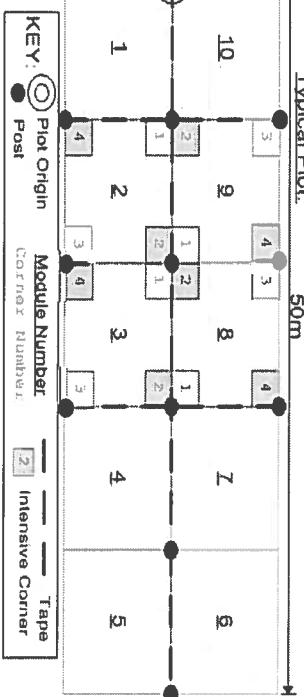
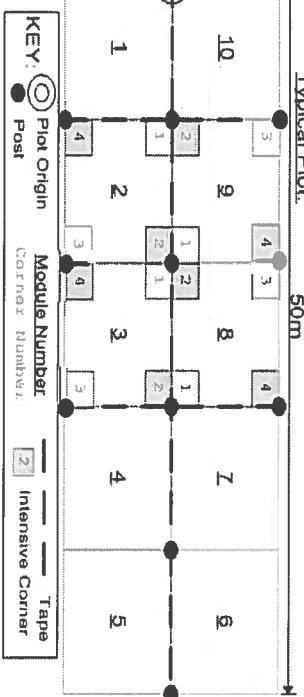
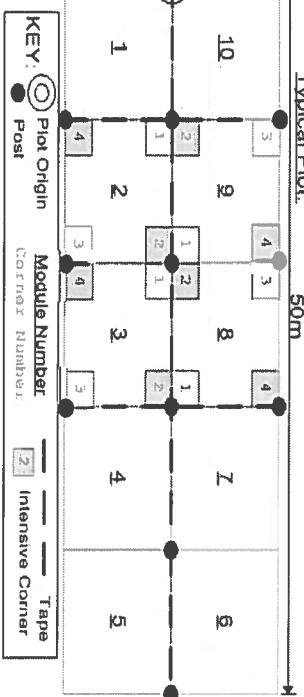
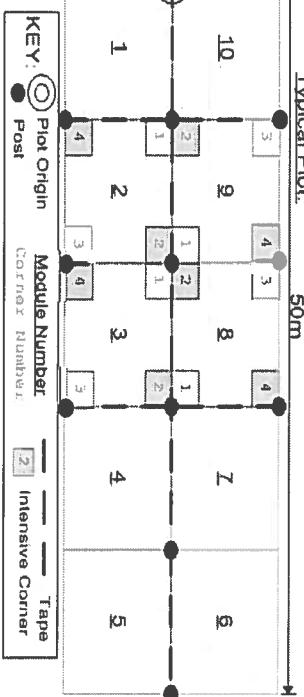
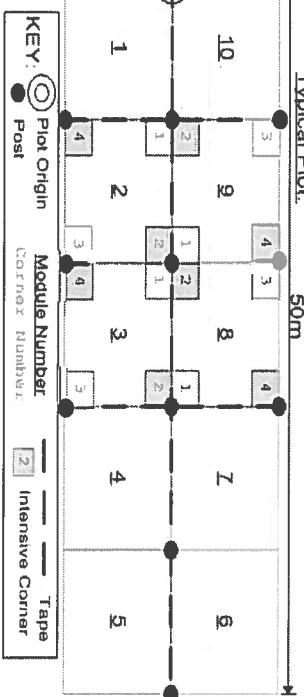
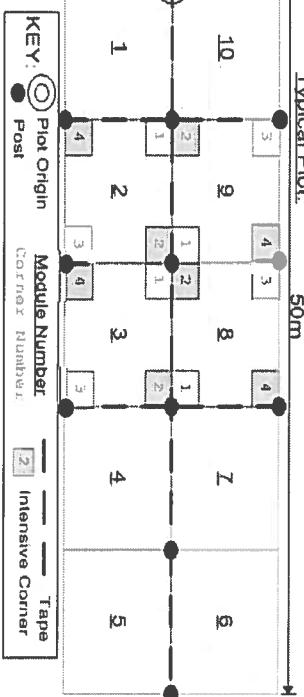
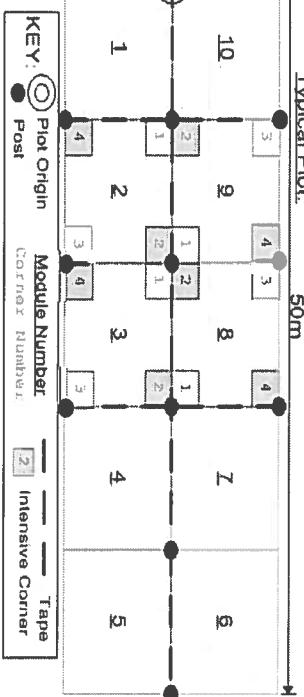
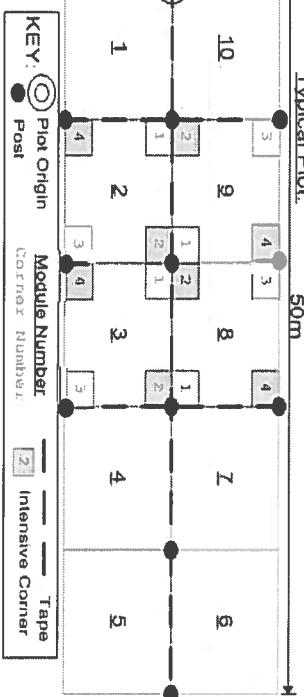
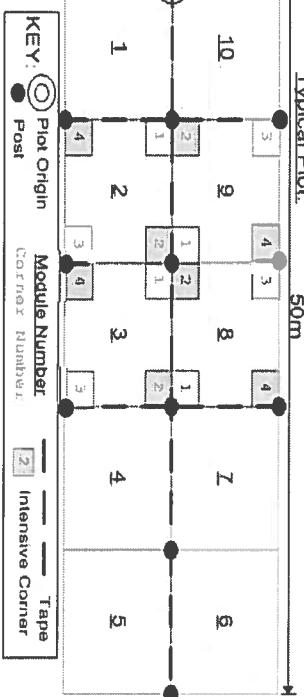
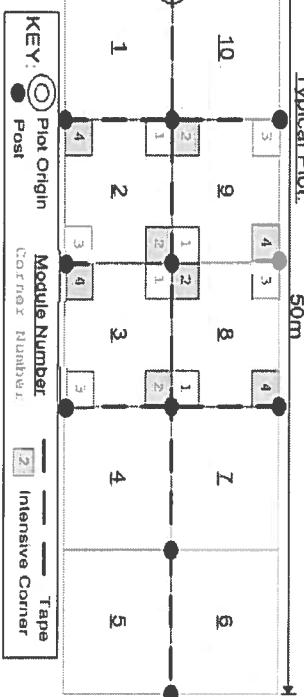
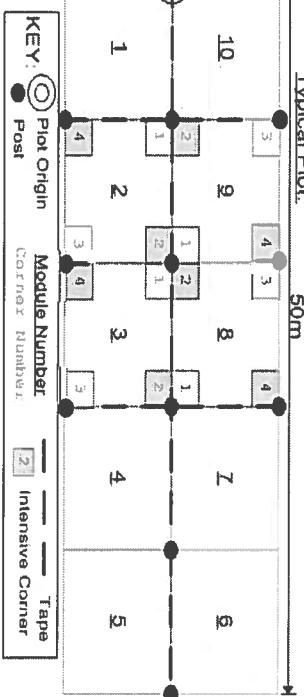
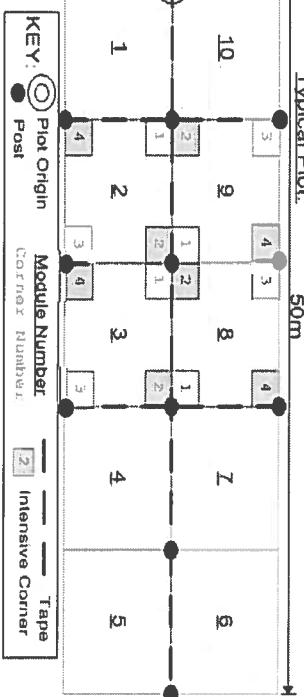
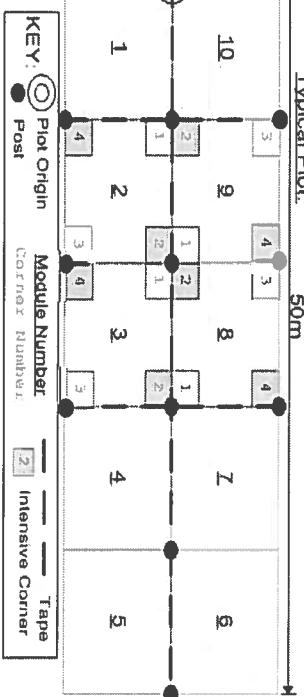
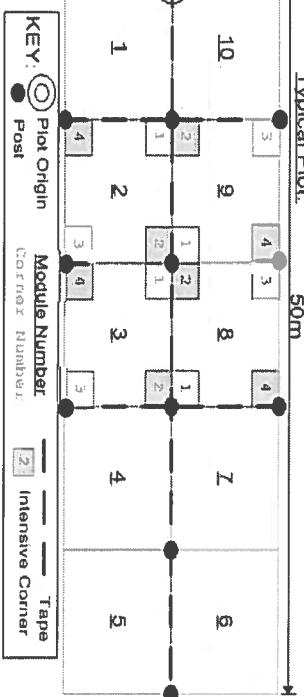
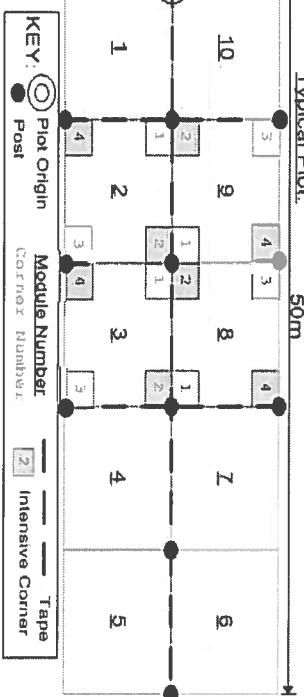
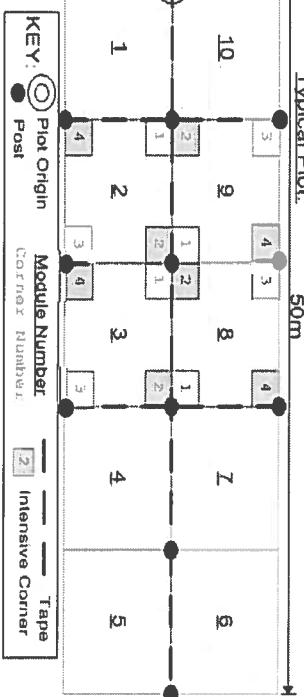
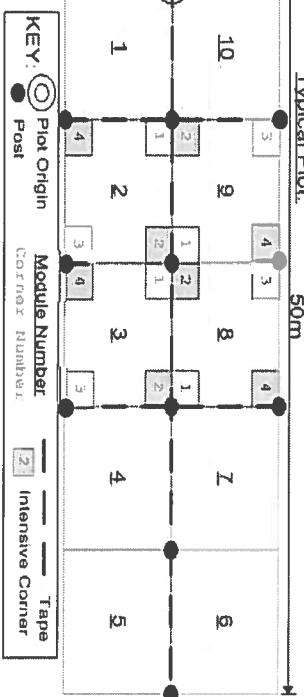
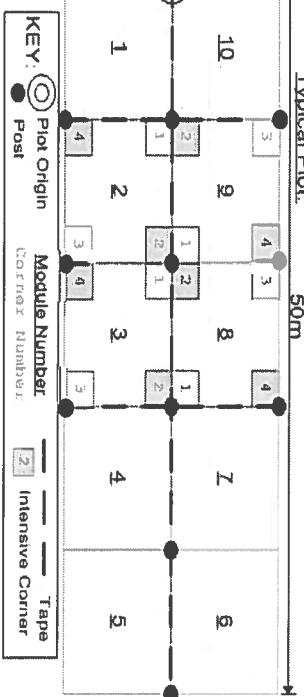
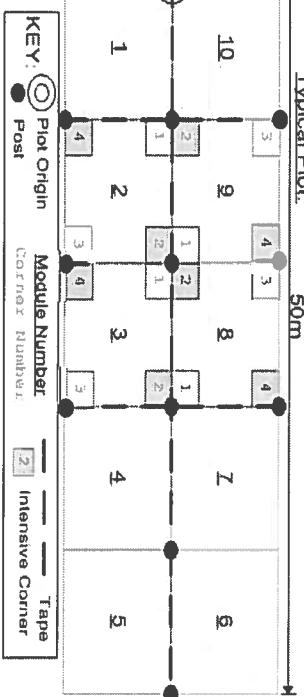
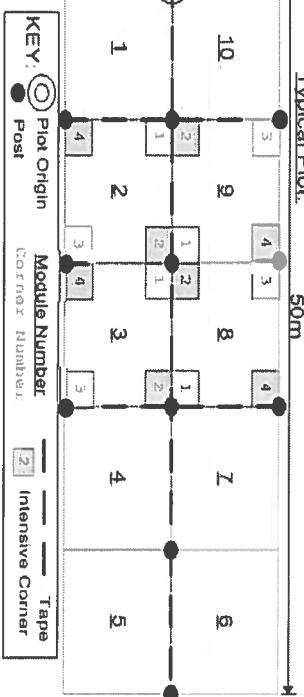
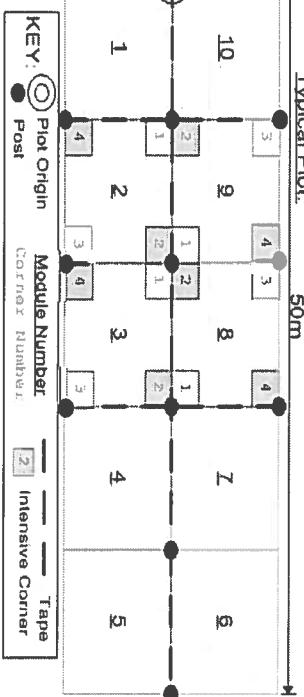
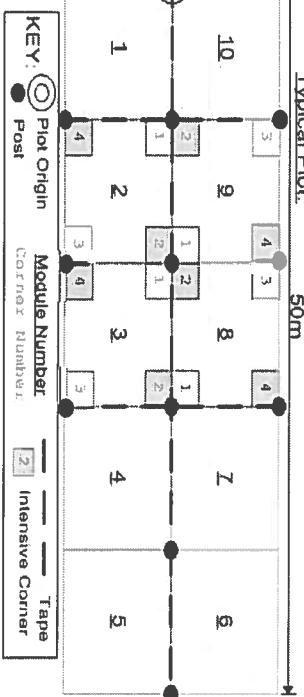
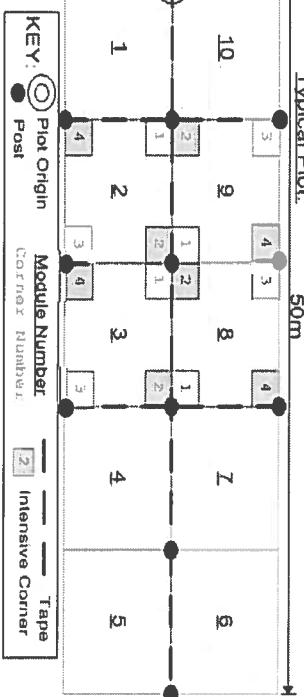
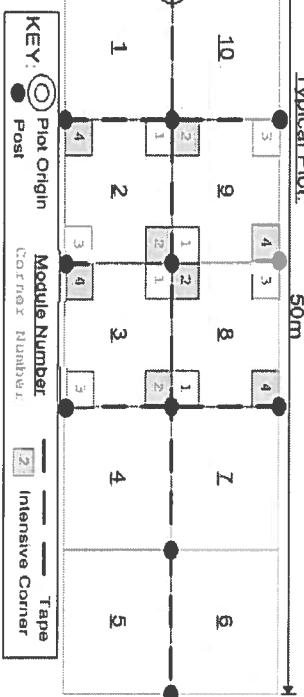
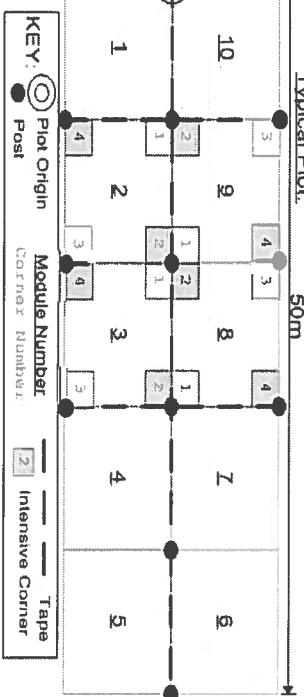
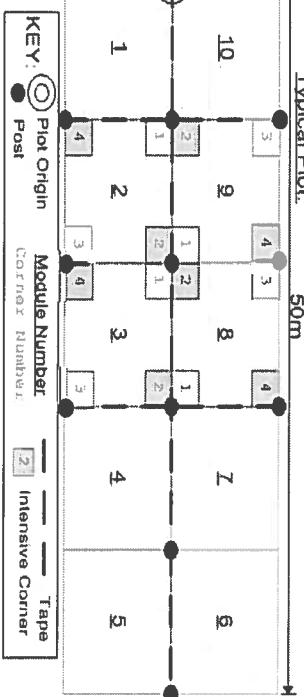
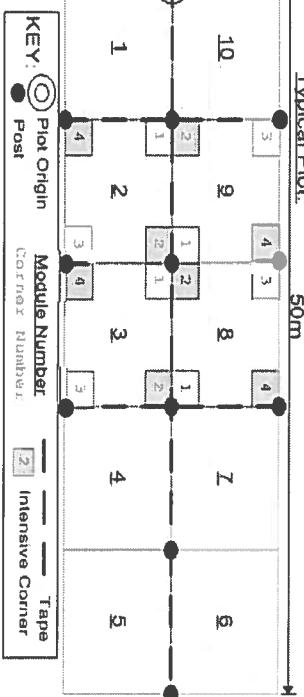
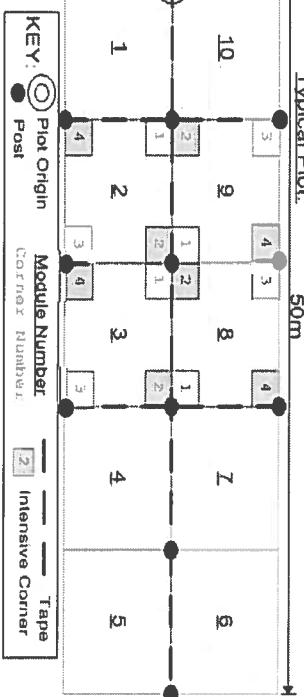
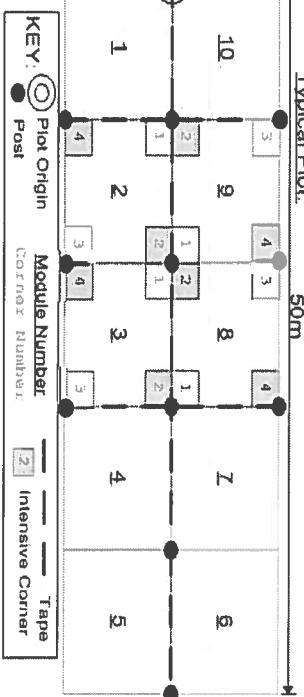
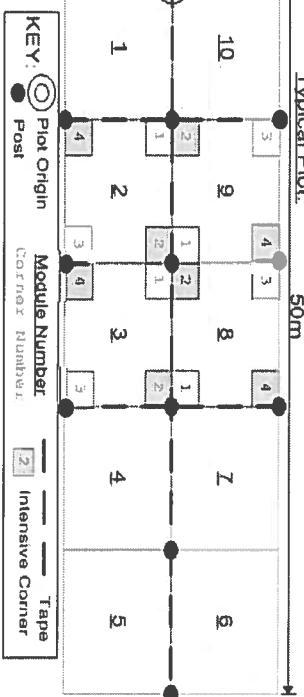
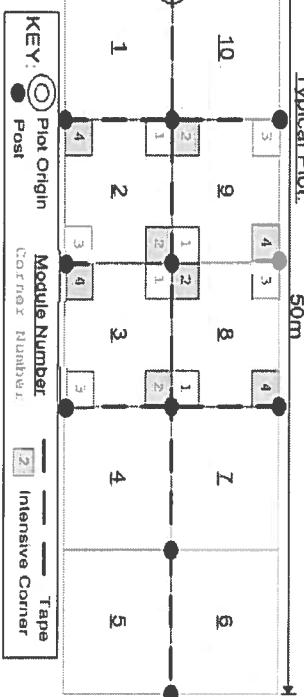
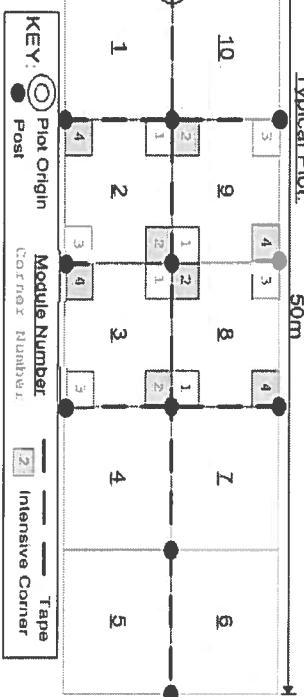
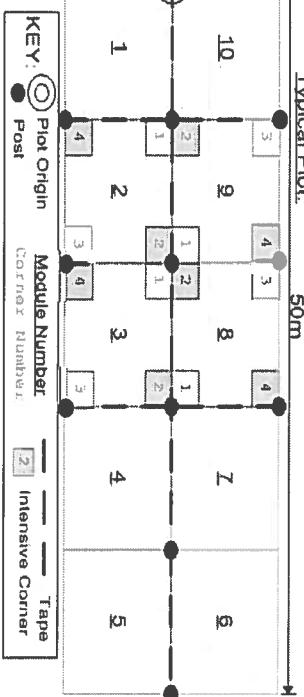
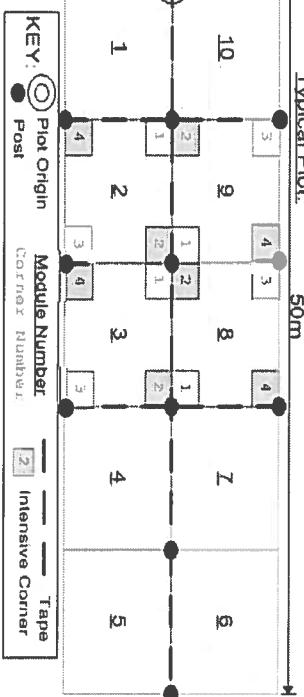
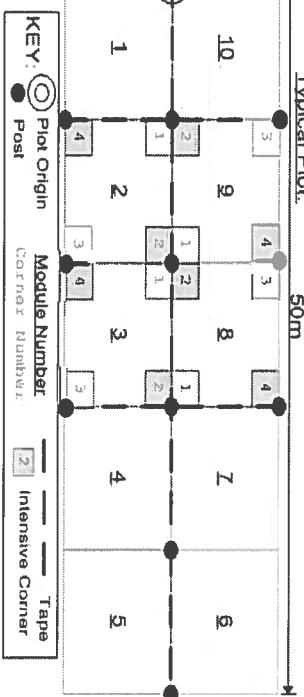
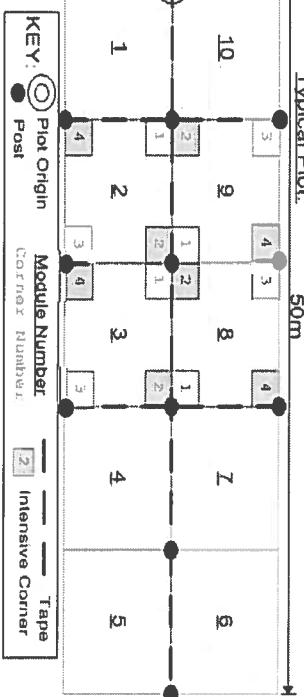
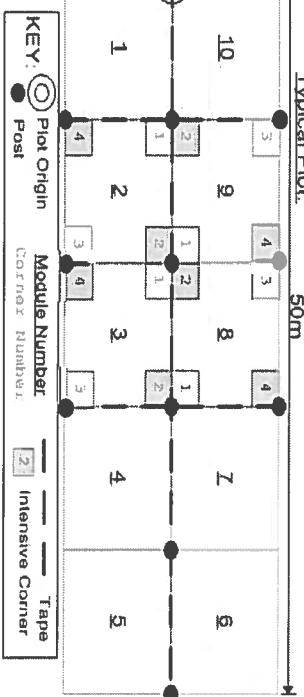
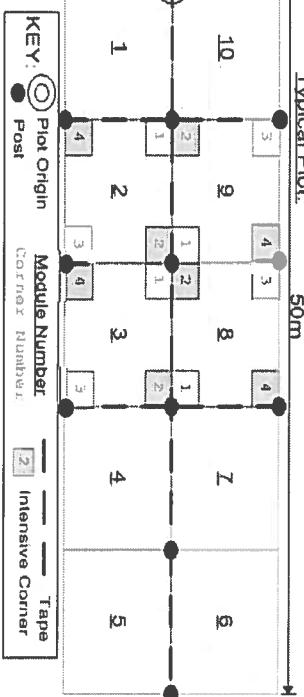
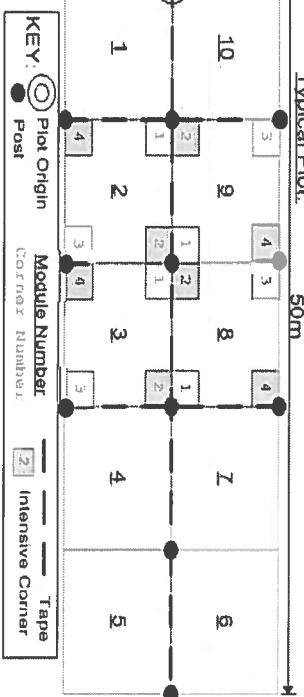
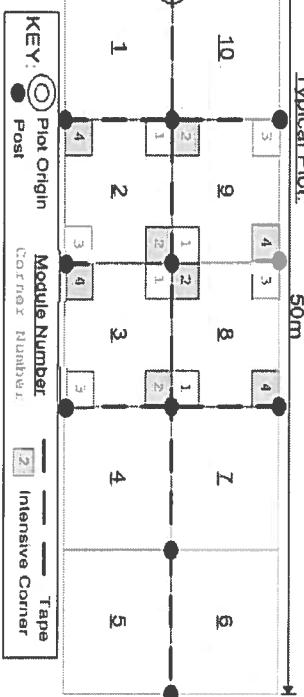
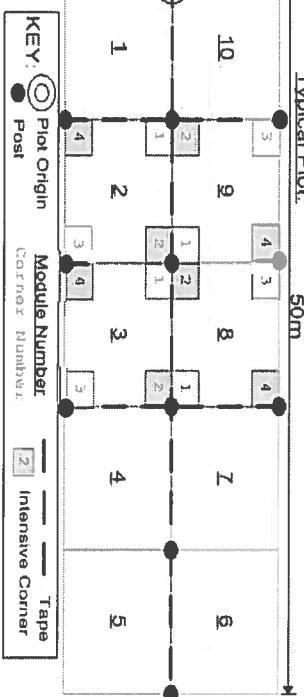
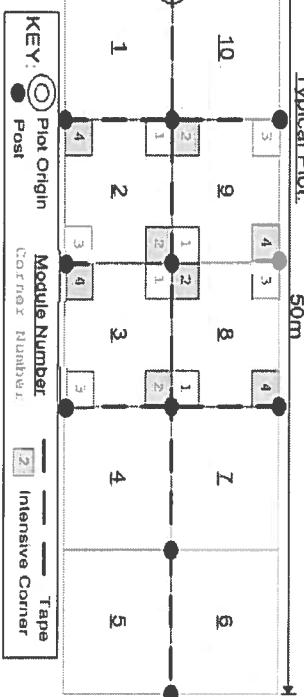
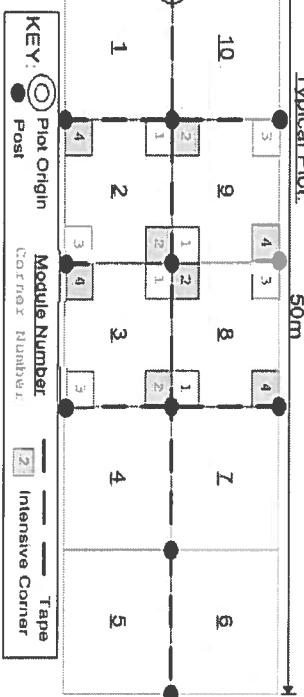
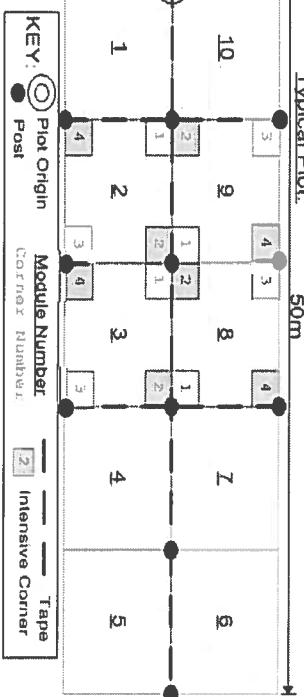
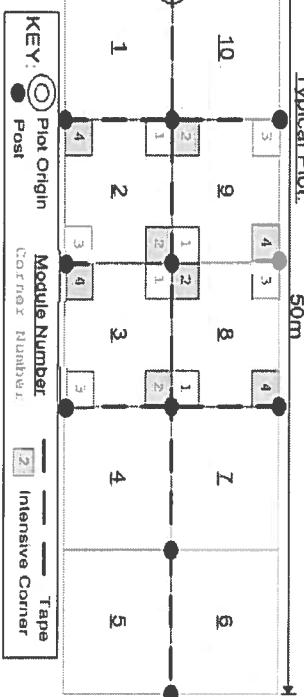
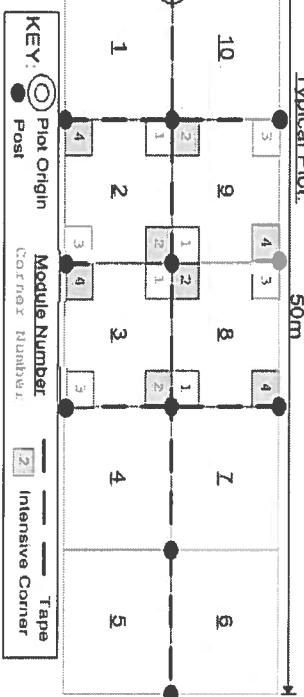
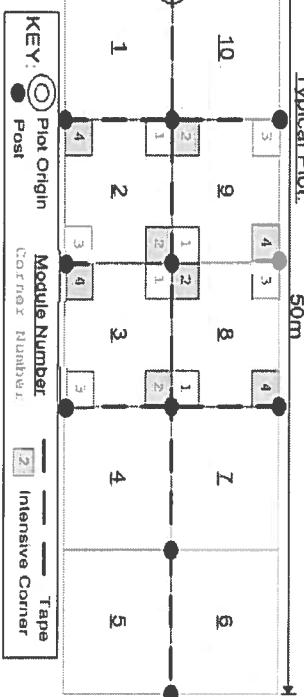
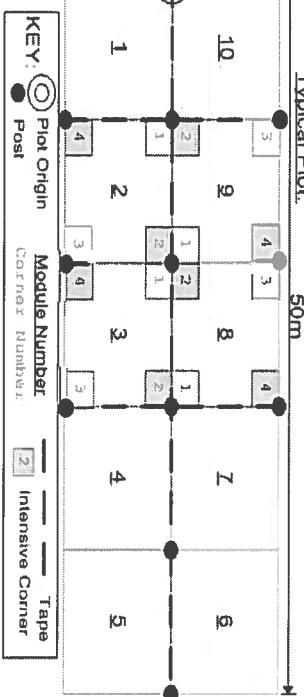
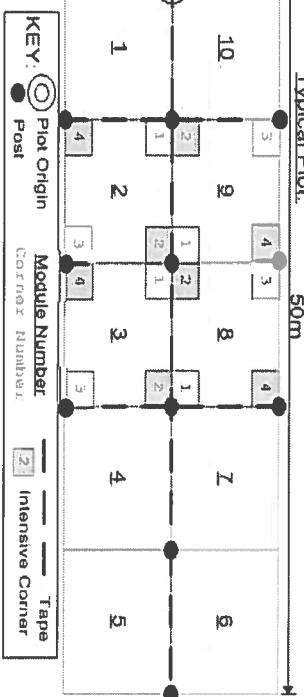
less than 10 percent, by numbers of stems browsed. **MEDIUM LOW** values include evidence of browse at about 10 percent of the stems with no significant impact to plant reproduction evident. In this rating, plants are browsed but preferential species are observed to be reproducing in numbers that appear 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.



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

Project Label: PCAP

Project Name: 01Hi2012

Plot No.: 1210

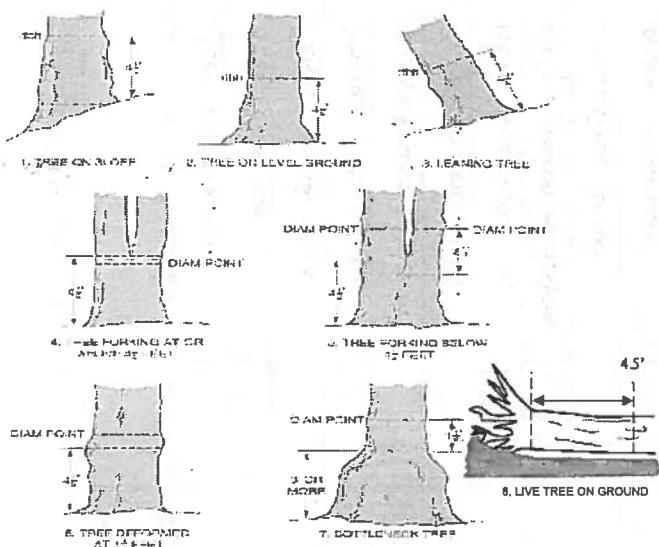
Page: 1 of 3

 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										# stems >40 (record each tree)
						0-<1	1-<2.5	2.5-<5	5-<10	10 - <15	15 - <20	20 - <25	25 - <30	30 - <35	35 - <40	
✓ 1	<i>Acer saccharum</i>					•	•	•	•	•	•	•	•	•	•	
✓ 1	<i>Acer rubrum</i>															
✓ 1	<i>Fagus grandifolia</i>															
✓ 1	<i>Smilax rotundifolia</i>															
✓ 2	<i>Sassafrass albidum</i>				•											
✓ 2	<i>Berberis thunbergii</i>					•										
✓ 2	<i>Acer saccharum</i>															
✓ 2	<i>Liriodendron tulipifera</i>															
✓ 2	Standing dead															
✓ 2	<i>Acer rubrum</i>															
✓ 2	<i>Fraxinus americana</i>															
✓ 2	<i>Fagus grandifolia</i>															
✓ 3	<i>Acer saccharum</i>															
✓ 3	Standing Dead															
✓ 3	<i>Fraxinus americana</i>															
✓ 3	<i>Berberis thunbergii</i>															
✓ 3	<i>Acer rubrum</i>															
✓ 4	<i>Acer saccharum</i>															
✓ 4	Standing dead															
✓ 4	<i>Acer rubrum</i>															
✓ 4	<i>Ostrya virginiana</i>															
✓ 4	<i>Fraxinus americana</i>															
✓ 4	<i>Liriodendron tulipifera</i>															
✓ 5	<i>Acer saccharum</i>															

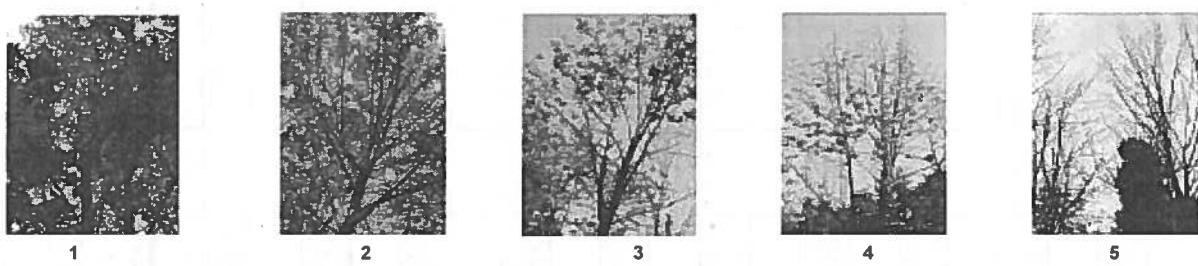
#### DBH Measurement Rules



#### 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



#### 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: 01 Hi 2012

Plot No.: 1210

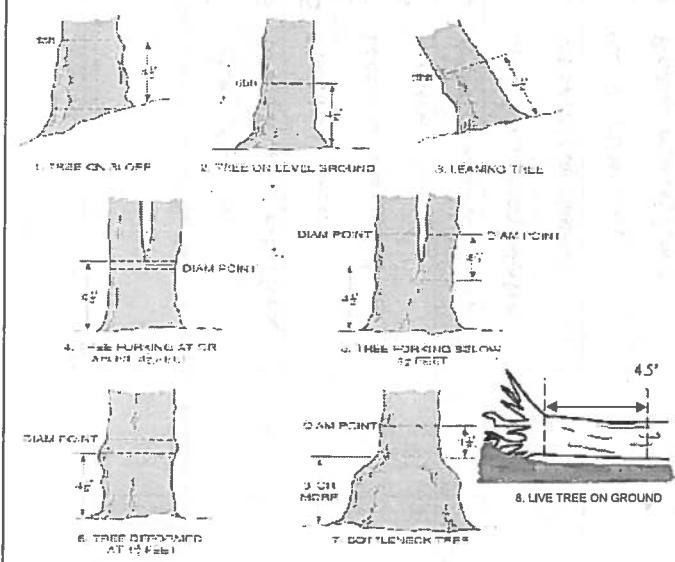
Page: 2 of 3

 Cleveland Metroparks

Explain subsample (additional room on back):

mod #	species	c	voucher#	browsed	# stems 0-1.4m	% sub or super sample	# shrub 0-<1	size class (cm) woody stems >1.4m										>40 (record each tree)
								1	2	3	4	5	6	7	8	9	10	
5	<i>Acer rubrum</i>																	
5	<i>Liriodendron tulipifera</i>																	
5	Standing dead																	
5	<i>Lonicera morrowii</i>																	
5	<i>Lindera benzoin</i>																	
6	<i>Acer saccharum</i>																	
6	<i>Liriodendron tulipifera</i>																	
6	Standing dead																	
6	<i>Acer rubrum</i>																	
6	<i>Rosa multiflora</i>																	
6	<i>Fraxinus americana</i>																	
6	<i>Acer rubrum</i>																	
6	<i>Lindera benzoin</i>																	
7	<i>Acer saccharum</i>																	
7	<i>Lindera benzoin</i>																	
7	Standing Dead																	
7	<i>Prunus serotina</i>																	
7	<i>Fagus grandifolia</i>																	
7	<i>Acer rubrum</i>																	
7	<i>Fraxinus sp.</i>																	
8	<i>Acer saccharum</i>																	
8	standing dead																	
8	<i>Liriodendron tulipifera</i>																	
8	<i>Acer rubrum</i>																	

### 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.



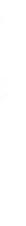
A



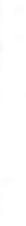
B



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)

- 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: 01Hi 2012

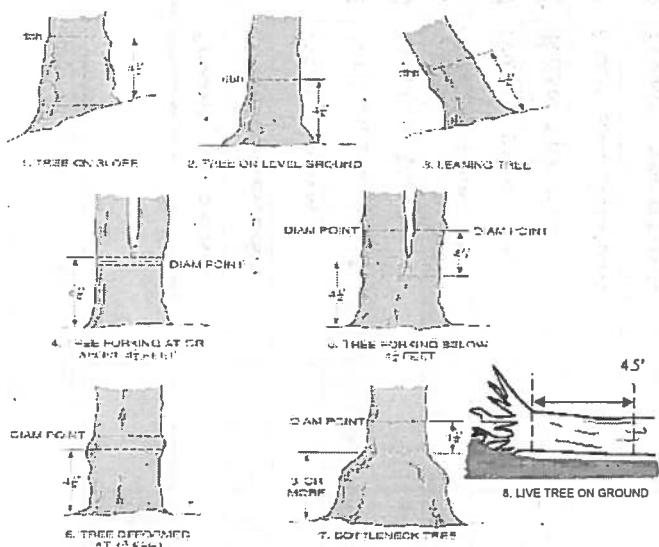
Page: 3 of 3

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Explain subsample (additional room on back)

mod #	species	c	voucher#	# stems 0-1.4m browsed	% sub or super sample	# shrub dumps	size class (cm) woody stems > 1.4m
8	<i>Prunus serotina</i>			•		1	2
8	<i>Lindera benzoin</i>				•		3
9	<i>Acer rubrum</i>					•	4
9	<i>Liriodendron tulipifera</i>					•	5
9	Standing Dead					•	6
9	<i>Acer saccharum</i>				•	7	7
9	<i>Prunus serotina</i>				•	8	8
9	<i>Nyssa sylvatica</i>			•		9	9
10	<i>Acer saccharum</i>				•	10	10
10	<i>Prunus serotina</i>				•	11	11
10	<i>Acer rubrum</i>				•	12	12
10	<i>Liriodendron tulipifera</i>			•		13	13
10	Standing dead					14	14
10	<i>Nyssa sylvatica</i>			•		15	15

### 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 year's deer browse.

Record using the tally system from 1 to 10



1



2



3



4



5

### ASH CANOPY CONDITION

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



A

B

C

D

E

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

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

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

CLEVELAND METROPARKS Emerald Ash Borer - *Fraxinus* Sheet

Project Label: PCAP

Project Name: 01 H.2 012

INTENSIVE MODULES ONLY TREES  $\geq$  10CM ONLY

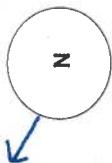
Page: 1 of 2



0 Intensive modules

Module ID	Tree ID	Species	Dead c	Voucher #	DBH (cm)	Ht @ DBH	Ash condition	"Dead condition	# Exit holes	Epicormic present	Woodpecker holes	ASH Only	
												0	0
2	1	<i>Fraxinus americana</i>	—	—	19.2	—	3	—	0	0	0		
3	2	<i>Fraxinus americana</i>	—	—	28.5	—	1	—	0	0	0		
	3												
	4												
	5												
	6												
	7												
	8												
	9												
	10												
	11												
	12												
	13												
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	16												
	17												
	18												
	19												
	20												
	21												
	22												
	23												
	24												
	25												

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



Baseline	
9	8
2	E
3	N

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

- \* If Ash Condition scores 5 (dead) provide breakup score (A-E)

Count EAB exit holes  $1.25\text{cm}^2 \times \geq 1.5\text{cm}$ 

Woodpecker and epicormic marked present (1) or absent (0)

CLEVELAND METROPARKS Plant Community Assessment Program: Invasive Species Survey



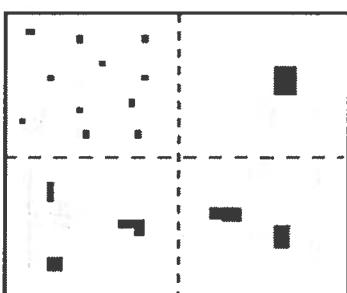
Tier 1: Early detection/ Rapid response		Presence				GPS		Presence
		NE	SE	SW	NW			
<i>Microstegium vimineum</i>	Japanese stiltgrass							X: yes
<i>Ranunculus ficaria</i>	Lesser Celandine							
<i>Cynanchum louiseae</i> (vine)	Black Swallow-wort							
<i>Butomus umbellatus</i> (wetland)	Flowering Rush							
<i>Heracleum mantegazzianum</i>	Giant Hogweed							
Tier 2: Assess as Needed		# of Plants				comments		
		NE	SE	SW	NW			
<i>Acer platanoides</i>	Norway Maple							
<i>Ailanthus altissima</i>	Tree of Heaven							
<i>Lonicera japonica</i> (vine)	Japanese Honeysuckle							
<i>Lythrum salicaria</i> (wetland)	Purple Loosestrife							
<i>Aegopodium podagraria</i> (G-cover)	Bishop's Goutweed							
<i>Celastrus orbiculatus</i> (vine)	Asian Bittersweet							
<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)	1	1	1	1			
<i>Alnus glutinosa</i>	European Alder							
<i>Dipsacus laciniatus</i>	Cut-leaf Teasel							
<i>Elaeagnus umbellata</i>	Autumn Olive (shrub)							
<i>Lonicera maackii</i>	Amur Honeysuckle (shrub)							
<i>Euonymus fortunei</i>	Wintercreeper							
Tier 3: Presence is of Interest		# of Plants				comments		
		NE	SE	SW	NW			
<i>Convallaria majalis</i> (G-cover)	Lily of the Valley							
<i>Coronilla varia</i> (G-cover)	Crown Vetch							
<i>Eleutherococcus pentaphyllus</i>	Five-leaf Aralia (shrub)							
<i>Pachysandra terminalis</i> (G-cover)	Japanese Pachysandra							
<i>Philadelphus coronarius</i>	Mock Orange (shrub)							
<i>Pulmonaria officinalis</i> (G-cover)	Lungwort							
<i>Rubus phoenicolasius</i>	Wineberry							
<i>Iris pseudacorus</i> (wetland)	Yellow Flag Iris							
<i>Ornithogalum umbellatum</i>	Star of Bethlehem							
<i>Viburnum opulus</i> var. <i>opulus</i>	European Cranberry (shrub)							
<i>Viburnum plicatum</i>	Doublefile Viburnum (shrub)							
Tier 4: Widespread and abundant		Presence				comments		
		NE	SE	SW	NW			
<i>Alliaria petiolata</i>	Garlic Mustard	1	2	2	1			
<i>Ligustrum vulgare</i>	Common Privet (shrub)	2						
<i>L. morrowii</i> , <i>L. tatarica</i>	Bush Honeysuckles (shrub)	3						
<i>Phalaris arundinacea</i>	Reed Canarygrass							
<i>Phragmites australis</i> (wetland)	Phragmites							
<i>Polygonum cuspidatum</i>	Japanese Knotweed							
<i>Frangula alnus</i>	Glossy Buckthorn (shrub)	1						
<i>Rosa multiflora</i>	Multiflora Rose (shrub)	2	2	1	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							
<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)

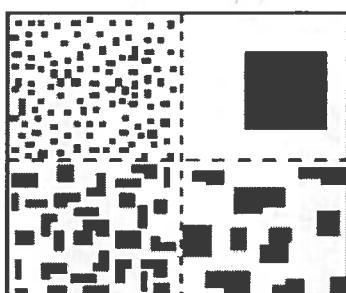
<b>SOIL PIT DESCRIPTION:</b> Excavate 20 cm plug with shovel. Describe using Munsell chart, visual exam, texture, and odor.																																							
<b>SOIL PIT MODULE:</b> <b>8</b> (one per entire plot)																																							
<b>SOIL SAMPLES</b> Standard procedure: collect a soil sample of the top 10 cm of soil from center of each intensive module and composite the sample																																							
<table border="1"> <tr> <td colspan="2">Soil Collection Module (Horizon A, B, C)</td> </tr> <tr> <td>Underlying Earth Surface*</td> <td>Ground Cover</td> </tr> <tr> <td>(Sum = 100%)</td> <td>Percent (Each <math>\leq 100\%</math>)</td> </tr> <tr> <td>Histsol</td> <td>0</td> <td>Coarse Woody Debris***</td> <td>3</td> </tr> <tr> <td>Mineral Soil</td> <td>100</td> <td>Fine Woody Debris***</td> <td>10</td> </tr> <tr> <td>Gravel-Cobble*</td> <td>0</td> <td>Litter</td> <td>95</td> </tr> <tr> <td>Bedrock</td> <td>0</td> <td>Duff (Ferm. + Humus)</td> <td>0</td> </tr> <tr> <td>Bedrock</td> <td>0</td> <td>Bryophytes- Lichen</td> <td>1</td> </tr> <tr> <td>Water</td> <td>0</td> <td>Gravel</td> <td>0</td> </tr> <tr> <td>Bare Soil</td> <td>0</td> <td>Deer</td> <td>0</td> </tr> <tr> <td>Other</td> <td>0</td> <td></td> <td></td> </tr> </table>		Soil Collection Module (Horizon A, B, C)		Underlying Earth Surface*	Ground Cover	(Sum = 100%)	Percent (Each $\leq 100\%$ )	Histsol	0	Coarse Woody Debris***	3	Mineral Soil	100	Fine Woody Debris***	10	Gravel-Cobble*	0	Litter	95	Bedrock	0	Duff (Ferm. + Humus)	0	Bedrock	0	Bryophytes- Lichen	1	Water	0	Gravel	0	Bare Soil	0	Deer	0	Other	0		
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Bare Soil	0	Deer	0																																				
Other	0																																						
<b>EARTH SURFACE &amp; GROUND COVER</b>																																							
<table border="1"> <tr> <td>Type</td> <td>% of Cover</td> </tr> <tr> <td><input type="checkbox"/> All Purpose</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Bridle</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Hiking sanctioned</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Bootleg unsanctioned</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Gravel</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Deer</td> <td></td> </tr> </table>		Type	% of Cover	<input type="checkbox"/> All Purpose		<input type="checkbox"/> Bridle		<input type="checkbox"/> Hiking sanctioned		<input type="checkbox"/> Bootleg unsanctioned		<input type="checkbox"/> Gravel		<input type="checkbox"/> Deer																									
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<input type="checkbox"/> Gravel																																							
<input type="checkbox"/> Deer																																							
<b>SOIL DEPTH MEASUREMENT:</b> Measure to the nearest 0.1 cm in center of intensive modules. If $>30.5$ cm, record as $>30$																																							
<table border="1"> <tr> <td>Strata</td> <td>Height Range (m)</td> <td>Total Cover (%)</td> </tr> <tr> <td>Tree</td> <td>5 - X</td> <td>93</td> </tr> <tr> <td>Shrub</td> <td>0.5 - 5</td> <td>18</td> </tr> <tr> <td>Herb</td> <td>X - 0.5</td> <td>18</td> </tr> <tr> <td>(Floating)*</td> <td>-</td> <td>—</td> </tr> </table>		Strata	Height Range (m)	Total Cover (%)	Tree	5 - X	93	Shrub	0.5 - 5	18	Herb	X - 0.5	18	(Floating)*	-	—																							
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Herb	X - 0.5	18																																					
(Floating)*	-	—																																					
<b>COVER BY STRATA</b> estimate using midpoints of 5, ex: 3, 8, 13 % <table border="1"> <tr> <td colspan="2">STAND SIZE</td> </tr> <tr> <td colspan="2"> <input checked="" type="checkbox"/> &gt;600 x plot size  <input type="checkbox"/> &gt; 100 x plot size  <input checked="" type="checkbox"/> 10-100 x plot size  <input type="checkbox"/> 3-10 x plot size  <input type="checkbox"/> 1-3 x plot size  <input type="checkbox"/> &lt; plot size         </td> </tr> </table>		STAND SIZE		<input checked="" type="checkbox"/> >600 x plot size <input type="checkbox"/> > 100 x plot size <input checked="" type="checkbox"/> 10-100 x plot size <input type="checkbox"/> 3-10 x plot size <input type="checkbox"/> 1-3 x plot size <input type="checkbox"/> < plot size																																			
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<b>NOTES:</b> Include evidence of earthworms (worms, castings, middens) <b>Earthworms present</b> in soil pit, no castings or middens																																							
* 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		Criteria: % of Surface Area Covered
	Conv.	NASIS	
Few	f	#	< 2
Common	c	#	2 to < 20
Many	m	#	≥ 20



2%



20%

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

0= Organic

1= Loamy

2= Clayey

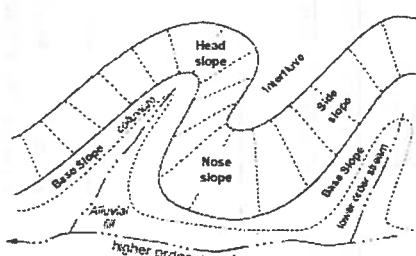
3= Sandy

4= Coarse Sand

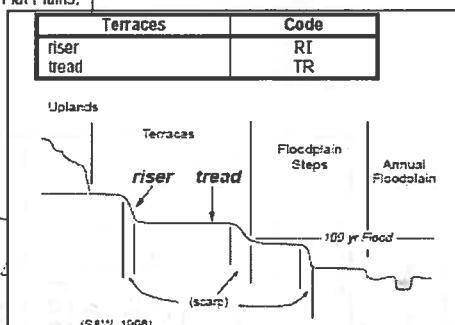
9= Not measured - make plot note

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

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

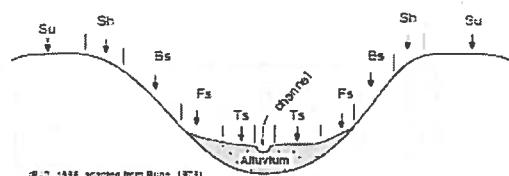


(PJS, 1995; adapted from Rine, 1975)



**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



(PJS, 1995; adapted from Rine, 1975)

### 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/SEMIOPENANTLY 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.

**SEMIOPENANTLY 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.

**STANDING BIOMASS** (required for emergent wetlands) collected in 0.1 m<sup>2</sup> clip plots (32x22 cm) from corners 1 and 3 in each intensive module. Required for VIBI-E score calculation. C<sup>2</sup>-check when collected

#### CLASSIFICATION

(FIT = excellent,  $\mathbb{F}$  Fit and Confidence

□ **Hydrogeomorphic class (WETLANDS ONLY):**  
□ DEPRESSION

degrees) + for up - for down  
**S PROGRAM - DO NOT FILL OUT IN FIELD!**

LFI is ample of


## MICROTOPOGRAPHIC FEATURE COUNTS - Intensive modules only

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

**Slope 1 = slight elevational grade across module (hill)**  
**Slope 2 = fall on slope ~20°**  
**Slope 3 = maximum steepness that can be safely sampled ~45°**

0 feature is absent or functionally absent from the wetland

3 feature is present in the wetland in very small amounts or is more common, of low quality  
7 feature is present in moderate amounts, but not of highest quality, or in small amounts of highest quality  
10 feature is present in moderate or greater amounts and of highest quality

10  
18

C.W.

c.w.d. - count for pieces with minimum 1m length

**CROWN COVER (DENSIMETER)** Make 4 readings per module facing N, S, E, W. Place dot counter corresponding space. (4 dots per grid square)

Module	N	S	E	W
2	6	4	5	4
3	3	4	4	4
8	1	3	5	3
9	4	4	4	3

COVER BY STRATA

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

\*Very tall shrubs are sometimes included in the tree stratum

\*\*Can also include seedlings of shrubs, i.e. all shrubs <0.5m

\*\*\*Tree seedlings are often defined as up to 1.4 m height or as <2.5 cm DBH in which case they would span the herb and shrub layers.

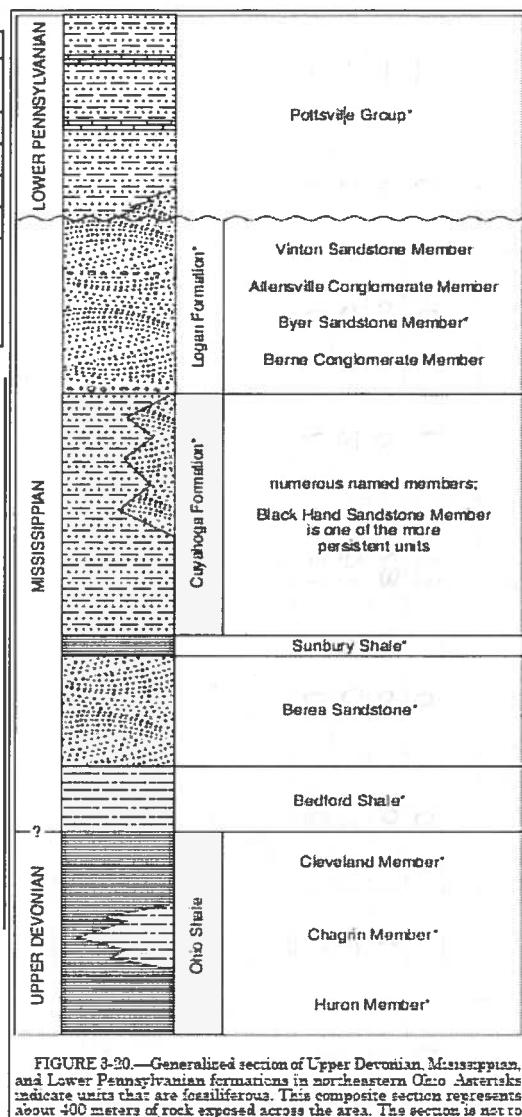
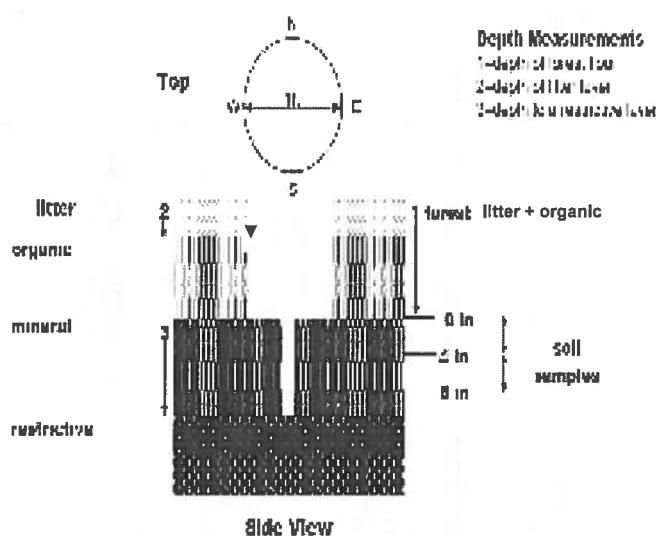


FIGURE 3-20.—Generalized section of Upper Devonian, Mississippian, and Lower Pennsylvanian formations in northeastern Ohio. Asterisks indicate units that are fossiliferous. This composite section represents about 400 meters of rock exposed across the area. The section is not to scale, but the thicknesses indicated are proportional. The term "Waverly" is used in the older literature to refer to Mississippian rocks in Ohio. Some geologists use the European term "Carboniferous," which encompasses the Mississippian and Pennsylvanian Periods of the U.S. Many units have been named within the Cuyahoga Formation, but most units are local and cannot be traced over great distances. The Black Hand Member is a spectacular massive sandstone that is fairly widespread but discontinuous. See Hyde (1953), Hoover (1960), and Collins (1975) for more information on Mississippian rocks in Ohio. See figure 3-18 for explanation of rock types.

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

Reviewed by (initial): \_\_\_\_\_

Site ID: PCAP Hi 1210

DATE: 06 / 19 / 2012

Location:	Fill in bubble(s) if plot(s) could not be sampled and flag →									
● AA Center    O N    O S    O E    O W	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(<10%); 2=Moderate(10-40%); 3 = Heavy (40-75%); 4 = Very Heavy (>75%)

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

**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"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3				Ditches, Channelization	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3			Pasture/Hay	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3		
Road - two lane	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3				Dike/Dam/Road/RR Bed (IMPEDE FLOW)	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3			Range	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3		
Road - four lane	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3				Water Level Control Structure	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3			Row Crops	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3		
Parking Lot/Pavement	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3				Excavation, Dredging	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3			Fallow Field (RECENT-RESTING ROW CROP FIELD)	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3		
Golf Course	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3				Fill/Spoil Banks	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3			Fallow Field (OLD - GRASS, SHRUBS, TREES)	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3		
Lawn/Park	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3				Freshly Deposited Sediment (UNVEGETATED)	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3			Nursery	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3		
Suburban Residential	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3				Soil Loss/Root Exposure	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3			Dairy	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3		
Urban/Multifamily	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3				Wall/Riprap	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3			Orchard	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3		
Landfill	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3				Inlets, Outlets	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3			Confined Animal Feeding	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3		
Dumping	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3				Point Source/Pipe (EFFLUENT OR STORMWATER)	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3			Rural Residential	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3		
Trash	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3				Impervious surface input (SHEETFLOW)	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3			Gravel Pit	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3		
Other: _____	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3				Other: _____	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3			Irrigation	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3		
Other: _____	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3				Other: _____	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3			Other: _____	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3		

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"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3				Forest Clear Cut	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3			Herbicide Use	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3		
Gas Wells	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3				Forest Selective Cut	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3			Mowing/Shrub Cutting	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3		
Mine (surface)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3				Tree Plantation	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3			Trails	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3		
Mine (underground)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3				Tree Canopy Herbivory (INSECT)	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3			Soil Compaction (ANIMAL OR HUMAN)	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3		
Military	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3				Shrub Layer Browsed (WILD OR DOMESTIC)	<input checked="" type="radio"/> 1	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3			Offroad vehicle damage	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3		
Other: _____	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3				Highly Grazed Grasses (OVERALL <3" HIGH)	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3			Soil erosion (FROM WIND, WATER, OR OVERUSE)	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3		
Other: _____	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3				Recently Burned Forest Canopy	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3			Other: _____	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3		
Other: _____	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3				Recently Burned Grassland (BLACKENED)	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3			Other: _____	<input type="radio"/> 0	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3		

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: P CAP HI 1210

DATE: 06 / 19 / 2012

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

Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Eurasian Watermilfoil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Purple Loosestrife	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Johnson Grass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Water hyacinth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Knotweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Kudzu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Yellow Floating Heart	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Japanese Knotweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Multiflora Rose	<input 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    O N3    O S3    O E3    O W3    O Nearest practicable location (flag and comment below)

Latitude North 41° 20' 59" 7

Longitude West 0 8 1 . 7 1 3 2 7

**Use Decimal Degrees: NAD83**

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

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

Site ID: PCAPH:1210

DATE: 06/19/2012

Location: O AA Center N 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(<10%); 2=Moderate(10-40%); 3 = Heavy (40-75%); 4 = Very Heavy (>75%)

Buffer Plot 1	Canopy Type: D E		Absent: 0	Buffer Plot 2	Canopy Type: D E		Absent: 0	Buffer Plot 3	Canopy Type: D E		Absent: 0
	Leaf Type: B N	Flag			Leaf Type: B N	Flag			Leaf Type: B N	Flag	
Big Trees (>0.3m DBH)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Small Trees (<0.3m DBH)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Woody Shrubs, Saplings (0.5m-5m HIGH)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Herbs, Forbs and Grasses	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Bare ground	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Litter, duff	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Rock	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Submerged Vegetation	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<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				Flag
Fill bubble if present - Plot	1	2	3	Fill bubble if present - Plot	1	2	3	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 checked="" 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 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								Flag
Fill bubble if present - Plot	1	2	3	Fill bubble if present - Plot	1	2	3	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

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

Reviewed by (initial): \_\_\_\_\_

Site ID: PCAPHI1210

DATE: 06/19/2012

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

Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Eurasian Watermilfoil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Purple Loosestrife	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Johnson Grass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Water hyacinth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Knotweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Kudzu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Yellow Floating Heart	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Japanese Knotweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Multiflora Rose	<input 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°10'730

### Longitude West

81.71346

Use Decimal Degrees: NAD83

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

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

Site ID: PCAP Hi 1210

DATE: 06/19/2012

Location: <u>O AA Center O N O S • E O W</u>						Fill in bubble(s) if plot(s) could not be sampled and flag →					
			<input type="radio"/> Plot 1			<input type="radio"/> Plot 2			<input 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 type="radio"/> E		Absent: <input type="radio"/> 0	Buffer Plot 2	Canopy Type: <input type="radio"/> D <input type="radio"/> E		Absent: <input type="radio"/> 0	Buffer Plot 3	Canopy Type: <input type="radio"/> D <input type="radio"/> E		Absent: <input type="radio"/> 0
	Leaf Type: <input type="radio"/> B <input type="radio"/> N	Flag			Leaf Type: <input type="radio"/> B <input type="radio"/> N	Flag			Leaf Type: <input type="radio"/> B <input type="radio"/> N	Flag	
Big Trees (>0.3m DBH)	<input type="radio"/> 0 <input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/> 0	Big Trees (>0.3m DBH)	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/> 0	Big Trees (>0.3m DBH)	<input type="radio"/> 0 <input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		
Small Trees (<0.3m DBH)	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/> 0	Small Trees (<0.3m DBH)	<input type="radio"/> 0 <input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/> 0	Small Trees (<0.3m DBH)	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4		
Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/> 0 <input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/> 0	Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/> 0	Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		
Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/> 0	Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/> 0	Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		
Herbs, Forbs and Grasses	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/> 0	Herbs, Forbs and Grasses	<input type="radio"/> 0 <input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/> 0	Herbs, Forbs and Grasses	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4		
Bare ground	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/> 0	Bare ground	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/> 0	Bare ground	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		
Litter, duff	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/> 0	Litter, duff	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4		<input type="radio"/> 0	Litter, duff	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4		
Rock	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/> 0	Rock	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/> 0	Rock	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		
Water	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/> 0	Water	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/> 0	Water	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		
Submerged Vegetation	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/> 0	Submerged Vegetation	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/> 0	Submerged Vegetation	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <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"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Ditches, Channelization	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Pasture/Hay	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		
Road - two lane	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Dike/Bam/Road/RR Bed (IMPEDE FLOW)	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Range	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		
Road - four lane	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Water Level Control Structure	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Row Crops	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		
Parking Lot/Pavement	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Excavation, Dredging	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Fallow Field (RECENT-RESTING ROW CROP FIELD)	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		
Golf Course	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Fill/Spoil Banks	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Fallow Field (OLD - GRASS, SHRUBS, TREES)	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		
Lawn/Park	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Freshly Deposited Sediment (UNVEGETATED)	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Nursery	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		
Suburban Residential	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Soil Loss/Root Exposure	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Dairy	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		
Urban/Multifamily	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Wall/Riprap	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Orchard	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		
Landfill	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Inlets, Outlets	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Confined Animal Feeding	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		
Dumping	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Point Source/Pipe (EFFLUENT OR STORMWATER)	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Rural Residential	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		
Trash	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Impervious surface input (SHEETFLOW)	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Gravel Pit	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		
Other: _____	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Other: _____	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Irrigation	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		
Other: _____	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Other: _____	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Other: _____	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		

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"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Forest Clear Cut	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Herbicide Use	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		
Gas Wells	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Forest Selective Cut	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Mowing/Shrub Cutting	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		
Mine (surface)	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Tree Plantation	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Trails	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		
Mine (underground)	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Tree Canopy Herbivory (INSECT)	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Soil Compaction (ANIMAL OR HUMAN)	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		
Military	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Shrub Layer Browsed (WILD OR DOMESTIC)	<input checked="" type="radio"/> 1	<input type="radio"/> 0	<input checked="" type="radio"/> 1		Offroad vehicle damage	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		
Other: _____	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Highly Grazed Grasses (OVERALL <3' HIGH)	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Soil erosion (FROM WIND, WATER, OR OVERUSE)	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		
Other: _____	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Recently Burned Forest Canopy	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Other: _____	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		
Other: _____	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Recently Burned Grassland (BLACKENED)	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		Other: _____	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2		

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: PCAP HI 1210

DATE: 06 / 19 / 2012

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

Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Eurasian Watermilfoil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Purple Loosestrife	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Johnson Grass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Water hyacinth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Knotweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Kudzu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Yellow Floating Heart	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Japanese Knotweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Multiflora Rose	<input type="radio"/>	<input 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 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 4 1 2 0 6 1 8      Longitude West 0 8 1 2 1 1 5 1

### Use Decimal Degrees; NAD83

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

Reviewed by (initial): \_\_\_\_\_

Site ID: PCAP H11210

DATE: 06/19/2012

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(<10%); 2=Moderate(10-40%); 3 = Heavy (40-75%); 4 = Very Heavy (>75%)

Buffer Plot 1	Canopy Type: D E		Absent: 0		Buffer Plot 2	Canopy Type: D E		Absent: 0		Buffer Plot 3	Canopy Type: D E		Absent: 0	
	Leaf Type: B N		Flag			Leaf Type: B N		Flag			Leaf Type: B N		Flag	
Big Trees (>0.3m DBH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Small Trees (<0.3m DBH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Herbs, Forbs and Grasses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Bare ground	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Litter, duff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Rock	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Water	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Submerged Vegetation	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" 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 checked="" 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 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 checked="" 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 (initial): \_\_\_\_\_

Site ID: ~~PCAPB~~ PCAP Hill 210

DATE: 06 / 19 / 2012

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

Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Eurasian Watermilfoil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Purple Loosestrife	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Johnson Grass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Water hyacinth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Knotweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Kudzu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Yellow Floating Heart	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Japanese Knotweed	<input type="radio"/>	<input checked="" 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° 20' 50" 1

Longitude West 081.71299

**Use Decimal Degrees: NAD83**

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

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

Site ID: PCAP HI (210)

DATE: 06/19/2012

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(<10%); 2=Moderate(10-40%); 3 = Heavy (40-75%); 4 = Very Heavy (>75%)

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

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

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

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: PCAP\_H11a10

DATE: 66 / 19 / 2012

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

Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Eurasian Watermilfoil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Purple Loosestrife	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Johnson Grass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Water hyacinth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Knotweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Kudzu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Yellow Floating Heart	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Japanese Knotweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Multiflora Rose	<input 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 checked="" 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"/>	

## **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° 30' 58" S      Longitude West 081° 17' 45" S

**Use Decimal Degrees: NAD83**