

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



Project Label:

PCAP

Plot No: 3465

Date Sampled: 8/21/13

Lead: LANCE

			Comment required if item answer is NO
Parking/Access outside of Park Boundaries:	Y	N	If yes, write details in Comments section below
Field journals completed	Y	N	
Site sketch made on 1:3000 map?	Y	N	
Check cover page	X-axis Bearing of plot recorded	Y	N
	GPS coords. Recorded	Y	N
	North direction recorded	Y	N
	Photographs taken?	Y	N
Plot No., Date agreement on all pages?	Y	N	
Header data completed all pages?	Y	N	
Cover classes recorded in all Intensive modules	Y	N	
Browse Level By Species	Y	N	
Woody stem quality control check	Y	N	
Invasive plant quality control check	Y	N	
Ash trees mapped	Y	N	NONE
Cover by Strata? (confirm cover type)	Y	N	
Soil samples collected with matching plot #.	X	N	
Vouchers labeled on datasheet with initials and number	X	N	
Vouchers labeled on collection bag	Y	N	
Pink flags removed	X	N	
Data sheet QA before leaving site?	X	N	
Common equipment returned to tub.	Y	N	
Data sheets scanned?	1-3-13	Enter date to left CC	
Final data sheets scanned?		Enter date to left	
Buffer Widths measured?	Y	N	29 Aug 2013 R&E
Web Soil Survey	Y	N	AB 8/27/13
Voucher Location	Refrigerator	Y	N
(# vouchers collected)	Press (#)	Enter number to left	
ACL 146- ACL 149	Drier	Y	N
	Identified	Y	N
	Mounted	Y	N
	Thrown away	Y	N

## GRTS point verification: Is plot sampleable?

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

## Additional Comments:



# CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet

Page 1 of 2

GENERAL INFORMATION			
Project Label:	PCAP		
Project Name:	<b>015C 2013</b>		
Plot Name:	<b>Picea Place</b>		
Plot No.:	<b>3465</b>		
End date (mm/dd/yyyy):	<b>08 / 21 / 2013</b>		
Party:	<b>A. Lance</b> <b>B. Eagle</b> <b>R. Chesla</b> <b>Woddy Crew</b>		
Role**:	<b>Plot leader</b>		
** Roles: Co-leader, Asst. Guide, Owner, Taxonomist, etc.			
PLOT NOT SAMPLLED:			
<input type="checkbox"/> Perm. water <input type="checkbox"/> Paved <input type="checkbox"/> Slope <input type="checkbox"/> Safety			
SAMPLING QUALITY*			
Effort Level:	<input checked="" type="checkbox"/> Very thorough <input type="checkbox"/> Accurate <input type="checkbox"/> Hurnied		
subjective evaluation of how much effort put into sampling. Hurnied plots may still provide good data			
TAXONOMIC ACCURACY			
high	modera-	low	not simpl
vascul.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	n/a
bryo	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
lichen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TAXONOMIC STANDARD			
Authority:	G&C    Pub Date: 1998		

Minimum required fields in Bold and Underlined

**LOCATION**

State: **OH**    County: **Cuyahoga**

Quadrangle: **Maplewood**

Local Place Names: **Polo Field**

Landowner: **CMP**

Data Confidentiality:

Check one:  Public data     Private Data

Fuzz 100m     Fuzz 250m     Fuzz 500m

Reason: If data not public why?

Source of coordinates:  MAP     GPS

Coordinate system:  Lat/Long     UTM     StatePlane     deg     deg min  
 Other (specify)     m     ft     ft

Datum:  NAD83/WGS84     NAD27

GPS location in plot x=0 to 5, y=1.0,+1:  
 $x = 0$      $y = 0$  (base of plot  $x=0, y=0$ )

Latitude: **41° 45' 24.5"**  
 Longitude: **81° 40' 6.39"**

Coord. Accuracy:  m     ft    **2.4** + -

GPS File Name: **3465A**

Plot size for cover data: **1** (hectares)

X-axis Bearing of plot: **[181]** °

Depth: (1-5): **4**

Intensive modules: 2, 3, 8, 9 (EDIT IF MODIFIED)

Camera No.: **4**

Photo Nos.: **623, 624**

Plot placement:  GRTS     Representative

Random     Stratified Random     Transect component

Systematic (grid)     Capture specific feature     Other

Diagram Key:

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

**Layout - 2x5**  
 Location - Park in the far east corner of the Metropark's Polo field lot. Plot is about 125m into the planted spruce trees.

**Rationale - GRTS point**  
**Veg. Characteristics - Plot is dominated by large Norway spruce, most likely planted a long time ago. Sycamore is mixed in with the spruce in a few locations. Otherwise, very little tree diversity.**

**POLY FIELD PARKING**

OVER

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

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

Project Label: PCAP

Project Name: 01 SC 2013

Page 2 of 2



Plot No.: 3465

Plot No.: 3465

CODE (on separate form):

W-01c

COMMUNITY NAME:

Planted  
Atypical Succession - Upland  
Forest - Norway Spruce

MODIFIED NATUREERVE CLASS\*

Fit= Conf=

Conspicuous inclusions

homogeneous

Irregular/pattern mosaic

**DISTURBANCES**

	type*	severity**	yr ago	% of plot	description
Human	L	O	100%	trash, fence in med 8	
Natural					
Fire					
Cut					
Animal	MH	O	100%	BROWSE	
Other					

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

Current Land Use:

PARK

Former Land Use:

UNKNOWN

**HYDROLOGIC REGIME\***

<input type="checkbox"/> Upland (seldom flooded)	<input type="checkbox"/> Intermittently flooded
<input type="checkbox"/> Intermittently/seasonally saturated (seldom flooded)	<input type="checkbox"/> Semipermanently flooded
<input type="checkbox"/> Permanently/Semipermanent, saturated (dry <1/yr, seldom flooded)	<input type="checkbox"/> Permanently flooded
<input checked="" type="checkbox"/> Occasionally flooded (<1/yr)	<input type="checkbox"/> Tidal/Seiche flooded monthly
<input type="checkbox"/> Temporarily flooded	<input type="checkbox"/> Tidal/Seiche flooded irregular (e.g. wind, storms)
	<input type="checkbox"/> Unknown

(by default unless plot is a wetland)

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

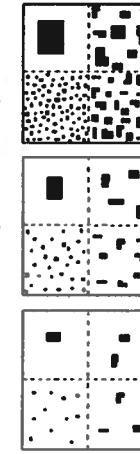
Wingstem is very abundant through out modules 1, 2, 9, and 10. Clearweed is also abundant. Other notable herbs include wild ginger, white snakeroot, and sensitive wood fern. A few patches of silvery glade fern are also present.

Japanese stilt grass was noted. Whitegrass was also present. Differentiation between these species was difficult.

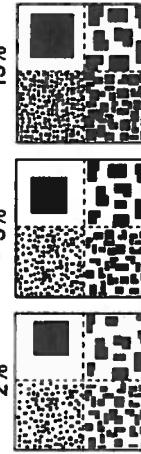


#### EXAMPLES OF PERCENT OF AREA COVERED

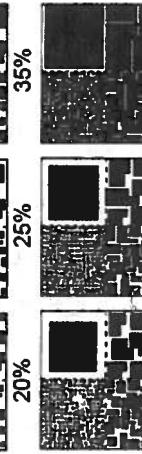
The following graphic can be used for various data elements to convey "Amount" or "Quantity". **NOTE:** Within any given box, each quadrant contains the same total area - covered, just different sized objects.



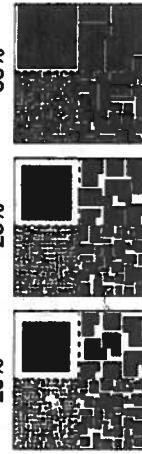
**2%**



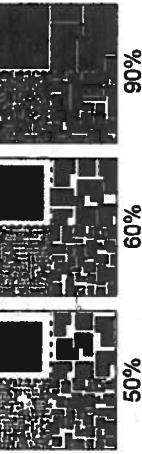
**5%**



**15%**



**25%**



**35%**



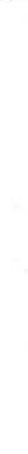
**50%**



**60%**

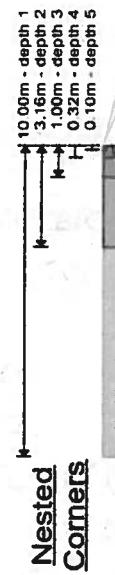


**90%**

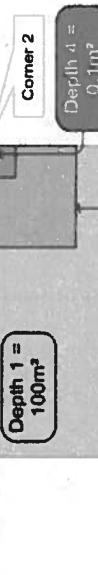


**100%**

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



**Nested Corners**



**Corner 1**



**Corner 2**

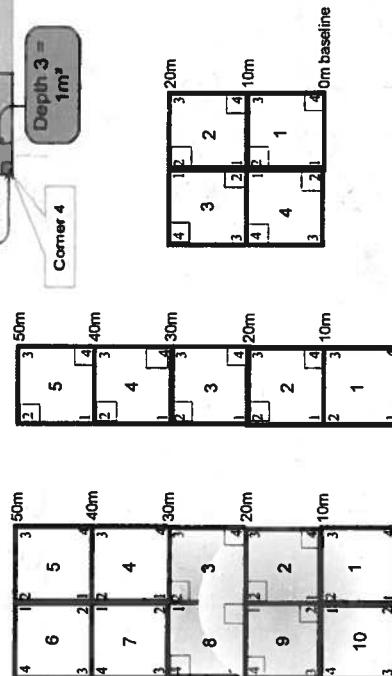
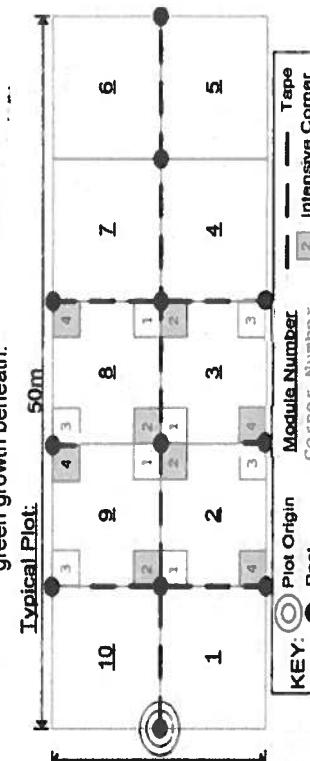


**Corner 3**



**Corner 4**

**KEY:** ● Plot Origin      ● Corner Number      — Tape      ■ Intensive Corner



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

**Project Label:** PCAP      **Project name:** 01 SC 2013

Plot no.: 3465

Page 2 of 3

Total modules: 10 Intensive modules: 4 Plot configuration: 2x5

Plot area (ha):



Cleveland Metroparks describe amount of browse per species over entire plot

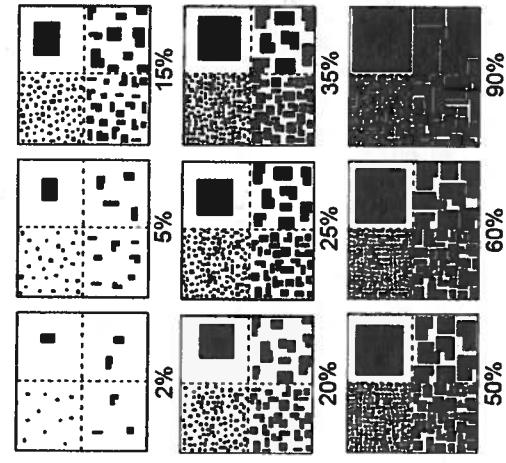
describe amount of browse per species over entire plot

### Strata - Cov. entire plot

2aCM PCAP Species Cover Data sheet Page 1 of x\_ver 3.xls last revised 5/29/2012 cer

#### EXAMPLES OF PERCENT OF AREA COVERED

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



#### BROWSE RATING NARRATIVE DESCRIPTION

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

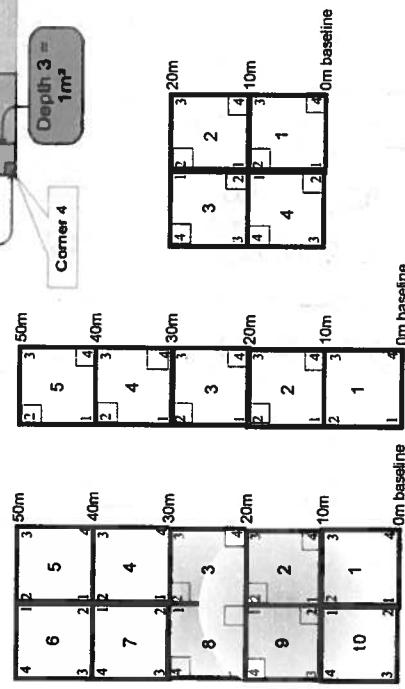
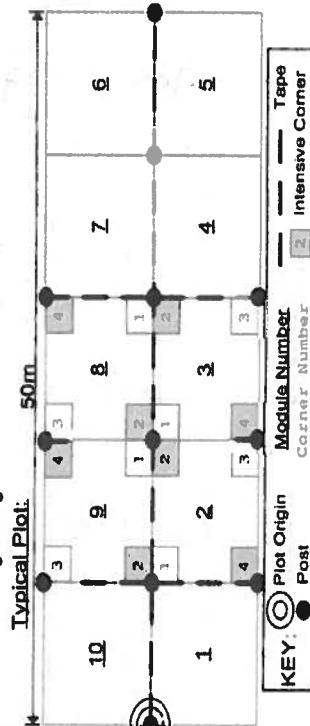
**MEDIUM LOW** values include evidence of browse at about 10 percent of the stems with no significant impact to plant reproduction evident. In this rating, plants are browsed but preferential species are observed to be reproducing in numbers that appear normal or near-normal in comparison to low browse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

**MEDIUM:** browse affects greater than 10 percent and less than 25 percent of stems in the 1 m<sup>2</sup> nested quadrat and intensive module. A browse line is usually not evident or obvious for all classes and species of vegetation, but careful examination may show preferential browse and/or browse lines for some species of plants.

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

**HIGH:** greater than 25 percent of the stems of plants in the 1 m<sup>2</sup> nested quadrat and intensive module AND a browse line is evident.

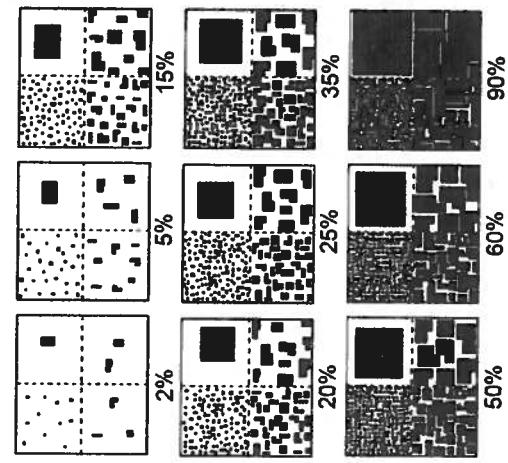
**VERY HIGH** values include extensive browse conditions, where the browse line is very evident AND almost all seedlings and herbs are severely browsed or missing. Browse line may be 5 to 6 feet in height with no or little green growth beneath.





#### EXAMPLES OF PERCENT OF AREA COVERED

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



#### BROWSE RATING NARRATIVE DESCRIPTION

**LOW OR NONE:** there is no measurable browse line.

AND there are very few or no plants 1-m nested quadrat and intensive module. In general, low values relate to less than 10 percent, by numbers of stems browsed.

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

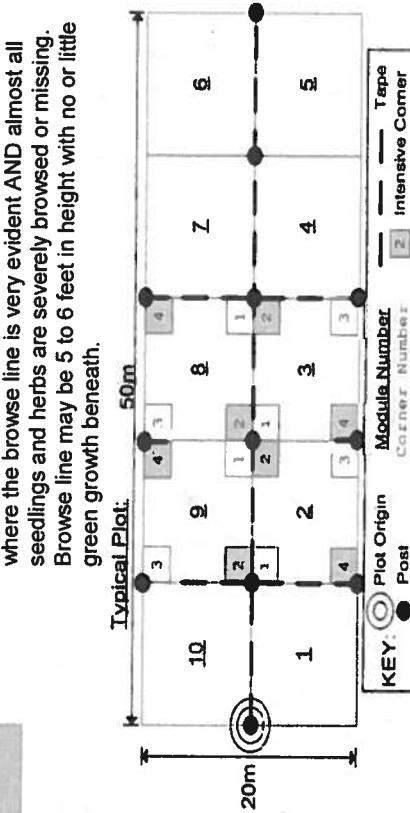
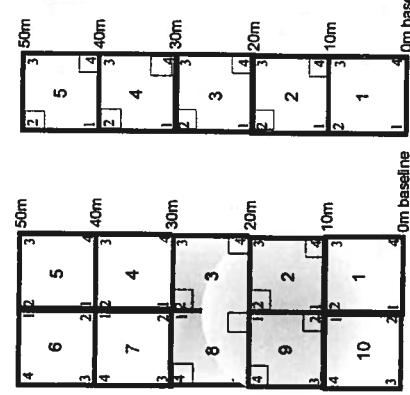
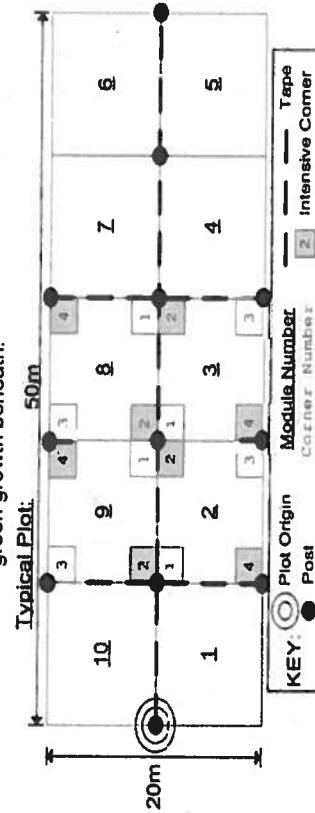
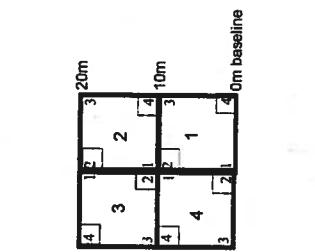
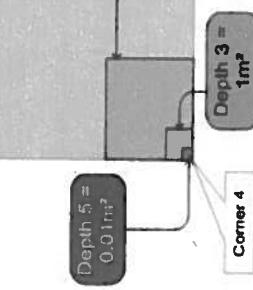
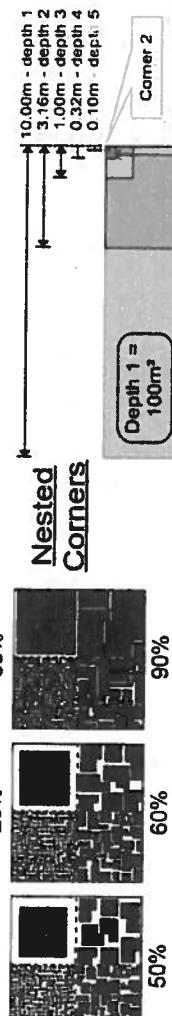
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**MEDIUM HIGH** values include evidence of a browse line and 25 percent of stems browsed with very little vegetation regeneration evident. In this rating, for some species of plants, reproduction does not appear to occur or it is very severely limited.

**HIGH:** greater than 25 percent of the stems of plants in the 1 m<sup>2</sup> nested quadrat and intensive module AND a browse line is evident.

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

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



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

Project Label: PCAP

Project Name: OISL 2013

Plot No.: 3465

Page: 1 of 3

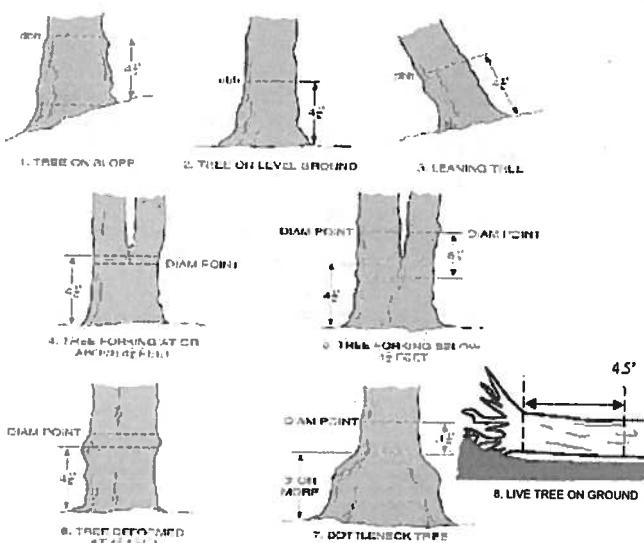
© Cleveland Metroparks

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										>40 (record each tree)
						1 0-1	2 1-2.5	3 2.5-5	4 5-10	5 10-15	6 15-20	7 20-25	8 25-30	9 30-35	10 35-40	
1	Picea abies															61.3
1	Ligustrum vulgare															
1	Fraxinus pennsylvanica															
1	Prunus pensylvanica															
1	Prunus pensylvanica															
1	Prunus pensylvanica															
1	Prunus pensylvanica															
1	Vitis sp.															
2	Parthenocissus quinquefolia															
2	Picea abies															
2	Ulmus sp.															
2	Prunus serotina															
2	Standing Dead															
2	Celastrus orbiculatus															
2	Smilax hispida															
2	Rubus alleghaniensis															
2	Rubus occidentalis															
2	Ligustrum vulgare															
3	Picea abies															
3	Fraxinus pennsylvanica															
3	Celtis occidentalis															
3	Standing Dead															
3	Ligustrum vulgare															
4	Picea abies															

Cultivars  
var.  
var.  
var.

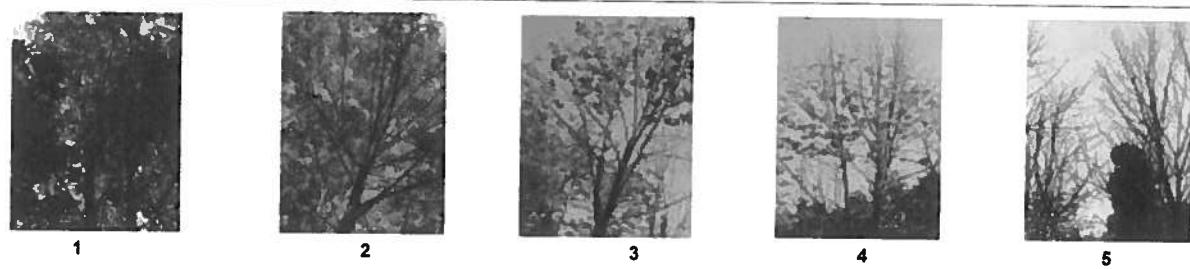
### DBH Measurement Rules



### 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



### 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: DISC 2013

Plot No.: 34405

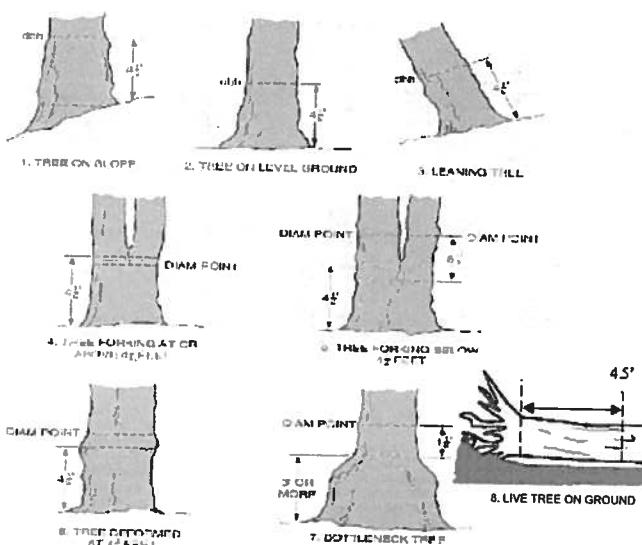
Page: 2 of 3  
© Cleveland Metroparks

Explain subsample (additional room on back):

mod #	species	c	voucher#	# stems 0-1.4m browsed	% sub shrub sample	# clumps	size class (cm) woody stems >1.4m										>40 (record each tree)
							1	2	3	4	5	6	7	8	9	10	
4	Liriodendron tulipifera																X
5	Picea abies																51.7 63.9
6	Platynus occidentalis																56.0
7	Standing Dead																
8	Rubus allegheniensis																
9	Standing Dead																
10	Picea abies																
11	Platynus occidentalis																
12	Picea abies																
13	Standing Dead																
14	Liriodendron tulipifera																
15	Rubus allegheniensis																
16	Standing Dead																
17	Picea abies																
18	Platynus occidentalis																
19	Picea abies																
20	Standing Dead																
21	Celtis orbiculata																
22	Fraxinus pennsylvanica																
23	Lindernia triplinervia																
24	Rosa multiflora																
25	Ulmus sp. Fagus grandifolia																
26	Prunus serotina																
27	Celtis occidentalis																
28	Picea abies																
29	Ligustrum vulgare																

Note: 3 ~~Celtis occidentalis~~  
3 ~~Fagus grandifolia~~  
3 ~~Prunus serotina~~  
3 ~~Celtis occidentalis~~  
3 ~~Ligustrum vulgare~~

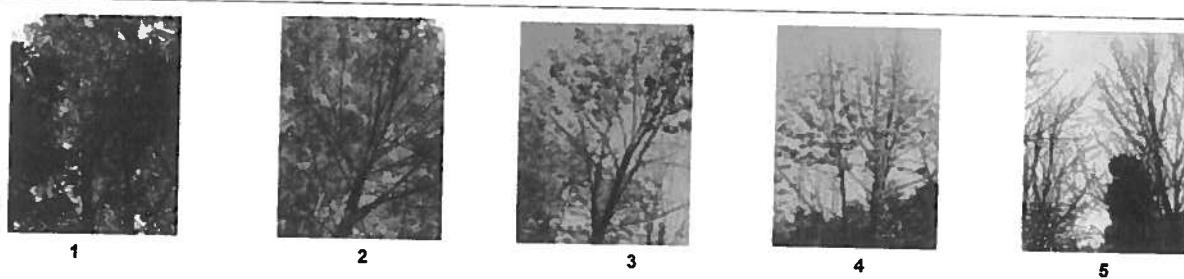
#### DBH Measurement Rules



#### 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: DISC 2013

Plot No.: 3415

Page:  
3

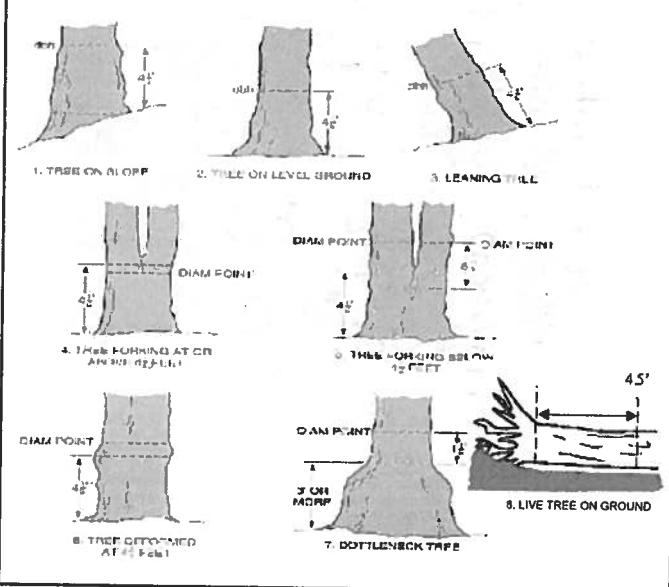
ପ୍ରାଚୀନ କବିତା

Explain subsample (additional room on back)

mod #	species	c	voucher#	# stems 0-1.4m browsed	% sub or super sample	# shrub clumps	size class (cm) woody stems >1.4m									
				1 0-<1	2 1-<2.5	3 2.5-<5	4 5-<10	5 10-<15	6 15-<20	7 20-<25	8 25-<30	9 30-<35	10 35-<40	11 >40 (record each tree)		

9	Standing Dead	
9	<i>Fraxinus pennsylvanica</i>	•
9	<i>Rosa multiflora</i>	•
9	<i>Berberis thunbergii</i>	•
10	<i>Dicea abies</i>	
10	<i>Celastrus orbiculatus</i>	•
10	<i>Ligustrum vulgare</i>	•
10	Standing Dead	

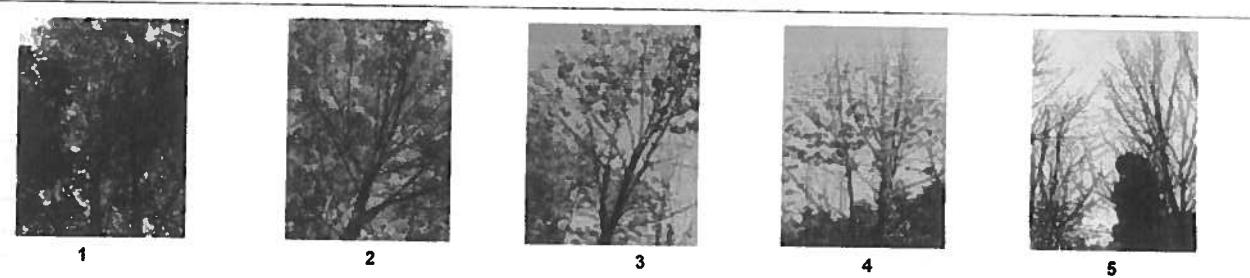
### DBH Measurement Rules



### Woody Stem Deer Browse

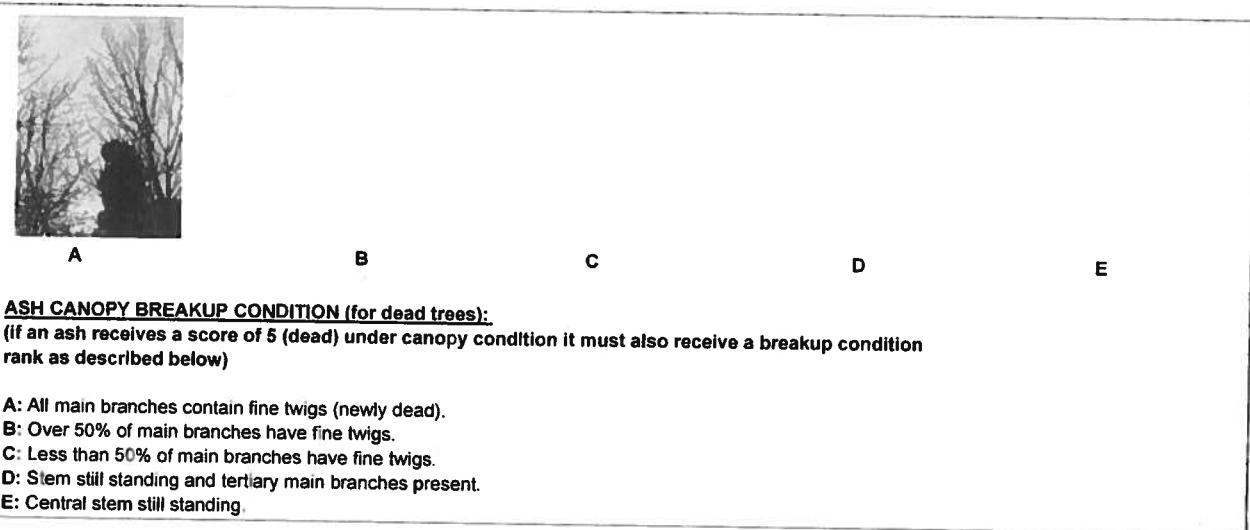
Record the number of stems/plants between 0.5-1.0 meters tall that exhibit evidence of this years deer browse.

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.



### 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: DISRUIN3

INTENSIVE MODULES ONLY TREES  $\geq 10\text{cm}$  ONLY Date: 10/21/13

Plot No.: 3165

Page: 1 of 2



Module	Tree ID.	Species	Dead c.	Voucher #	DBH (cm)	Ht @ DBH (cm)	Ash condition	ASH Only		
								*Dead condition	# Exit holes	Epicormic present
1		<b>NO ASH</b>								
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										

Baseline

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

9

8

3

N

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

- \* If Ash Condition scores 5 (dead) provide breakup score (A-E)
- Count EAB exit holes  $1.25\text{m}^2 \times 21.5\text{m}$
- Woodpecker and epicormic marked present (1) or absent (0)

CLEVELAND METROPARKS Plant Community Assessment Program: Invasive Species Survey



Tier 1: Early detection/ Rapid response		Presence				GPS
		NE	SE	SW	NW	
<i>Microstegium vimineum</i>	Japanese stiltgrass	X	X	X	X	41.45245, 81.40639
<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					

Presence
X: yes

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	5	1	1	3	SDT 2-5-13
Torilis sp.	Hedgeparsley	X				
<i>Conium maculatum</i>	Poison Hemlock					
<i>Rhamnus cathartica</i>	Common Buckthorn (shrub)					
<i>Berberis thunbergii</i>	Japanese Barberry (shrub)	0	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					

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

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)					

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

Tier 4: Widespread and abundant		Presence				comments
		NE	SE	SW	NW	
<i>Alliaria petiolata</i>	Garlic Mustard	2	3	1	2	SRF 12-5-13
<i>Ligustrum vulgare</i>	Common Privet (shrub)	5	4	4	5	
<i>L. morrowii</i> , <i>L. tatarica</i>	Bush Honeysuckles (shrub)	5	1		4	
<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		1	1	
<i>Rosa multiflora</i>	Multiflora Rose (shrub)	7	2	2	1	
<i>Typha angustifolia</i> , <i>T. x glauca</i>	Cattails (wetland)					
<i>Cirsium arvense</i>	Canada thistle					
<i>Dipsacus fullonum</i>	Common Teasel					
<i>Hesperis matronalis</i>	Dame's Rocket	1	1	1	3	
<i>Vinca minor</i> (G-cover)	Periwinkle					

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

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

**CLEVELAND METROPARKS Plant Community Assessment Program - Plant Cover and Earth Surface**

Project Label: PCAP

Project Name: 01/2013

Plot No.: 1360 3466

Page: 1 of 1



**STANDING BIOMASS** (required for emergent wetland(s) collected in 1 m<sup>2</sup> clip plots (32x32 cm) from corners 1 and 3 in each intensive module. Required for VIBI-E score calculation. C=check when collected)

Module #	C?	Corner	Corner

**MICROTOPOGRAPHIC FEATURE COUNTS - Intensive modules only**

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

Slope 1 = slight elevational grade across module (nil)

Slope 2 = fails 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 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

CLASSIFICATION						
<b>Hydrogeomorphic class (WETLANDS ONLY):</b>						
<input type="checkbox"/> DEPRESSION	<input type="checkbox"/> Beaver	<input type="checkbox"/> Human	Fit: _____	Conf: _____	At aspect:	N
<input type="checkbox"/> RIVERINE	<input type="checkbox"/> Headwater	<input type="checkbox"/> Marshland	Fit: _____	Conf: _____	+45 degrees	NE
<input type="checkbox"/> SLOPE	<input type="checkbox"/> ground water hydrology or on a physical slope	<input type="checkbox"/> Channel	Fit: _____	Conf: _____	+90 degrees	E
<input type="checkbox"/> FRINGING	<input type="checkbox"/> Reservoir	<input type="checkbox"/> Natural lake	Fit: _____	Conf: _____	+135 degrees	SE
<input type="checkbox"/> COASTAL	<input type="checkbox"/> specify subclasz	<input type="checkbox"/> Lake	Fit: _____	Conf: _____	+180 degrees	S
<input type="checkbox"/> BOG	<input type="checkbox"/> (strongly, moderately, weekly, ombrotrophic)	<input type="checkbox"/> Forest	Fit: _____	Conf: _____	+225 degrees	SW
<b>Ohio EPA VIBI Plant Community Class (WETLANDS ONLY):</b>						
<input type="checkbox"/> FOREST	<input type="checkbox"/> swamp forest	<input type="checkbox"/> bog forest	<input type="checkbox"/> forest step	<input type="checkbox"/> emerg. step	Fit: _____	Conf: _____
<input type="checkbox"/> EMERGENT	<input type="checkbox"/> marsh	<input type="checkbox"/> wet meadow	<input type="checkbox"/> open bog	<input type="checkbox"/> tall sh. fen	Fit: _____	Conf: _____
<input type="checkbox"/> SHRUB	<input type="checkbox"/> shrub swamp	<input type="checkbox"/> tall sh. bog	<input type="checkbox"/> tall sh. fen	<input type="checkbox"/> Conf: _____	Fit: _____	Conf: _____

NOTE: tussocks and hummocks are counted in BOTH nested quadrat corners but counts are aggregated.

<b>MCNAB INDICES (degrees) + for up - for down</b>	
LFI*	TSI**
Module	N
2	29
3	20
8	24
9	13
	24
	26
	9

**FILLED OUT USING GIS PROGRAM - DO NOT FILL OUT IN FIELD**

Module	N	S	E	W
2	29	29	25	16
3	20	28	37	16
8	24	20	30	12
9	13	24	26	9

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

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

Module	N	S	E	W
2	16	14	3	1
3	15	7	4	0
8	16	2	3	0
9	10	13	5	-

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.

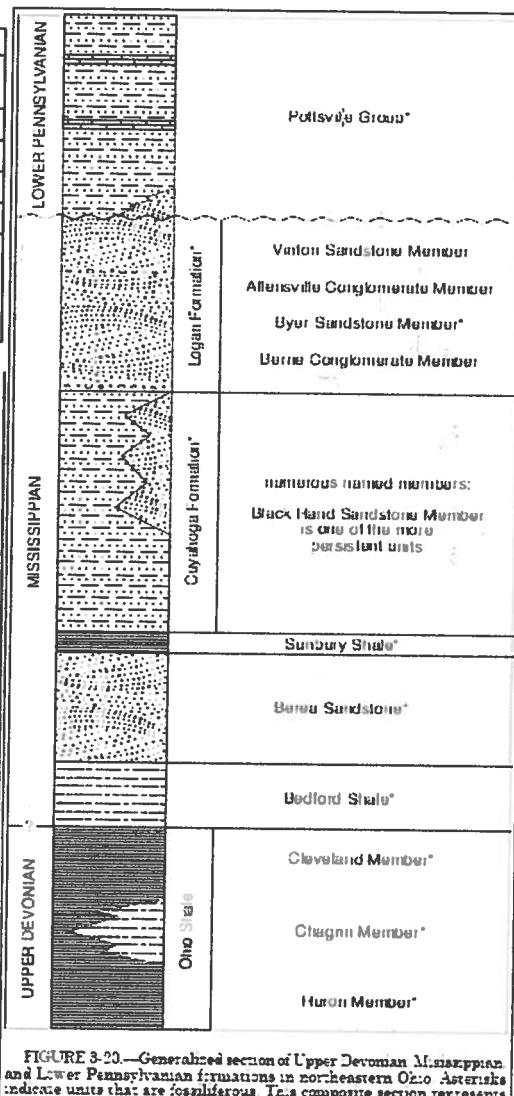
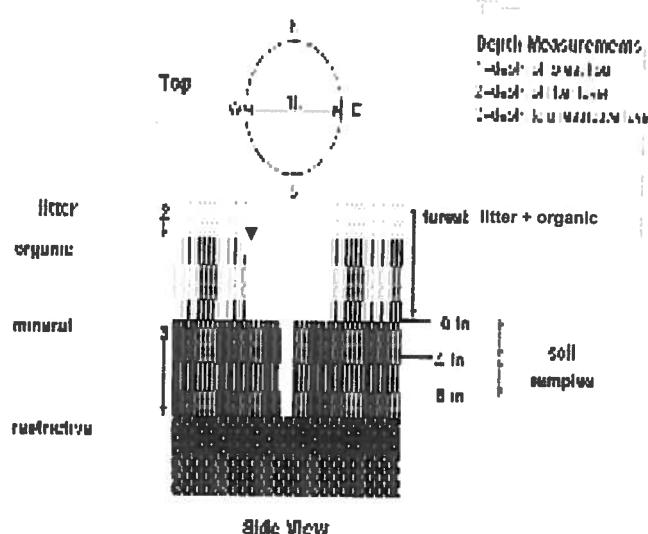
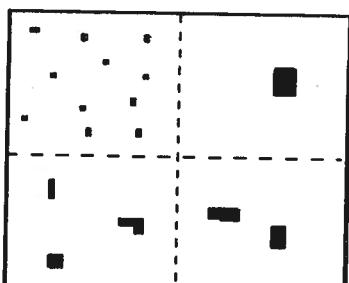


FIGURE 3-20.—Generalized section of Upper Devonian Mississippian and Lower Pennsylvanian formations in northeastern Ohio. Asterisks indicate units that are fossiliferous. This composite section represents about 300 meters of rock exposed across the area. The section is not to scale, but the thicknesses 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, 1959; Hoover, 1960, and Collins, 1979, for more information on Mississippian rocks in Ohio. See figure 3-16 for explanation of rock types.

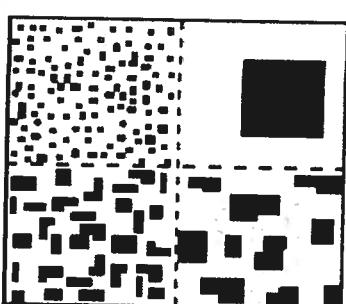


**PERCENT MOTTLES (USE CLASS CODES):**

Class	Code Conv.	NASIS	Criteria: % of Surface Area Covered
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

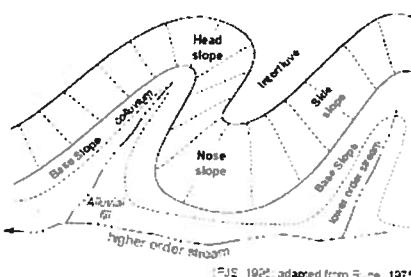
3= Sandy

4= Coarse Sand

9= Not measured - make plot note

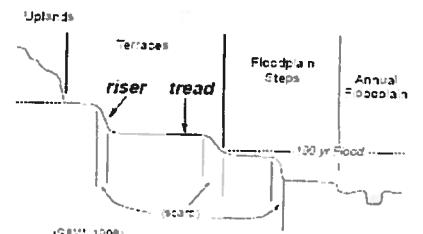
**Geomorphic Component** - Three-dimensional descriptors of parts of landforms or microfeatures that are best applied to areas. Unique descriptors are available for Hills, Terraces, Mountains, and Flat Plains; e.g., (for Hills) nose slope or NS.

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



IJS 1992, adapted from R-Lee, 1975

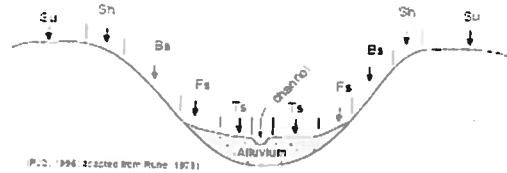
Terraces	Code
riser tread	RI TR



IJSW, 1996

**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



IJS, 1996, adapted from R-Lee, 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/SEMI-PERMANENTLY SATURATED:** Dry less than once per year. Surface water is seldom present, but substrate is saturated to surface for extended periods during the growing season. Equivalent to Cowardin's Saturated modifier.

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

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

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

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

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

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

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

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

Site ID: PCAPSET53 3405DATE: 08/21/2013

Location:	Fill in bubble(s) if plot(s) could not be sampled and flag →							
<input checked="" type="radio"/> AA Center <input type="radio"/> ON <input type="radio"/> OS <input type="radio"/> OE <input type="radio"/> OW	<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(&lt;10%); 2=Moderate(10-40%); 3 = Heavy (40-75%); 4 = Very Heavy (&gt;75%)

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

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

Residential and Urban Stressors				Hydrology Stressors				Agricultural & Rural Stressors							
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	
Road - gravel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Ditches, Channelization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pasture/Hay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Road - two lane	<input type="radio"/>	<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"/>	<input type="radio"/>	Range	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Road - four lane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Water Level Control Structure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Row Crops	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Parking Lot/Pavement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Excavation, Dredging	<input type="radio"/>	<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"/>	<input type="radio"/>	
Golf Course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fill/Spoil Banks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fallow Field (OLD - GRASS, SHRUBS, TREES)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Lawn/Park	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Freshly Deposited Sediment (UNVEGETATED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Nursery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Suburban Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Soil Loss/Root Exposure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Dairy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Urban/Multifamily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Wall/Riprap	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Orchard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Landfill	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Inlets, Outlets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Confined Animal Feeding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Dumping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Point Source/Pipe (EFFLUENT OR STORMWATER)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Rural Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Trash	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Impervious surface input (SHEETFLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Gravel Pit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Irrigation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Other: _____	<input type="radio"/>	<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"/>	<input type="radio"/>	Forest Clear Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Herbicide Use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Gas Wells	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Forest Selective Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Mowing/Shrub Cutting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Mine (surface)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Tree Plantation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Trails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Mine (underground)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Tree Canopy Herbivory (INSECT)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Soil Compaction (ANIMAL OR HUMAN)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Military	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Shrub Layer browsed (WILD OR DOMESTIC)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Offroad vehicle damage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Highly Grazed Grasses (OVERALL <3" HIGH)	<input type="radio"/>	<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"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Recently Burned Forest Canopy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Recently Burned Grassland (BLACKENED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

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

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

2428168304

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

Reviewed by (Initials):

**Site ID:** PCAPSCT~~005~~3465

DATE: 08 / 21 / 2013

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

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

## PLOT COORDINATES

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

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

**Location of coordinates (choose one):**

## Flag

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

Latitude North 41° 45' 27.9"

Longitude West

**Use Decimal Degrees: NAD83**

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

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

Site ID: PCAPSC1265 3405

DATE: 08 / 21 / 2013

Location:

O AA Center   O N   O S   O E   O W

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

O Plot 1   O Plot 2   O Plot 3

## Buffer Natural Cover Strata

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

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

Buffer Plot 1	Canopy Type: D E		Absent: <input type="radio"/>	Buffer Plot 2	Canopy Type: D E		Absent: <input type="radio"/>	Buffer Plot 3	Canopy Type: D E		Absent: <input checked="" type="radio"/>
	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 type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Small Trees (<0.3m DBH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Woody Shrubs, Saplings (0.5m-5m HIGH)	<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 type="radio"/>	<input type="radio"/>	<input type="radio"/>
Woody Shrubs, Saplings (<0.5m HIGH)	<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"/>	<input type="radio"/>	<input type="radio"/>
Herbs, Forbs and Grasses	<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 type="radio"/>	<input type="radio"/>
Bare ground	<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 type="radio"/>	<input type="radio"/>	<input 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 type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rock	<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 type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Water	<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"/>	<input type="radio"/>	<input type="radio"/>
Submerged Vegetation	<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"/>	<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							
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	
Road - gravel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Ditches, Channelization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Pasture/Hay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Road - two lane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Dike/Dam/Road/RR Bed (IMPEDE FLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Range	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Road - four lane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Water Level Control Structure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Row Crops	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Parking Lot/Pavement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Excavation, Dredging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Fallow Field (RECENT-RESTING ROW CROP FIELD)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Golf Course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Fill/Spoil Banks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Fallow Field (OLD - GRASS, SHRUBS, TREES)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Lawn/Park	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Freshly Deposited Sediment (UNVEGETATED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Nursery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Suburban Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Soil Loss/Root Exposure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Dairy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Urban/Multifamily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Wall/Riprap	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Orchard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Landfill	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Inlets, Outlets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Confined Animal Feeding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Dumping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Point Source/Pipe (EFFLUENT OR STORMWATER)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Rural Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Trash	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		Impervious surface input (SHEETFLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Gravel Pit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Irrigation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		

Industrial Development Stressors				Habitat/Vegetation Stressors											
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	
Oil Drilling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Forest Clear Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Herbicide Use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Gas Wells	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Forest Selective Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Mowing/Shrub Cutting	<input type="radio"/>	<input type="radio"/>	<input checked="" 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 checked="" 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 checked="" type="radio"/>	<input checked="" type="radio"/>		
Military	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Shrub Layer browsed (WILD OR DOMESTIC)	<input checked="" type="radio"/>	<input checked="" 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:** PLAPSC1365 3405

DATE: 08 / 21 / 2013

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

FIII 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 checked="" 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°45'39.3"

Longitude West

Use Decimal Degrees: NAD83

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

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

Site ID: PCAPSC3466

DATE: 08/21/2013

Location:

O AA Center O N O S O E O W

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

O Plot 1 O Plot 2 O Plot 3

## Buffer Natural Cover Strata

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

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

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

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

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

Industrial Development Stressors				Habitat/Vegetation Stressors											
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	
Oil Drilling	O	O	O		Forest Clear Cut	O	O	O		Herbicide Use	O	O	O		
Gas Wells	O	O	O		Forest Selective Cut	O	O	O		Mowing/Shrub Cutting	O	O	O		
Mine (surface)	O	O	O		Tree Plantation	O	O	O		Trails	O	O	O		
Mine (underground)	O	O	O		Tree Canopy Herbivory (INSECT)	O	O	O		Soil Compaction (ANIMAL OR HUMAN)	O	O	O		
Military	O	O	O		Shrub Layer Browsed (WILD OR DOMESTIC)	O	O	O		Offroad vehicle damage	O	O	O		
Other: _____	O	O	O		Highly Grazed Grasses (OVERALL <3" HIGH)	O	O	O		Soil erosion (FROM WIND, WATER, OR OVERUSE)	O	O	O		
Other: _____	O	O	O		Recently Burned Forest Canopy	O	O	O		Other: _____	O	O	O		
Other: _____	O	O	O		Recently Burned Grassland (BLACKENED)	O	O	O		Other: _____	O	O	O		

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

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

2428168304

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

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

**Site ID:** PLAPSC3465

DATE: 08 / 21 / 2013

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

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

## **PLOT COORDINATES**

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

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

**Location of coordinates (choose one):**

## Flag

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

Latitude North 41.45284      Longitude West 0.8140494  
Use Decimal Degrees; NAD83

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

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

Site ID: PTAC23465 PCAPSC3465

DATE: 08 / 21 / 2013

Location:

AA Center    N    S    O/E    W

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

Plot 1    Plot 2    Plot 3

F

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

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

Residential and Urban Stressors				Hydrology Stressors				Agricultural & Rural Stressors							
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	
Road - gravel	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Ditches, Channelization	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Pasture/Hay	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	
Road - two lane	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Dike/Dam/Road/RR Bed (IMPEDE FLOW)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Range	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	
Road - four lane	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Water Level Control Structure	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Row Crops	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	
Parking Lot/Pavement	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Excavation, Dredging	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Fallow Field (RECENT-RESTING ROW CROP FIELD)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	
Golf Course	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Fill/Spoil Banks	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Fallow Field (OLD - GRASS, SHRUBS, TREES)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	
Lawn/Park	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Freshly Deposited Sediment (UNVEGETATED)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Nursery	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	
Suburban Residential	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Soil Loss/Root Exposure	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Dairy	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	
Urban/Multifamily	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Wall/Riprap	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Orchard	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	
Landfill	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Inlets, Outlets	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Confined Animal Feeding	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	
Dumping	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Point Source/Pipe (EFFLUENT OR STORMWATER)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Rural Residential	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	
Trash	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Impervious surface input (SHEETFLOW)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Gravel Pit	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	
Other: _____	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Other: _____	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Irrigation	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	
Other: _____	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Other: _____	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Other: _____	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	

**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 <input type="radio"/> 4			<input type="radio"/>	Forest Clear Cut	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Herbicide Use	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>
Gas Wells	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Forest Selective Cut	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Mowing/Shrub Cutting	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>
Mine (surface)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Tree Plantation	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Trails	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>
Mine (underground)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Tree Canopy Herbivory (INSECT)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Soil Compaction (ANIMAL OR HUMAN)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>
Military	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Shrub Layer Browsed (WILD OR DOMESTIC)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Offroad vehicle damage	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>
Other: _____	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Highly Grazed Grasses (OVERALL <3" 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"/>	Soil erosion (FROM WIND, WATER, OR OVERUSE)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>
Other: _____	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Recently Burned Forest Canopy	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Other: _____	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>
Other: _____	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Recently Burned Grassland (BLACKENED)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>	Other: _____	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			<input type="radio"/>

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

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

2428168304

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

Reviewed by (Initials):

**Site ID:** PCAPSC3465

DATE: 08 / 21 / 2013

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

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

## PLOT COORDINATES

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

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

**Location of coordinates (choose one):**

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

### Flag

Latitude North 4.145180      Longitude West 0.81.40612  
Use Decimal Degrees: NAD83

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

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

Site ID: PCAPSC3465

DATE: 08/21/2013

Location: **O AA Center O N O S O E O W**

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

## Buffer Natural Cover Strata

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

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

Buffer Plot 1	Canopy Type: <input checked="" type="radio"/> <input checked="" type="radio"/>		Absent: <input type="radio"/>	Buffer Plot 2	Canopy Type: <input checked="" type="radio"/> <input type="radio"/> E		Absent: <input type="radio"/>	Buffer Plot 3	Canopy Type: <input checked="" type="radio"/> <input type="radio"/> E		Absent: <input type="radio"/>			
	Leaf Type: <input checked="" type="radio"/> <input checked="" type="radio"/>				Flag				Leaf Type: <input checked="" type="radio"/> <input type="radio"/> N					
Big Trees (>0.3m DBH)	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input checked="" type="radio"/> 4				Big Trees (>0.3m DBH)	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input checked="" type="radio"/> 4
Small Trees (<0.3m DBH)	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input checked="" type="radio"/> 4				Small Trees (<0.3m DBH)	<input type="radio"/>	<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 checked="" type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4				Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/>	<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"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input checked="" type="radio"/> 4
Herbs, Forbs and Grasses	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input checked="" type="radio"/> 4				Herbs, Forbs and Grasses	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
Bare ground	<input type="radio"/>	<input checked="" type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4				Bare ground	<input type="radio"/>	<input checked="" type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
Litter, duff	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input checked="" type="radio"/> 4				Litter, duff	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input checked="" type="radio"/> 4
Rock	<input checked="" type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4				Rock	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
Water	<input checked="" type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4				Water	<input type="radio"/>	<input checked="" type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
Submerged Vegetation	<input checked="" type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4				Submerged Vegetation	<input checked="" type="radio"/>	<input 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"/>	<input type="radio"/>	<input type="radio"/>		Ditches, Channelization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Pasture/Hay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Road - two lane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Dike/Dam/Road/RR Bed (IMPEDE FLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Range	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Road - four lane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Water Level Control Structure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Row Crops	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Parking Lot/Pavement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Excavation, Dredging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Fallow Field (RECENT-RESTING ROW CROP FIELD)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Golf Course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Fill/Spoil Banks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Fallow Field (OLD - GRASS, SHRUBS, TREES)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Lawn/Park	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Freshly Deposited Sediment (UNVEGETATED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Nursery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Suburban Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Soil Loss/Root Exposure	<input type="radio"/>	<input 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 checked="" 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 checked="" type="radio"/>	<input checked="" type="radio"/>	/	
Military	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Shrub Layer browsed (WILD OR DOMESTIC)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" 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.

2428168304

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

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

Reviewed by (Initials):

**Site ID:** PCAPSC3465

DATE: 08 / 21 / 2013

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

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

## PLOT COORDINATES

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

If Buffer Riot 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 · 45263      Longitude West 081 · 40765  
Use Decimal Degrees; NAD83