

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



Project Label: PCAP

Plot No: 1205 Date Sampled: 06/13/12 Lead: B. Rocke

Comment required if item answer is NO

Parking/Access outside of Park Boundaries:	<input checked="" type="checkbox"/> Y	N	If yes, write details in Comments section below
Field journals completed	<input checked="" type="checkbox"/> Y	N	
Site sketch made on 1:3000 map?	<input checked="" type="checkbox"/> Y	N	
Check cover page	X-axis Bearing of plot recorded	<input checked="" type="checkbox"/> Y	N
	GPS coords. Recorded	<input checked="" type="checkbox"/> Y	N
	North direction recorded	<input checked="" type="checkbox"/> Y	N
	Photographs taken?	<input checked="" type="checkbox"/> Y	N
Plot No., Date agreement on all pages?	<input checked="" type="checkbox"/> Y	N	
Header data completed all pages?	<input checked="" type="checkbox"/> Y	N	
Cover classes recorded in all Intensive modules	<input checked="" type="checkbox"/> Y	N	
Browse Level By Species	<input checked="" type="checkbox"/> Y	N	
Woody stem quality control check	<input checked="" type="checkbox"/> Y	N	
Invasive plant quality control check	<input checked="" type="checkbox"/> Y	N	
Ash trees mapped	<input checked="" type="checkbox"/> Y	N	No Ash
Cover by Strata? (confirm cover type)	<input checked="" type="checkbox"/> Y	N	
Soil samples collected with matching plot #.	<input checked="" type="checkbox"/> Y	N	
Vouchers labeled on datasheet with initials and number	<input checked="" type="checkbox"/> Y	N	
Vouchers labeled on collection bag	<input checked="" type="checkbox"/> Y	N	
Pink flags removed	<input checked="" type="checkbox"/> Y	N	
Data sheet QA before leaving site?	<input checked="" type="checkbox"/> Y	N	
Common equipment returned to tub.	<input checked="" type="checkbox"/> Y	N	
Data sheets scanned?	06/18/12		Enter date to left NZ
Final data sheets scanned?			Enter date to left
Buffer Widths measured?	<input checked="" type="checkbox"/> Y	N	6-22-12 JTP
Web Soil Survey	<input checked="" type="checkbox"/> Y	N	6-8-2012 JTP
Voucher Location	Refrigerator	Y	N
(# vouchers collected)	Press (#)	Enter number to left	
BD2001-	Drier	<input checked="" type="checkbox"/> Y	N
BD2003	Identified	<input checked="" type="checkbox"/> Y	N
	Mounted	<input checked="" type="checkbox"/> Y	N
	Thrown away	<input checked="" type="checkbox"/> Y	N

## GRTS point verification: Is plot sampleable?

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

## Additional Comments:

Part at End of Echo Hill Dr.



# Meadow Plot

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

Page 1 of 2  
N

### GENERAL INFORMATION

**Project Label:** PCAP

**Project Name:** 01-BR-012

**Plot Name:** *Theory*  
*Prairie*

**Plot No.:** 1205

Level 4 (no nested corners sampled)

Level 5 (nested corners sampled)

Date (mm/dd/yyyy): 06/13/2012

End date (if > 1 day): 06/14/2012

Party

**J.H. Ruckes** Plot Leader

**Mike Boeth** Ass't. Plot Leader

**Seán Fennell** Ass't. Plot Leader

**Nicole Zimmerman** Field Tech

**T. Petty** Field Tech

**K. Lengyel** Field Tech

**R. H. Hickey** Field Tech

**A. G. Hickey** Field Tech

**S. M. Hickey** Field Tech

**J. M. Hickey** Field Tech

**L. M. Hickey** Field Tech

**J. M. Hickey** Field Tech

### LOCATION

**State:** OH County: Cuyahoga

Quadrangle: Northfield

Local Place Names: Echo Hill Drive

Landowner: CM

Plot module: 2-10

plot: #10

#1

#2

#3

#4

#5

#6

#7

#8

#9

#10

#11

#12

#13

#14

#15

#16

#17

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#36

#37

#38

#39

#40

#41

#42

#43



Diagram Key:  
 ● Plot origin (0,0) point  
 ○ GPS location  
 → photo taken, ● location of permanent posts

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

Layout: 2x2

Location: Park at the end of Echo Hill Dr. Walk ~500m to the southeast through two large gullies to an open ridge top meadow

Rationale: GRTS pt

Veg char: No canopy  
 Blackberries, Pyrus, Fagus, Nyssa  
 Solidago, Poa, Pennisetum

Depth: (1-5): 4

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

Camera No.: 3

Photo Nos.: 100-0822

Plot placement: GRTS Representative

□ Random □ Stratified Random □ Transect component

□ Systematic (grid) □ Capture specific feature □ Other

OVER

Minimum required fields in Bold and Underlined

\*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: CBRZP

MODIFIED NATURERESERVE CLASS\*

CODE (on separate form): TOT VO4  
Fit: L Conf: L

DISTURBANCES

type*	severity**	yrs ago	% of plot	description
Human				
Natural				
Fire				
Cut				
Animal	ML	≤ 1	BR 7-3-2012	Bear
Other		100		

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

Current Land Use: Park

Former Land Use: Unk

HYDROLOGIC REGIME\*

<input checked="" 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"/> Saltwater	<input type="checkbox"/> Permanently flooded
<input type="checkbox"/> Brackish	<input type="checkbox"/> Tidal/Seiche flooded daily
<input type="checkbox"/> Fresh	<input type="checkbox"/> Tidal/Seiche flooded monthly
<input type="checkbox"/> Upland (n/a)	<input type="checkbox"/> Tidal/Seiche flooded irregular (e.g. wind, storms)
(by default unless plot is a wetland)	<input type="checkbox"/> Unknown

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

*This plot was mostly various grasses and sedges with some clumps of Rubus sp (pensylvanicus?), Cornus sp., Multiflora Rose & Buckthorn. There were a few slight depressions (eg mud, cover) where there was a localized change in moisture resulting in a change in dominant grasses.*

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

Project Label:

PCAF

Project name: Q1 Br 2012

Plot no.: 1205

Total modules:

1

Intensive modules: 4 Plot configuration: 2x2

Plot area (ha): 0.4

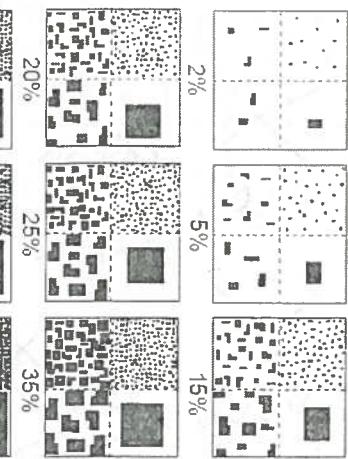


SIEHE AUCH  
Mitarbeiter

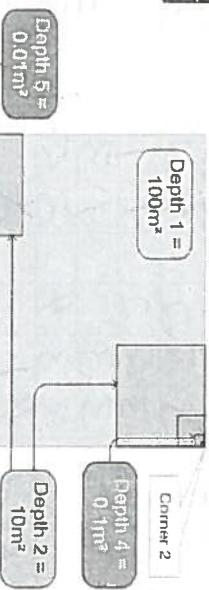
describe amount of browse per species over entire plot

### EXAMPLES OF PERCENT OF AREA COVERED

The following graphic can be used for various data elements to convey "Adequacy of Quality". NOTE: Within any given 1m<sup>2</sup> each quadrant contains the same total area covered just after all sized objects.



Nested  
Corners



cover class	% cover	mid point
1	solitary or few	0.001
2	0-1%	0.005
3	1-2%	0.015
4	2-5%	0.035
5	5-10%	0.075
6	10-25%	0.175
7	25-50%	0.375
8	50-75%	0.625
9	75-95%	0.850
10	95-100%	0.975

### BROWSE RATING NARRATIVE DESCRIPTION

LOW OR NONE: there is no measurable browse line AND there are very few or no plants 1-m nested quad at 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.

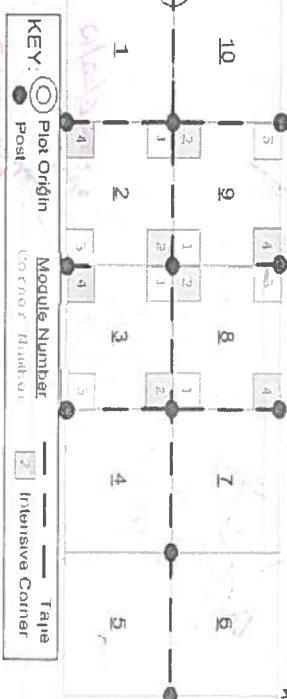
MEDIUM: browse affects greater than 10 percent and less than 25 percent of stems in the 1 m<sup>2</sup> nested quadrat and intensive module. A browse line is usually not evident or obvious for all classes and species of vegetation, but careful examination may show preferential browse and/or browse lines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

Typical Plot:



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

Project Label: PCAP

Project name: *(signature)*

Plot no.: 130

Page 2 of 3

Total modules:

4

Intensive modules: 4 Plot configuration: 2x2

Plot area (ha): 104

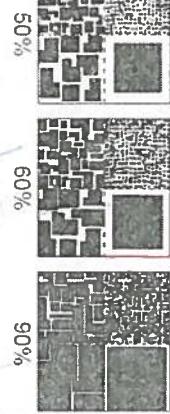
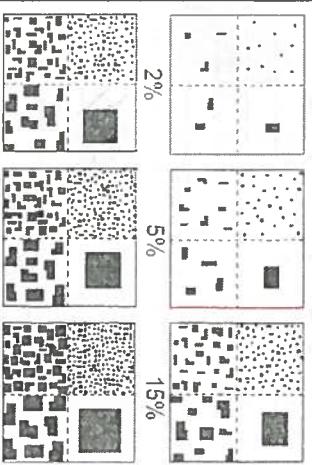
Cleveland  
Metroparks

describe amount of browse per species over entire plot

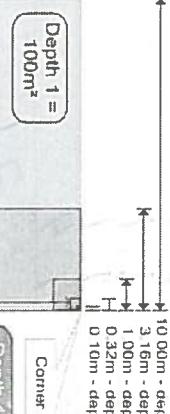
92E  
7.3.12

### EXAMPLES OF PERCENT OF AREA COVERED

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



Nested  
Corners



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

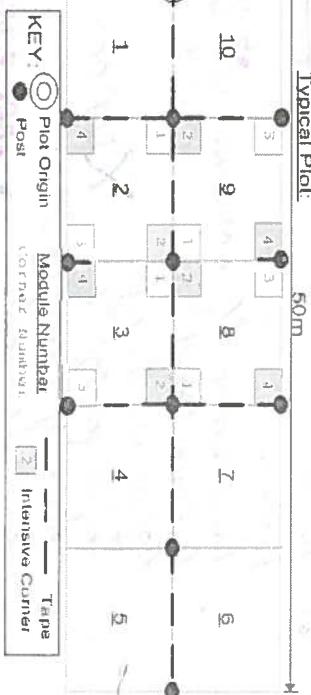
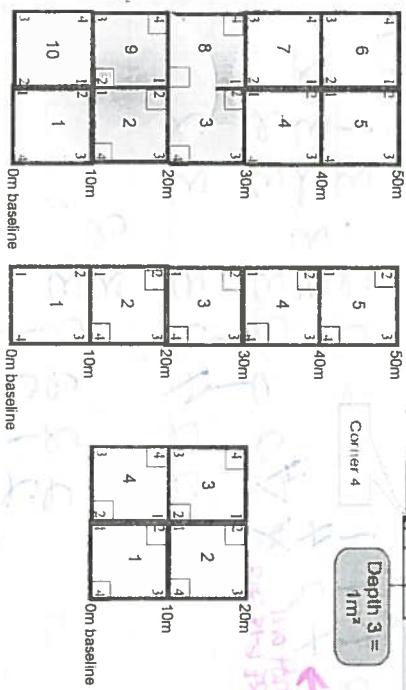
**MEDIUM LOW** values include evidence of browse at about 10 percent of the stems with no significant impact to plant reproduction evident. In this rating, plants are browsed but preferential species are observed to be reproducing in numbers that appear normal or near-normal in comparison to low browse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

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

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

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

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



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

Project Label:

PCAP

Project name: 01 Br 2012

Plot no.: 1205

Page 3 of 29

Total modules:

A

Intensive modules: 4 Plot configuration: 2

Plot area (ha): 10.54



Die Weißrute  
Maierparkes

Strata - Cov. entire plot

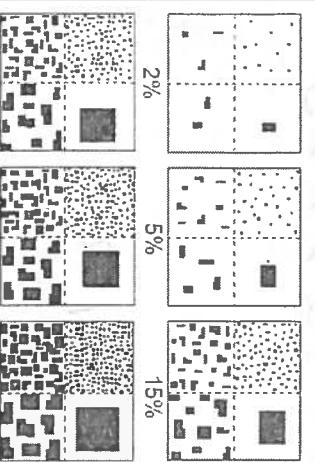
• browser level: use cover classes to describe amount of browse per species over entire plot

Estimate for each intensive module:  
%open wa

Duplicate  
specimens  
SKE  
#312

### EXAMPLES OF PERCENT OF AREA COVERED

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



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

### BROWSE RATING NARRATIVE DESCRIPTION

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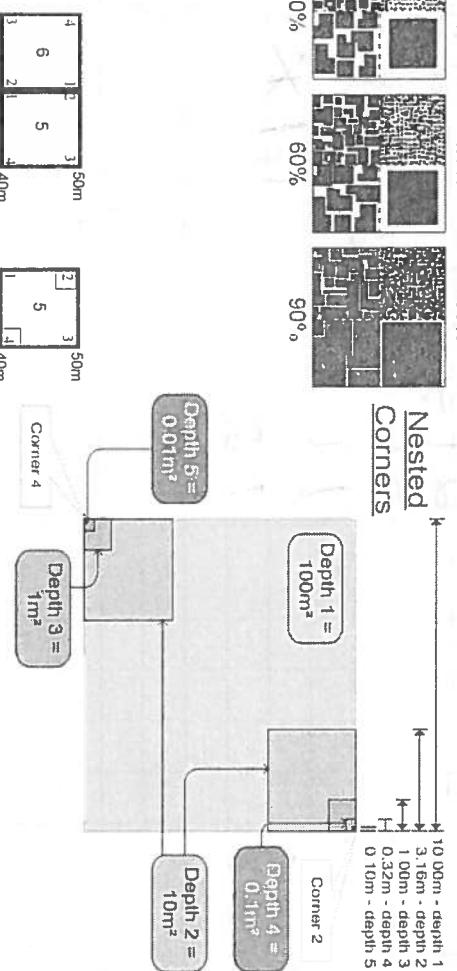
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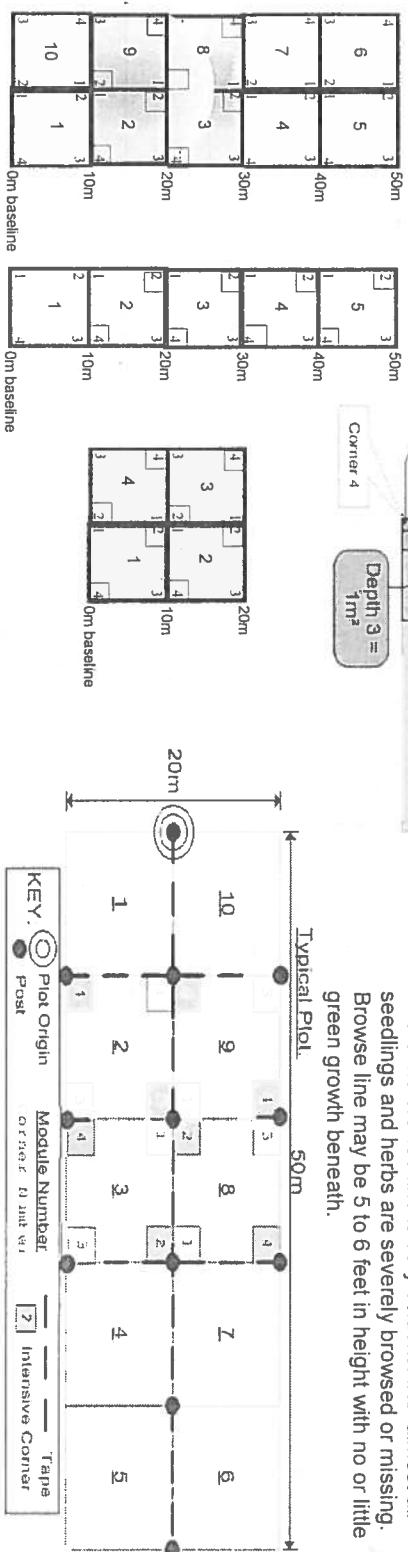
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**VERY HIGH** values include extensive browse conditions, where the browse line is very evident AND almost all seedlings and herbs are severely browsed or missing. Browse line may be 5 to 6 feet in height with no or little green growth beneath.



Typical Plot.



KEY: ● Plot Origin      Module Number [ ]      Range [ ]      Intensive Corner [ ]

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

Project Label: PCAP

Project Name: 018A 2012

Plot No.: 1205

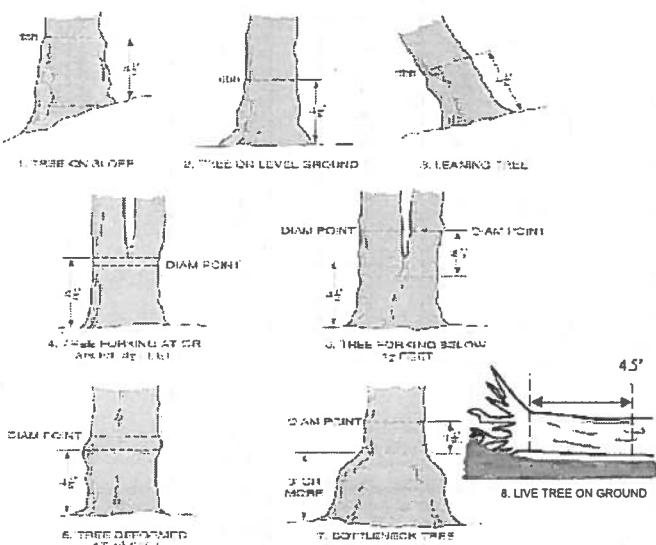
Page: 1 of 2

Cleveland Metroparks

Explain subsample (additional room on back):

mod #	species	c	voucher#	browsed?	# stems 0-1.4m sample	% sub shrub clumps	#	size class (cm) woody stems > 1.4m										>40 (record each tree)
								1	2	3	4	5	6	7	8	9	10	
✓ 1	RUBUS PENNSYLVANICUS						69											
✓ 1	LUGUSTRI																	
✓ 1	LIGUSTRUM vulgare																	
✓ 1	RHAMNUS frangula																	
✓ 1	COTONEAUS SP.																	
✓ 1	LONICERA morrowii																	
✓ 1	FAGIUS PENNSYLVANICUS																	
✓ 1	RIVINIS SP.																	
✓ 1	ROSA multiflora																	
✓ 2	LONICERA morrowii																	
✓ 2	ROSA multiflora																	
✓ 2	RUBUS PENNSYLVANICUS																	
✓ 2	VITIS SP.																	
✓ 2	COTONEAUS SP.																	
✓ 2	ROBINA PSEUDOCACIA																	
✓ 3	FRAXINUS SP.																	
✓ 3	LIGUSTRUM vulgare																	
✓ 2	RHAMNUS frangula																	
✓ 3	RUBUS PENNSYLVANICUS																	
✓ 3	ROSA multiflora																	
✓ 3	LONICERA morrowii																	
✓ 3	ROSACEAE CAROLINENSIS SP.																	
X RUBUS																		

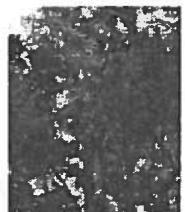
### DBH Measurement Rules



### Woody Stem Deer Browse

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

Record using the tally system from 1 to 10



1



2



3



4



5

### ASH CANOPY CONDITION

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



A

B

C

D

E

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

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

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

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

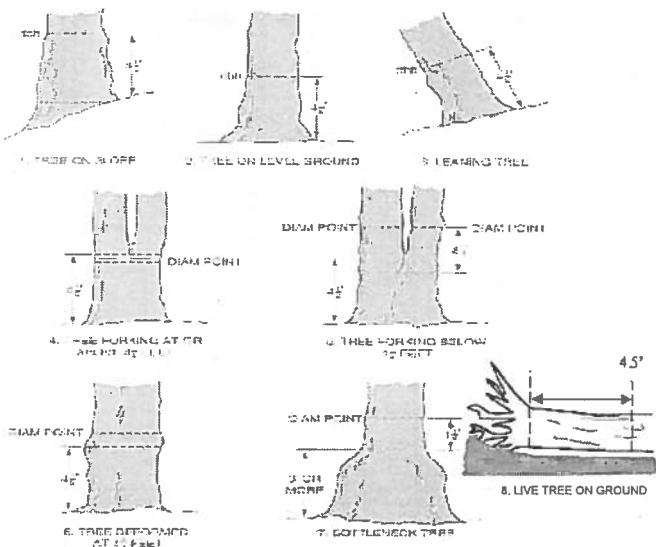
Project Label: PCAP

Project Name: ABR2012 Plot No.: 1205

Page: 2 of 2

Explain subsample (additional room on back):

### DBH Measurement Rules



### Woody Stem Deer Browse

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

Record using the tally system from 1 to 10



1



2



3



4



5

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B

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- D: Stem still standing and tertiary main branches present.
- E: Central stem still standing.

<b>SOIL PIT DESCRIPTION:</b> Excavate 20 cm plug wth shovel. Describe using Munsell chart, visual exam, texture, and odor.	
Soil pit module # <u>3</u> (one per entire plot) <u>70 x 70 m</u> <u>line brown and 3</u>	
5 cm	matrix color <u>10 YR 4/2</u> moiste color <u>N/A</u> %smotile <u>0</u> oxid roots <u>Y</u> N texture* <u>1</u> redox features** <u>Y</u> N hydr. cond.*** <u>I S M D</u> matrix color <u>10 YR 4/3</u> moiste color <u>N/A</u> %smotile <u>0</u> oxid roots <u>Y</u> <u>N</u> texture* <u>1</u> redox features** <u>Y</u> <u>N</u> hydro cond. *** <u>I S M D</u>

<b>SOIL SAMPLES</b> Standard procedure: collect a soil sample of the top 10 cm of soil from center of each intensive module and composite the sample	
Soil Collection Module	Horizon (A, B, C)
2,3,8,9 composted	A
Soil Series/Type <u>MgB, Mahoning Silt Loam</u>	
Soil Series Source: Ohio Soil Survey	
Landform type: <u>Till Plains</u>	
Depth to rest Layer: <u>&gt; 80"</u>	
Parent Material: <u>Till</u>	
Diameter: <u>10 cm</u>	
<input checked="" type="checkbox"/> Excessively dr. <input type="checkbox"/> Somewhat excessively <input type="checkbox"/> Well drained <input type="checkbox"/> Moderately well dr. <input checked="" type="checkbox"/> Somewhat poorly dr. <input type="checkbox"/> Very poorly dr. <input type="checkbox"/> Impenetrable surface	
WSS: JTP 61812	

<b>EARTH SURFACE &amp; GROUND COVER</b>	
Underlying Earth Surface*	Ground Cover
Percent ( $\sum = 100\%$ )	Percent ( $\sum \leq 100\%$ )
Histosol <u>✓</u>	Coarse Woody Debris*** <u>Ø</u>
Mineral Soil <u>100</u>	Fine Woody Debris*** <u>Ø</u>
Gravel-Cobble* <u>Ø</u>	Litter <u>Ø</u>
Boulder** <u>Ø</u>	Duff (Fern + Humus) <u>Ø</u>
Bedrock <u>Ø</u>	Bryophyte-Lichen <u>Ø</u>
* Gravel-Cobble = 1/15-10"	Water <u>Ø</u>
** Boulder = > 10 in	Bare Soil <u>Ø</u>
*** >2 cm in diameter	Road/Rail <u>Ø</u>
**** <5 cm in diameter	Other

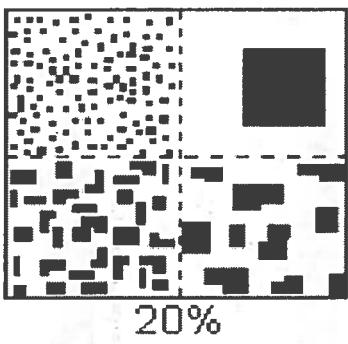
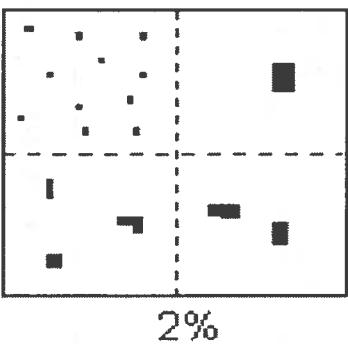
<b>COVER BY STRATA</b> estimate using midpoints of 5, ex: 3, 8, 13 %		
<b>SOIL DEPTH MEASUREMENT:</b> Measure to the nearest 0.1 cm in center of intensive modules. If >30.5 cm, record as >30		
Strata	Height Range (in)	Total Cover (%)
Tree	<u>7 - 5</u>	<u>Ø</u>
Shrub	<u>0.5 - 5</u>	<u>48</u>
Herb	<u>- 0.5</u>	<u>88</u>
(Floating)* (Aquatic)*	<u>/</u>	<u>/</u>

1 litter+ organic depth (cm)	2 litter depth (cm)	water depth (cm)	depth sat (cm)
<u>6</u>	<u>3</u>	<u>0</u>	<u>730</u>
<u>2</u>	<u>5.1</u>	<u>0</u>	<u>730</u>
<u>3</u>	<u>3.3</u>	<u>0</u>	<u>&gt; 30</u>
<u>4</u>	<u>2.3</u>	<u>0</u>	<u>0</u>
<u>&gt; 30</u>			

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

### PERCENT MOTTLES (USE CLASS CODES):

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



**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

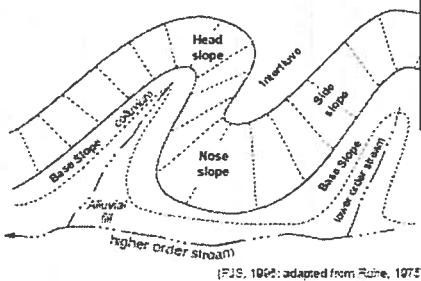
3= Sandy

4= Coarse Sand

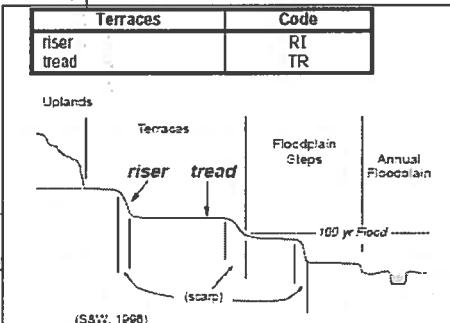
9= Not measured - make plot note

**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	Code
PDP	NASIS	
interfluve	IF	IF
head slope	HS	HS
nose slope	NS	NS
side slope	SS	SS
base slope	-	BS

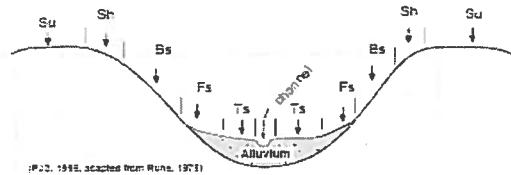


(PJS, 1992; adapted from Rusk, 1975)



**Hillslope - Profile Position (Hillslope Position In PDP)** - Two-dimensional descriptors of parts of line segments (i.e., slope position) along a transect that runs up and down the slope; e.g., backslope or BS. This is best applied to transects or points, not areas.

Position	Code
summit	SU
shoulder	SH
backslope	BS
footslope	FS
toeslope	TS



### HYDROLOGIC REGIME Modified from Grossman et al 1998. (Frequency and duration of flooding.)

**UPLAND:** Not a wetland. Very rarely flooded.

**INTERMITTENTLY/SEASONALLY SATURATED:** Dry at least once per year. Surface water is seldom present, but substrate is saturated to surface for extended periods during the growing season.

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

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

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

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

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

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

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

STANDING BIOMASS (required for emergent wetlands); collected in 0.1m<sup>2</sup> 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


### CLASSIFICATION

(Fit = excellent & Fit and Confidence

#### Hydroeconomic class (WETLANDS ONLY)

□ DEPRESSION	Fit= _____	Conf= _____
□ IMPOUNDMENT □ Beaver □ Human	Fit= _____	Conf= _____
□ RIVERINE □ Headwater □ Mainstem □ Channel	Fit= _____	Conf= _____
□ SLOPE (ground water hydrology or on a physical slope)	Fit= _____	Conf= _____
□ FRINGING □ Reservoir □ Natural Lake	Fit= _____	Conf= _____
□ COASTAL (specify subclast)	Fit= _____	Conf= _____
□ BOG (strongly, moderately, weekly ombrotrophic)	Fit= _____	Conf= _____
Ohio EPA VIBI Plant Community Class (WETLANDS ONLY):		
□ FOREST □ swamp forest □ wet meadow □ open bog	Fit= _____	Conf= _____
□ EMERGENT □ marsh □ overwash □ tall sh. bog □ tall sh. fen	Fit= _____	Conf= _____

### 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 (mod)

Slope 2 = falls on slope ~20°

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

0 feature is absent or functionally absent from the wetland

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

7 feature is present in moderate amounts, but not of highest quality, or in small amounts of highest quality

10 feature is present in moderate or greater amounts and of highest quality

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

no. of tussocks	no. of hummocks	no. macro depressions	c.w.d (2-12 cm)	c.w.d (12-40cm)	>40 cm interspers.	microhab. interspers.	microhab.
depth 3	depth 2	depth 1	depth 1	depth 1	depth 1	depth 1	SLOPE
1 x 1m	3.16 x 1.6m	10 x 10m	10 x 10m	10 x 10m	10 x 10m	10 x 10m	
mod#	corner	(count)	(count)	(count)	(count)	(rank)	(rank)
1	0	0	0	0	0	1	1
2	0	0	1	0	0	1	0
3	0	0	1	0	0	1	0
4	0	0	2	0	0	0	1

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

Module	N	S	E	W
1	96	95	96	96
2	96	96	96	96
3	96	96	96	96
4	96	96	96	96

CROWN COVER (DENSIMETER) Module 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
1	96	95	96	96
2	96	96	96	96
3	96	96	96	96
4	96	96	96	96

**COVER BY STRATA**

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

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

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

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

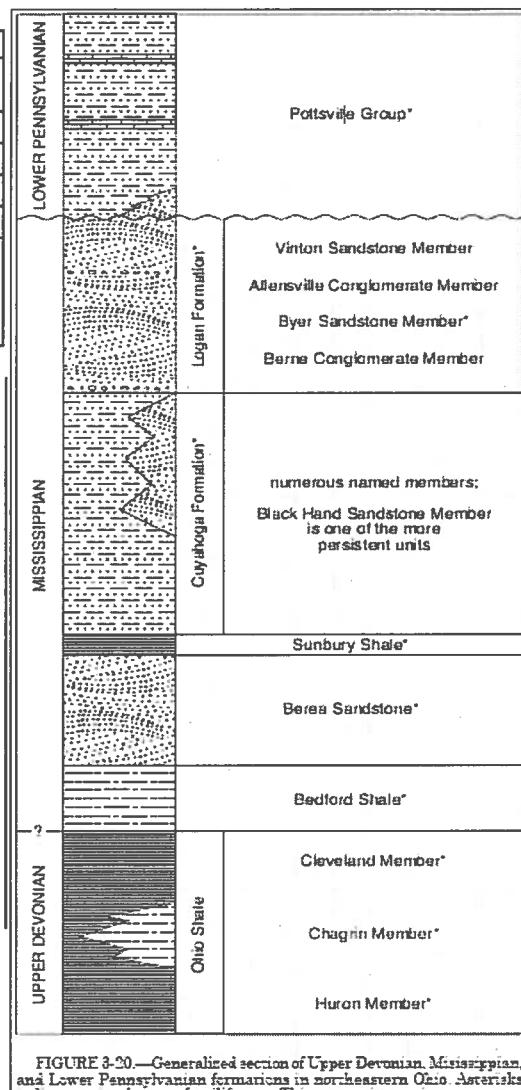
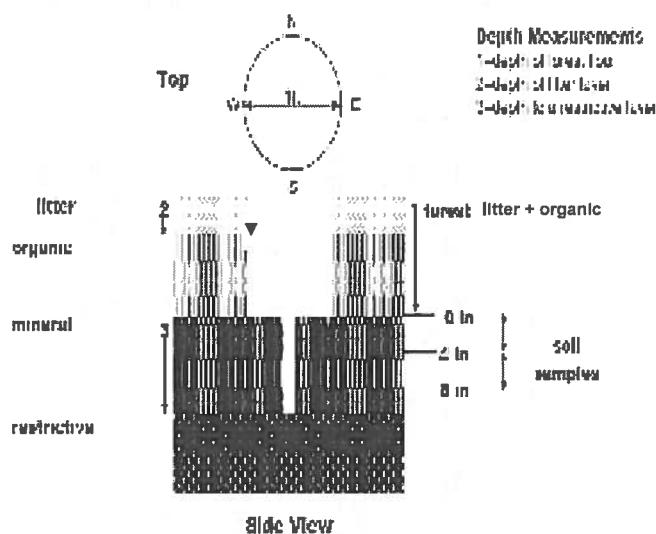


FIGURE 3-20.—Generalized section of Upper Devonian, Mississippian, and Lower Pennsylvanian formations in northeastern Ohio. Asterisks indicate units that are fossiliferous. This composite section represents about 400 meters of rock exposed across the area. The section is not to scale, but the thicknesses indicated are proportional. The term "Wavy" is used in the older literature to refer to Mississippian rocks in Ohio. Some geologists use the European term "Carboniferous," which encompasses the Mississippian and Pennsylvanian Periods of the U.S. Many units have been named within the Cuyahoga Formation, but most units are local and cannot be traced over great distances. The Black Hand Member is a spectacular massive sandstone that is fairly widespread but discontinuous. See Hyda (1953), Hoover (1960), and Collins (1970) for more information on Mississippian rocks in Ohio. See figure 3-15 for explanation of rock types.

CLEVELAND METROPARKS Plant Community Assessment Program: Invasive Species Survey



Tier 1: Early detection/ Rapid response		Presence				GPS	Presence
		NE	SE	SW	NW		
<i>Microstegium vimineum</i>	Japanese stiltgrass						X: yes
<i>Ranunculus ficaria</i>	Lesser Celandine						
<i>Cynanchum louiseae</i> (vine)	Black Swallow-wort						
<i>Butomus umbellatus</i> (wetland)	Flowering Rush						
<i>Heracleum mantegazzianum</i>	Giant Hogweed						
Tier 2: Assess as Needed		# of Plants				comments	# of Plants
		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						1: 1-10
<i>Celastrus orbiculatus</i> (vine)	Asian Bittersweet						2: 11-50.
<i>Torilis sp.</i>	Hedgeparsley						3: 51-100
<i>Conium maculatum</i>	Poison Hemlock						4: 101-1,000
<i>Rhamnus cathartica</i>	Common Buckthorn (shrub)						5: >1,000
<i>Berberis thunbergii</i>	Japanese Barberry (shrub)	1	1	1	1		
<i>Alnus glutinosa</i>	European Alder						
<i>Dipsacus laciniatus</i>	Cut-leaf Teasel						
<i>Elaeagnus umbellata</i>	Autumn Olive (shrub)	1	1	1			
<i>Lonicera maackii</i>	Amur Honeysuckle (shrub)						
<i>Euonymus fortunei</i>	Wintercreeper						
Tier 3: Presence is of interest		# of Plants				comments	# of Plants
		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)						1: 1-10
<i>Pulmonaria officinalis</i> (G-cover)	Lungwort						2: 11-50.
<i>Rubus phoenicolasius</i>	Wineberry						3: 51-100
<i>Iris pseudacorus</i> (wetland)	Yellow Flag Iris						4: 101-1,000
<i>Ornithogalum umbellatum</i>	Star of Bethlehem						5: >1,000
<i>Viburnum opulus</i> var. <i>opulus</i>	European Cranberry (shrub)						
<i>Viburnum plicatum</i>	Doublefile Viburnum (shrub)						
Tier 4: Widespread and abundant		Presence				comments	Presence
		NE	SE	SW	NW		
<i>Alliaria petiolata</i>	Garlic Mustard	1	1	1	1		X: yes
<i>Ligustrum vulgare</i>	Common Privet (shrub)			1			
<i>L. morrowii</i> , <i>L. tatarica</i>	Bush Honeysuckles (shrub)	2		4	3		
<i>Phalaris arundinacea</i>	Reed Canarygrass	4	4	5	4		
<i>Phragmites australis</i> (wetland)	Phragmites						
<i>Polygonum cuspidatum</i>	Japanese Knotweed						
<i>Frangula alnus</i>	Glossy Buckthorn (shrub)	2	0	4	5		
<i>Rosa multiflora</i>	Multiflora Rose (shrub)	5	0	5	5		
<i>Typha angustifolia</i> , <i>T. x glauca</i>	Cattails (wetland)						
<i>Cirsium arvense</i>	Canada thistle	1	1	1	1		
<i>Dipsacus fullonum</i>	Common Teasel						
<i>Hesperis matronalis</i>	Dame's Rocket						
<i>Vinca minor</i> (G-cover)	Periwinkle						

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

CLEVELAND METROPARKS Emerald Ash Borer - *Fraxinus* Sheet

Project Label: PCAP

Project Name: C1Bc2012

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

Plot No.: 1205 Date: 06/13/12

Page: 1 of 2

Tree Module ID.	Species	Dead c	Voucher #	DBH (cm)	Ht @ DBH	Ash condition	ASH Only		
							*Dead holes	# Exit holes	Epicormic present
1	N <del>O</del> A <del>S</del>								
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

2

3

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 LAB exit holes  $1.25\text{m}^2 \times 1.5\text{m}$ 

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

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

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

Site ID: ~~PCAPR1205~~ PCAPBR1205

DATE: 06/14/2012

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

## Buffer Natural Cover Strata

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

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

Buffer Plot 1	Canopy Type: <input 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				Leaf Type: <input checked="" type="radio"/> B <input type="radio"/> N				Leaf Type: <input checked="" type="radio"/> B <input type="radio"/> N		
Big Trees (>0.3m DBH)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Big Trees (>0.3m DBH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4	Big Trees (>0.3m DBH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4
Small Trees (<0.3m DBH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4	Small Trees (<0.3m DBH)	<input type="radio"/>	<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"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4
Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/>	<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"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4	Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/>	<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 HIGH)	<input type="radio"/>	<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 HIGH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4	Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4
Herbs, Forbs and Grasses	<input type="radio"/>	<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"/>	<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"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4
Bare ground	<input checked="" type="radio"/>	<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 type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Bare ground	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4
Litter, duff	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Litter, duff	<input type="radio"/>	<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"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4
Rock	<input checked="" type="radio"/>	<input 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"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Rock	<input type="radio"/>	<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"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Water	<input type="radio"/>	<input 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"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Submerged Vegetation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Submerged Vegetation	<input type="radio"/>	<input 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 checked="" type="radio"/>	<input type="radio"/>		Dairy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Urban/Multifamily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Wall/Riprap	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Orchard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Landfill	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Inlets, Outlets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Confined Animal Feeding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Dumping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Point Source/Pipe (EFFLUENT OR STORMWATER)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Rural Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Trash	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Impervious surface input (SHEETFLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Gravel Pit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Irrigation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Industrial Development Stressors				Habitat/Vegetation Stressors										
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Oil Drilling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Forest Clear Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Herbicide Use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Gas Wells	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Forest Selective Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Mowing/Shrub Cutting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Mine (surface)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tree Plantation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Trails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Mine (underground)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tree Canopy Herbivory (INSECT)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Soil Compaction (ANIMAL OR HUMAN)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Military	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Shrub Layer Browsed (WILD OR DOMESTIC)	<input 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:** PCAPBR1205

DATE: 06 / 14 / 2012

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

Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Eurasian Watermilfoil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Purple Loosestrife	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Johnson Grass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Water hyacinth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Knotweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Kudzu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Yellow Floating Heart	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Japanese Knotweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Multiflora Rose	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	
Giant Salvinia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Perennial Pepperweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Common Buckthorn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Garlic Mustard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Giant Reed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Himalayan Blackberry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Poison Hemlock	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Cheatgrass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tamarisk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Mile-A-Minute Weed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Reed Canary Grass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other:	<input type="text"/>	<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="text"/>	<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="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
										Other:	<input type="text"/>	<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** 90 80 70 60 50 40 30 20 10 0      **Longitude West** 90 80 70 60 50 40 30 20 10 0

#### **Use Decimal Degrees: NAD83**

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

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

Site ID: PCAPBR1205

DATE: 06 / 13 / 2012

Location:	Fill in bubble(s) if plot(s) could not be sampled and flag →									
○ AA Center    ● N    ○ S    ○ E    ○ W	<input type="radio"/> Plot 1 <input type="radio"/> Plot 2 <input type="radio"/> Plot 3									

## Buffer Natural Cover Strata

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

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

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

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

Industrial Development Stressors				Habitat/Vegetation Stressors								Flag
Fill bubble if present - Plot	1	2	3	Fill bubble if present - Plot	1	2	3	Fill bubble if present - Plot	1	2	3	Flag
Oil Drilling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Forest Clear Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Herbicide Use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Gas Wells	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Forest Selective Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Mowing/Shrub Cutting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Mine (surface)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Tree Plantation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Trails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Mine (underground)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Tree Canopy Herbivory (INSECT)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Soil Compaction (ANIMAL OR HUMAN)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Military	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Shrub Layer browsed (WILD OR DOMESTIC)	<input 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 checked="" type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Recently Burned Forest Canopy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Recently Burned Grassland (BLACKENED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

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

2428168304

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

Reviewed by (initials):

**Site ID:** PEAP BR 1205

DATE: 06/13/2012

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

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

## PLOT COORDINATES

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

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

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

## Flag

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

Latitude North 4 1 . 7 8 6 3 1

Longitude West 781.58955

**Use Decimal Degrees: NAD83**

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

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

Site ID: PCAPBR1205

DATE: 06 / 13 / 2012

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

## Buffer Natural Cover Strata

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

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

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

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

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:** PCAPBR1205

DATE: 06 / 13 / 2012

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

Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Eurasian Watermilfoil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Purple Loosestrife	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Johnson Grass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Water hyacinth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Knotweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Kudzu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Yellow Floating Heart	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Japanese Knotweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Multiflora Rose	<input checked="" type="radio"/>	<input 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° 28' 41" N      Longitude West 81° 58' 90" W

**Use Decimal Degrees; NAD83**

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

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

Site ID: PLAPBR1205

DATE: 06 / 13 / 2012

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

Buffer Plot 1	Canopy Type: <input type="radio"/> D <input type="radio"/> E		Absent: <input checked="" type="radio"/>	Buffer Plot 2	Canopy Type: <input type="radio"/> D <input type="radio"/> E		Absent: <input type="radio"/>	Buffer Plot 3	Canopy Type: <input type="radio"/> D <input type="radio"/> E		Absent: <input type="radio"/>	
	Leaf Type: <input type="radio"/> B <input type="radio"/> N	Flag	Leaf Type: <input type="radio"/> B <input type="radio"/> N		Leaf Type: <input type="radio"/> B <input type="radio"/> N	Flag	Leaf Type: <input type="radio"/> B <input type="radio"/> N		Leaf Type: <input type="radio"/> B <input type="radio"/> N	Flag		
Big Trees (>0.3m DBH)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4		Big Trees (>0.3m DBH)	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
Small Trees (<0.3m DBH)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4		Small Trees (<0.3m DBH)	<input 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 checked="" type="radio"/>	<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 type="radio"/> 1	<input checked="" type="radio"/>	<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 type="radio"/> 4
Herbs, Forbs and Grasses	<input type="radio"/>	<input type="radio"/> 1	<input checked="" type="radio"/>	<input type="radio"/> 3	<input checked="" type="radio"/>		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 checked="" type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4		Bare ground	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
Litter, duff	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4		Litter, duff	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
Rock	<input checked="" type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4		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 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 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 type="radio"/>	
Mine (underground)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tree Canopy Herbivory (INSECT)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Soil Compaction (ANIMAL OR HUMAN)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Military	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Shrub Layer Browsed (WILD OR DOMESTIC)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		Offroad vehicle damage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Highly Grazed Grasses (OVERALL <3' HIGH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Soil erosion (FROM WIND, WATER, OR OVERUSE)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Recently Burned Forest Canopy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Recently Burned Grassland (BLACKENED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

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

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

2428168304

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

**Reviewed by (initials):**

Site ID: PCAPBR1205

DATE: 06 / 13 / 2012

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

Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Eurasian Watermilfoil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Purple Loosestrife	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Johnson Grass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Water hyacinth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Knotweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Kudzu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Yellow Floating Heart	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Japanese Knotweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Multiflora Rose	<input checked="" type="radio"/>	<input 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 4 1 2 8 5 3 0      Longitude West 8 1 5 8 9 1 8 0

**Use Decimal Degrees: NAD83**

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

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

Site ID: PCAPBR1205

DATE: 06/13/2012

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

## Buffer Natural Cover Strata

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

Buffer Plot 1	Canopy Type: D E		Absent:	Buffer Plot 2	Canopy Type: D E		Absent:	Buffer Plot 3	Canopy Type: D E		Absent:
	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)	<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"/>
Small Trees (<0.3m DBH)	<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-5m HIGH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>						
Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/>	<input 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"/>
Herbs, Forbs and Grasses	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input 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 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"/>
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 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 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 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 checked="" type="radio"/>	1	Dairy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Urban/Multifamily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Wall/Riprap	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Orchard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Landfill	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Inlets, Outlets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Confined Animal Feeding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Dumping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Point Source/Pipe (EFFLUENT OR STORMWATER)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Rural Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Trash	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Impervious surface input (SHEETFLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Gravel Pit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Irrigation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		

Industrial Development Stressors				Habitat/Vegetation Stressors											
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	
Oil Drilling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Forest Clear Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Herbicide Use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Gas Wells	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Forest Selective Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Mowing/Shrub Cutting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Mine (surface)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tree Plantation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Trails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Mine (underground)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tree Canopy Herbivory (INSECT)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Soil Compaction (ANIMAL OR HUMAN)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Military	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Shrub Layer browsed (WILD OR DOMESTIC)	<input checked="" type="radio"/>	<input 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 checked="" type="radio"/>	1	
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: PCAPBR | 205

DATE: 06/13/2012

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

Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Eurasian Watermilfoil	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>		Purple Loosestrife	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>		Johnson Grass	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Water hyacinth	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Knotweed	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Kudzu	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Yellow Floating Heart	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Japanese Knotweed	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Multiflora Rose	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	
Giant Salvinia	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Perennial Pepperweed	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Common Buckthorn	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Garlic Mustard	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Giant Reed	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Himalayan Blackberry	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Poison Hemlock	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Cheatgrass	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Tamarisk	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Mile-A-Minute Weed	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Reed Canary Grass	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Other:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Birdsfoot Trefoil	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Common Reed	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Other:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Canada Thistle	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		Leafy Spurge	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Other:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
										Other:	<input type="radio"/>	<input type="radio"/>	<input checked="" 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 41.28492      Longitude West 81.59068

**Use Decimal Degrees: NAD83**

Flag	Comments
1	plot falls on a slope