

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

Cleveland Metroparks

Project Label: PCAP Plot No: 3466 Date Sampled: 8/8/11 Lead: DS

Comment required if item answer is NO

Parking/Access outside of Park Boundaries.	Y <input checked="" type="radio"/> N <input type="radio"/>	If yes, write details in Comments section below	
Field journals completed	Y <input checked="" type="radio"/> N <input type="radio"/>		
Site sketch made on 1:3000 map?	Y <input checked="" type="radio"/> N <input type="radio"/>		
Check cover page	X-axis Bearing of plot recorded	Y <input checked="" type="radio"/> N <input type="radio"/>	
	GPS coords. Recorded	Y <input checked="" type="radio"/> N <input type="radio"/>	
	North direction recorded	Y <input checked="" type="radio"/> N <input type="radio"/>	
	Photographs taken?	Y <input checked="" type="radio"/> N <input type="radio"/>	
Plot No., Date agreement on all pages?	Y <input checked="" type="radio"/> N <input type="radio"/>		
Header data completed all pages?	Y <input checked="" type="radio"/> N <input type="radio"/>		
Cover classes recorded in all Intensive modules	Y <input checked="" type="radio"/> N <input type="radio"/>		
Browse Level By Species	Y <input checked="" type="radio"/> N <input type="radio"/>		
Woody stem quality control check	Y <input checked="" type="radio"/> N <input type="radio"/>		
Invasive plant quality control check	Y <input checked="" type="radio"/> N <input type="radio"/>		
Ash trees mapped	Y <input checked="" type="radio"/> N <input type="radio"/>	NYA	
Cover by Strata? (confirm cover type)	Y <input checked="" type="radio"/> N <input type="radio"/>		
Soil samples collected with matching plot #.	Y <input checked="" type="radio"/> N <input type="radio"/>		
Vouchers labeled on datasheet with initials and number	Y <input checked="" type="radio"/> N <input type="radio"/>		
Vouchers labeled on collection bag	Y <input checked="" type="radio"/> N <input type="radio"/>		
Pink flags removed	Y <input checked="" type="radio"/> N <input type="radio"/>		
Data sheet QA before leaving site?	Y <input checked="" type="radio"/> N <input type="radio"/>		
Common equipment returned to tub.	Y <input checked="" type="radio"/> N <input type="radio"/>		
Data sheets scanned?		Enter date to left 9-12-2011	
Final data sheets scanned?		Enter date to left	
Buffer Widths measured?	Y <input checked="" type="radio"/> N <input type="radio"/>		
Web Soil Survey	Y <input checked="" type="radio"/> N <input type="radio"/>		
Voucher Location	Refrigerator	Y <input checked="" type="radio"/> N <input type="radio"/>	
(# vouchers collected)	Press (#)		Enter number to left
	Drier	Y <input checked="" type="radio"/> N <input type="radio"/>	
	Identified	Y <input checked="" type="radio"/> N <input type="radio"/>	
	Mounted	Y <input checked="" type="radio"/> N <input type="radio"/>	
	Thrown away	Y <input checked="" type="radio"/> N <input type="radio"/>	

## GRTS point verification: Is plot sampleable?

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

## Additional Comments:



CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet

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# CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet

Page 1 of 2

GENERAL INFORMATION		LOCATION	
Project Label:	PCAP	State:	OH County: Medina
Project Name:	<u>5/14/2011</u>	Quadrangle:	<u>WEST RICHFIELD</u>
Plot Name:	<u>Ginger Mack</u>		
Plot No.:	<u>3406</u>		
Party	<input type="checkbox"/> Level 4 (no nested corners sampled) <input checked="" type="checkbox"/> Level 5 (nested corners sampled)		
Date (num/ddd/yyyy):	<u>08/08/2011</u>		
End date (if > 1 day):	<u>/ /</u>		
Role**	<input type="checkbox"/> Plot leader <input checked="" type="checkbox"/> Surveyor		
Plot**	<input type="checkbox"/> Plot leader <input checked="" type="checkbox"/> Surveyor		
PLOT NOT SAMPLED:		PLOT NOT SAMPLED:	
<input type="checkbox"/> Penn. water <input type="checkbox"/> Paved <input type="checkbox"/> Slope <input type="checkbox"/> Safety		<input type="checkbox"/> Other	
<b>SAMPLING QUALITY*</b>			
<p><b>Effort Level:</b> <input checked="" type="checkbox"/> Very thorough    <input type="checkbox"/> Accurate    <input type="checkbox"/> Hurned</p> <p>subjective evaluation of how much effort put into sampling. Hurned plots may still provide good data</p>			
<b>TAXONOMIC ACCURACY</b>			
Vascular	high	moder	low
Bryo	/	/	/
lichen	/	/	/
<b>TAXONOMIC STANDARD</b>			
<input type="checkbox"/> G&C <input type="checkbox"/> Pub Date: <u>1998</u>			
<small>Minimum required fields in Bold and Underlined</small>			
<small>*Definitions and values in CM PCAP FOM v. 1.0 and CVS Field Guide</small>			
<small>OVER</small>			

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



CLEVELAND METROPARKS Plant Community Assessment Program Species Cover Data Sheet

Project Label:

PCAP

Project name: ER 4/2001 Plot no.: 3900  
ensive modules: 4 Plot configuration: 3 X 5

Plot area (ha): 0.1

Visual est. % open v

water entire site: 0 Visual e

est. %unveg.o.w. entire site: 0

Visual est. %invasives entire site: 2

卷之三

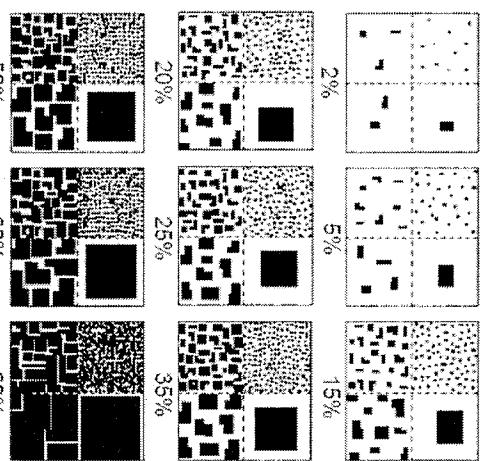
Georgian  
Monarchs

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

Strata - Cov. entire plot										%Unveg. ground (bare soil)											
T	S	H	(F)	(A)	Br	Species					C	Voucher #	depth	cov	depth	cov	depth	cov	depth	cov	
7	4	2				<i>Fraxinus americana</i>					1	9	1	8	1	8	1	7	1	7	
9	6	2				<i>Fraxinus nigra</i>					4	7	2	4	5	2	4	3	2	2	7
5	3	2				<i>Fraxinus pennsylvanica</i>					4	8	4	4	9	4	4	9	4	4	8
6	1					<i>Fraxinus quadrangulata</i>					4	5	2	1	2	1	2	2	5	2	
3						<i>Fraxinus nigra</i>					4	4					2	6	2	6	
3						<i>Allium tricoccum</i>					4	2	3	3	2	3	1	2	3	3	
3						<i>Viola striata</i>					3	2					1	1	2	2	
3						<i>Epipactis helleborine</i>					4	1									
6	2					<i>Prunus pensylvanica</i>					4	2	4	3	7	4	3	5	4	4	2
2						<i>Euonymus americanus</i>					3	2					1	1			
2						<i>Geum canadense</i>					X	DS 201	3	2	3	1	3	2	3	2	2
2						<i>Carex laevigata</i>					3	2	2	1	2	3	1	1	1	2	
4	2					<i>Carex jamesii</i>					3	2	1			1	1	2	2	2	
2						<i>Fraxinus americana</i>					2	2	4			3	2	3	2	2	
2						<i>Polystachys viscosa</i>					2	1				2	1	2	2	2	
2						<i>Solidago flexicaulis</i>					2	2									
3	8					<i>Cirsium heterophyllum</i>					2	2	3	1	2						
2						<i>Viola sororia</i>					2	1				1	1	2	1	2	
5	2					<i>Carex</i> (Glauca)					2	2									
3						<i>Carpinus cordiformis</i>					2	1	2	2	1	2	2	1	2	2	
1						<i>Fraxinus americana</i>					2	3	0602	2	1						
3						<i>Alliaria petiolata</i>					2	2	4	2	3	3	2	3	4	3	
1						<i>Toxicodendron radicans</i>					1	1	+	1	1	+	2	1			
2						<i>Parthenocissus quinquefolia</i>					1	3	1	2	1	2	1	2	1	2	
2	1					<i>Rosa multiflora</i>					1	1	+					1	2	1	
4						<i>Ulmus rubra</i>					1	4	2	1	2			1	4	2	

### 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, but different sized objects.



### Nested Corners

cover class	% cover	midpoint
1	solitary or few	0.0001
2	0-1%	0.05
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

**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.

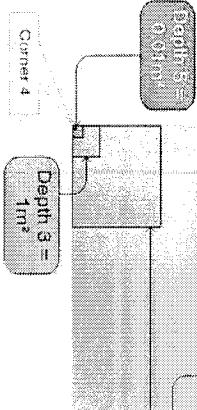
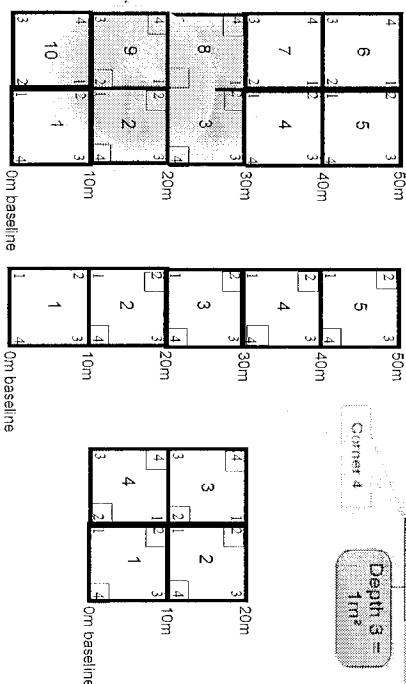
**MEDIUM LOW** values include evidence of browse at about 10 percent of the stems with no significant impact to plant reproduction evident. In this rating, plants are browsed but preferential species are observed to be reproducing in numbers that appear normal or near-normal in comparison to low browse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

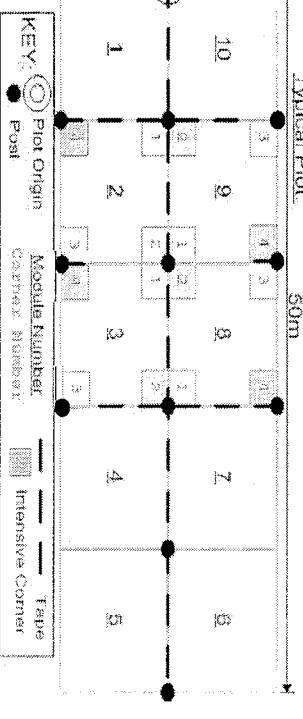
**MEDIUM HIGH** values include evidence of a browse line and 25 percent of stems browsed with very little vegetation regeneration evident. In this rating, for some species of plants, reproduction does not appear to occur or it is very severely limited.

**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.



### Typical Plot



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

## CLEVELAND METROPARKS Plant Community Assessment Program Species Cover Data Sheet

Project name: 01/11/2011Project label: PCAPTotal modules: Intensive modulesVisual est. % open water entire site:  Visual est. % unvegetated entire site:  Visual est. % invasives entire site:  Plot no.: 3406Plot configuration:  Plot area (ha):  Page 2 of 4Visual est. % open water entire site:  

Bl = Browse Level. Use cover classes 10-16 for shrubs.

describe amount of browse per species over entire plot

% unoccupied open water

% unoccupied bare soil

% unoccupied litter (leaf litter)

Estimate for each

Intensive module

mod

cover

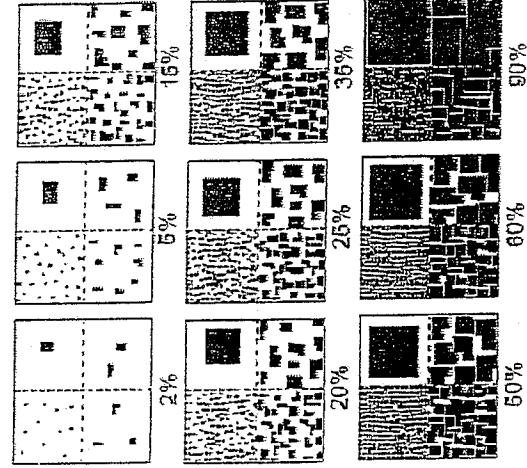
depth

cov

depth

## EXAMPLES OF PERCENT OF AREA COVERED

The *bioactive* granite can be used for various applications to control *Y. enterocolitica* in *Salmonella* and *Escherichia coli* O157:H7.



BROWSE RATING NARRATIVE DESCRIPTION

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

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

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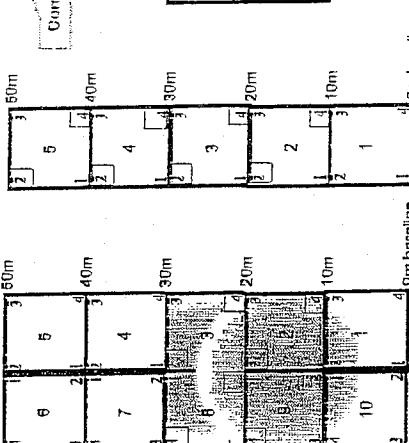
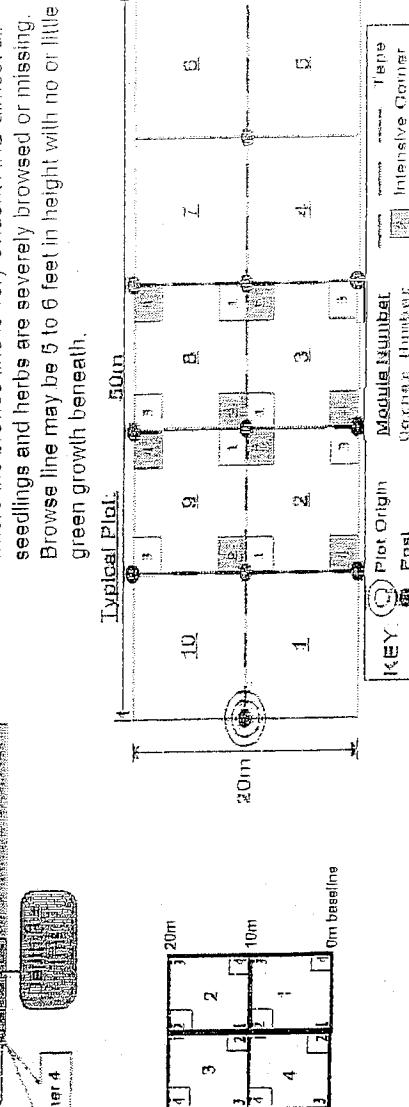
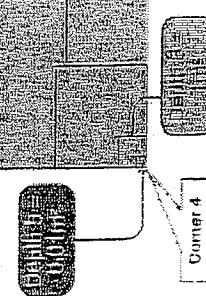
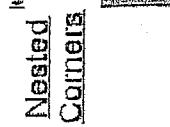
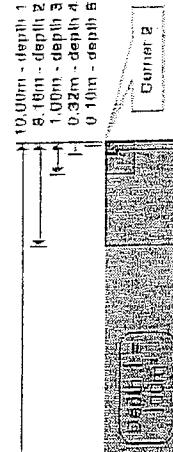
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**VERY HIGH** values include extensive browse condition where the browse line is very evident AND almost all seedlings and herbs are severely browsed or missing. Browse line may be 5 to 6 feet in height with no or little

green growth beneath.

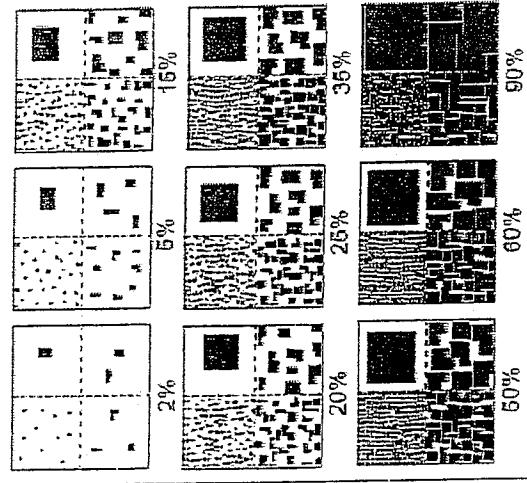
cover class	% cover	midpoint
1	scattered or few	0.0001
2	0-1%	0.0006
3	1-2%	0.0115
4	2-5%	0.0335
5	5-10%	0.0715
6	10-25%	0.1175
7	25-50%	0.3175
8	50-75%	0.825
9	76-95%	0.850
10	95-100%	0.975





#### EXAMPLES OF PERCENT OF AREA COVERED

The following graphic can be used for visual data elements to cover "Amount" of "Quantity", *i.e.* Within any given line, each quadrant contains the same area or an covered, just different sized objects.



#### BROWSE RATING NARRATIVE DESCRIPTION

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

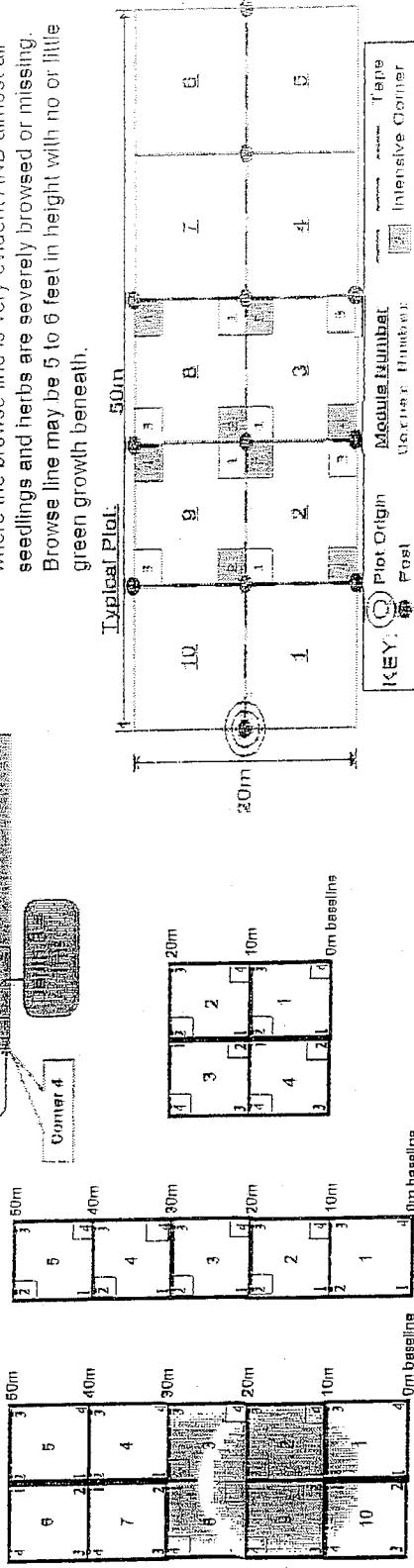
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**MEDIUM HIGH** values include evidence of a browse line and 25 percent of stems browsed with very little vegetation, but careful examination may show **preferential** browse and/or browse lines for some species of plants.

**HIGH**: greater than 25 percent of the stems of plants in the 1m<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

Page 4 of 4

Project name: PCAP Plot no. 3406

Total modules:

Visual est. % open water entire site

Intensive modules:

Plot configuration:

Plot area (ha):

Visual est. % uninvag d/w. entire site:

Visual est. % invasives entire site:

		Estimate for each intensive module:															
		mod	corner	mod	corner	mod	corner	mod	corner	mod	corner	mod	corner	mod	corner	mod	corner
		depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov
% uninvaded open water		1		1		1		1		1		1		1		1	
% uninvaded ground (bare soil)		1		1		1		1		1		1		1		1	
% uninvaded litter (bare litter)		1		1		1		1		1		1		1		1	

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

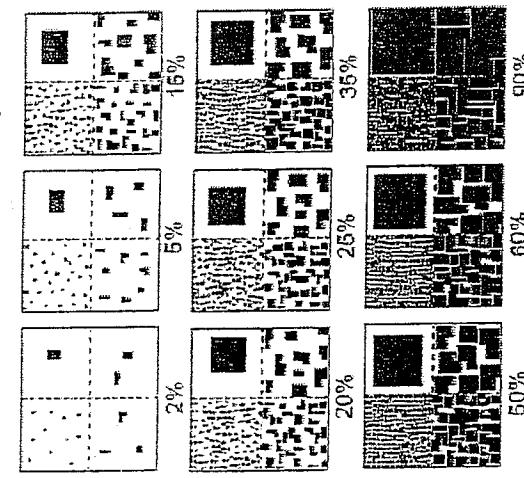
Estimate for each intensive module:

T	S	H	(F)	(A)	Br	Species	mod	corner											
						<i>Heptica acutifolia</i>													
						<i>Agrimonia pubescens</i>	X	DS 204											
						<i>Pilea pumila</i>													
						<i>Corex sparganioides</i>													
						<i>Epilobium coloratum</i>													
						<i>Erechtites hispacholia</i>													
						<i>Lensia virginica</i>													
						<i>Veronica chrysostachys</i>	X	DS 205											
						<i>Kraburnum dentatum</i>													
						<i>Taraxacum officinale</i>													
						<i>Ranunculus hispidus</i>													
						<i>Carex racemata</i>	X	DS 206											
						<i>Lonicera morrowii</i>													
						<i>Carex (laxiflora) sp.</i>													
						<i>Cinna arundinacea</i>													
						<i>Festuca subverticillata</i>	X	DS 207											

s/so

#### EXAMPLES OF PERCENT OF AREA COVERED

The following graphics can be used for visual data elements to convey 'Amount of Coverage' AND 'Within any given box, each quadrant contains the same total area covered, just different sized objects.'



cover class	% cover	midpoint
1	solitary or few	0.0001
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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%	0.525
9	75-95%	0.850
10	95-100%	0.975

#### BROWSE RATING NARRATIVE DESCRIPTION

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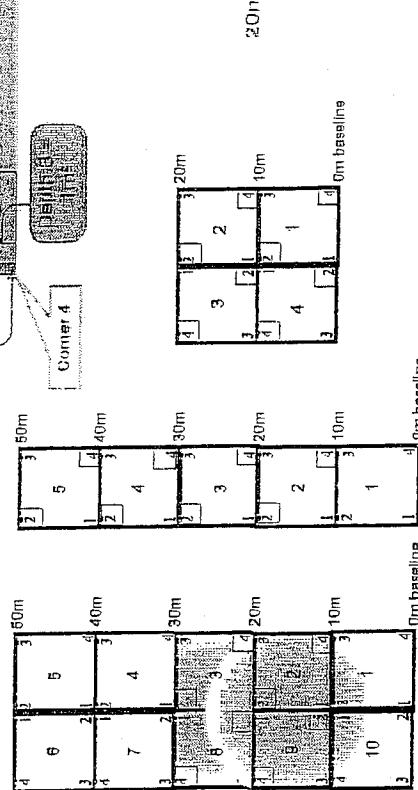
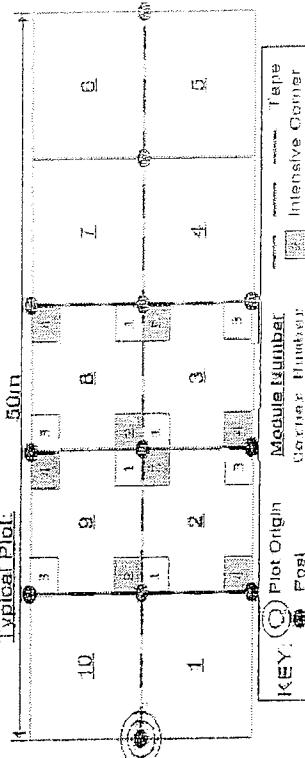
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**MEDIUM HIGH** values include evidence of a browse line and 25 percent of stems browsed with very little vegetation regeneration evident. In this rating, for some species of plants, reproduction does not appear to occur or it is very severely limited.

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

**VERY HIGH** values include extensive browse conditions, where the browse line is very evident AND almost all seedlings and herbs are severely browsed or missing.

Browse line may be 5 to 6 feet in height with no or little green growth beneath.



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

Project Label: PCAP

Project Name: 51H2011

Plot No.: 3406

Page: 1 of 3

PLANT COMMUNITY ASSESSMENT

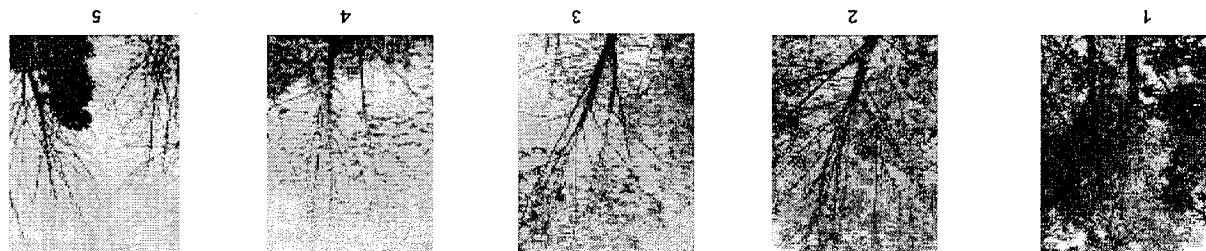
Explain subsample (additional room on back):

mod #	species	c	voucher#	# stems 0.5-1m browsed	% sub sample	# shrub	size class (cm) woody stems > 1m										11 >40 (record each tree)
							1	2	3	4	5	6	7	8	9	10	
1	<i>Carpinus caroliniana</i>						•	•	1.	•	•	•	•	•	•	•	
1	<i>Acer saccharum</i>						•	•	1.	•	•	•	•	•	•	•	
1	<i>Fraxinus americana</i>						•	•	•	•	•	•	•	•	•	•	
1	<i>Juglans nigra</i>						•	•	•	•	•	•	•	•	•	•	74.2
1	<i>Ostrya virginiana</i>						•	•	•	•	•	•	•	•	•	•	
1	<i>Fagus grandifolia</i>						•	•	•	•	•	•	•	•	•	•	
1	Standing Dead						•	•	•	•	•	•	•	•	•	•	
2	<i>Acer saccharum</i>						•	•	•	•	•	•	•	•	•	•	
2	<i>Fagus grandifolia</i>						11	11	11	11	11	11	11	11	11	11	62.4
2	Standing Dead						•	•	•	•	•	•	•	•	•	•	
2	<i>Ostrya virginiana</i>						•	•	•	•	•	•	•	•	•	•	
3	Standing Dead						•	•	•	•	•	•	•	•	•	•	
3	<i>Prunus serotina</i>						•	•	•	•	•	•	•	•	•	•	411.8
3	<i>Fagus grandifolia</i>						•	•	•	•	•	•	•	•	•	•	42.0
3	<i>Ostrya virginiana</i>						•	•	•	•	•	•	•	•	•	•	
4	<i>Acer saccharum</i>						•	•	•	•	•	•	•	•	•	•	80.1
4	<i>Prunus serotina</i>						•	•	•	•	•	•	•	•	•	•	
4	<i>Fagus grandifolia</i>						•	•	•	•	•	•	•	•	•	•	
4	<i>Ostrya virginiana</i>						•	•	•	•	•	•	•	•	•	•	
4	Standing Dead						•	•	•	•	•	•	•	•	•	•	
4	<i>Carpinus caroliniana</i>						•	•	•	•	•	•	•	•	•	•	
5	<i>Acer saccharum</i>						•	•	•	•	•	•	•	•	•	•	
5	<i>Prunus serotina</i>						•	•	•	•	•	•	•	•	•	•	

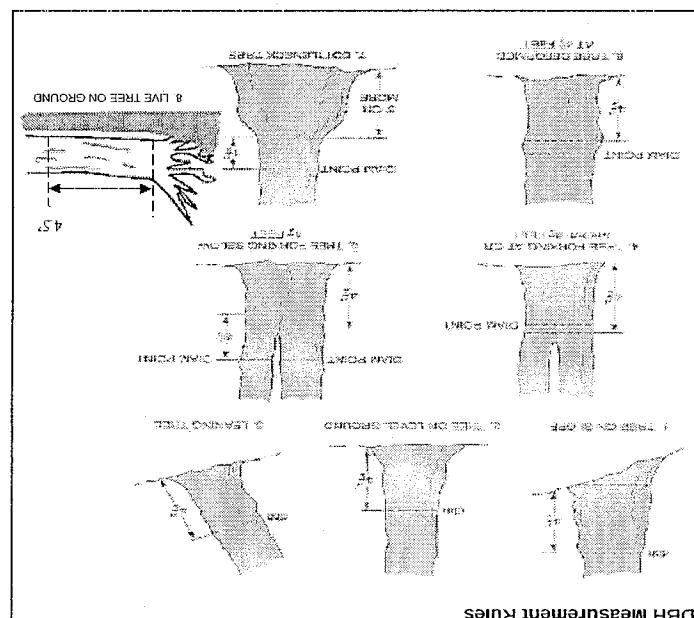
- ASH CANOPY BREAKUP CONDITION (for dead trees):
- rank as described below)
- A: All main branches contain fine twigs (newly dead).
- B: Over 50% of main branches have fine twigs.
- C: Less than 50% of main branches have fine twigs.
- D: Stem still standing and tertiary main branches present.
- E: Central stem still standing.
- (if an ash receives a score of 5 (dead) under canopy condition it must also receive a breakup condition rank as described below).



- ASH CANOPY CONDITION
1. Healthy, full canopy: A healthy ash canopy is normally thinner than many other trees such as maple.
2. Thinning canopy: The 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.



	•
Record using the tally system from 1 to 10	
Record the number of stems/plants between 0.5-1.0 meters tall that exhibit evidence of this years deer browse.	
Woody Stem Deer Browse	



CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet

Project Label: PCAP

Project Name: 01-HI 2011

Plot No.: 34106

Page: 2

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### Exhibit 10.1 Sample (auditorial) pack

ASH CANOPY BREAKUP CONDITION (for dead trees):				
	A	B	C	D
rank as described below:				
(if an ash receives a score of 5 (dead) under canopy condition it must also receive a breakup condition				
E: Central stem still standing				
D: Stem still standing and tertiary main branches present				
C: Less than 50% of main branches have fine twigs				
B: Over 50% of main branches have fine twigs				
A: All main branches contain fine twigs (newly dead)				

ASH CANOPY CONDITION				
	1	2	3	4
(lowest branch) on the trunk				
5. Dead canopy: No leaves remain in the canopy portion of the tree. If still counts as 5 even if there are epiphytic sprouts below the canopy				
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.				
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.				
2. Thinning canopy: There aren't as many leaves as there ought to be, but all top branches exposed to sunlight have leaves.				
1. Healthy, full canopy: A healthy ash canopy is normally thinner than many other trees such as maple.				

DBH Measurement Rules	
<p>Record using the tally system from 1 to 10</p> <p>WOODY STEM DEER BROWSE</p> <p>Record the number of stems/plants between 0.5-1.0 meters tall that exhibit evidence of this years deer browse.</p>	

CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet

Project Label: PCAP

Project Name: OIMI 2011 Plot No.: 3406

Page: 3 of 3

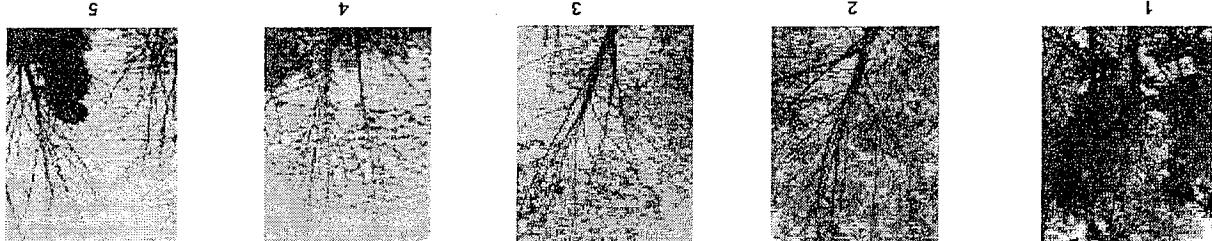
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Exhibit 1000 (adults) (continued back).

ASH CANOPY BREAKUP CONDITION (for dead trees):				
	A	B	C	D
rank as described below)				
(lowest branch) on the trunk				
E: Central stem still standing.				
D: Stem still standing and tertiary main branches present				
C: Less than 50% of main branches have fine twigs				
B: Over 50% of main branches have fine twigs				
A: All main branches contain fine twigs (newly dead).				
If an ash receives a score of 5 (dead) under canopy condition it must also receive a breakup condition				



ASH CANOPY CONDITION				
	1	2	3	4
5. Dead canopy: No leaves remain in the canopy portion of the tree. If still counts as 5 even if there are epiphytic sprouts below the canopy				
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.				
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.				
2. Thinning canopy: There aren't as many leaves as there ought to be, but all top branches exposed to sunlight have leaves.				
1. Healthy, full canopy: A healthy ash canopy is normally thinner than many other trees such as maple.				



DBH Measurement Rules	
<p>Record using the tally system from 1 to 10</p> <p>Record the number of stems/plants between 0.5-1.0 meters tall that exhibit evidence of this years deer browse.</p> <p>Woodsy Stem Deer Browse</p>	

Tier 1: Early detection/ Rapid response							Tier 2: Assess as Needed			Tier 3: Presence is of interest							Tier 4: Widespread and abundant							X: Yes					
# of Plants			Presence			NE SE SW NW			# of Plants			Presence			NE SE SW NW			# of Plants			Presence			NE SE SW NW			Presence		
5: >1,000																													
4: 101-1,000																													
3: 51-100																													
2: 11-50.																													
1: 1-10																													
Convallaria majalis (G-cover) Lily of the Valley							NE SE SW NW			# of Plants			Presence			Comments			Pulmonaria officinalis (G-cover) Lungwort			Presence			Comments				
Corynilla varia (G-cover) Crow's Nest							NE SE SW NW			# of Plants			Presence			Comments			Rubus phoenicolasius (Wineberry)			Presence			Comments				
Elutherococcus pentaphyllus (G-cover) Five-leaf Aralia							NE SE SW NW			# of Plants			Presence			Comments			Pachysandra terminalis (G-cover) Japanese Pachysandra			Presence			Comments				
Convallaria majalis (G-cover) Lily of the Valley							NE SE SW NW			# of Plants			Presence			Comments			Phytolacca americana (Mock Orange)			Presence			Comments				
Corynilla varia (G-cover) Crow's Nest							NE SE SW NW			# of Plants			Presence			Comments			Lonicera maackii (Amur Hornysuckle)			Presence			Comments				
Elutherococcus pentaphyllus (G-cover) Five-leaf Aralia							NE SE SW NW			# of Plants			Presence			Comments			Lonicera maki (Autumn Olive)			Presence			Comments				
Convallaria majalis (G-cover) Lily of the Valley							NE SE SW NW			# of Plants			Presence			Comments			Dipsacus laciniatus (Cut-leaf Teasel)			Presence			Comments				
Corynilla varia (G-cover) Crow's Nest							NE SE SW NW			# of Plants			Presence			Comments			Elaeagnus umbellata (Japanese Buckthorn)			Presence			Comments				
Elutherococcus pentaphyllus (G-cover) Five-leaf Aralia							NE SE SW NW			# of Plants			Presence			Comments			Rhamnus cathartica (Common Buckthorn)			Presence			Comments				
Convallaria majalis (G-cover) Lily of the Valley							NE SE SW NW			# of Plants			Presence			Comments			Cornus maculatum (Common Hemlock)			Presence			Comments				
Corynilla varia (G-cover) Crow's Nest							NE SE SW NW			# of Plants			Presence			Comments			Alnus glutinosa (European Alder)			Presence			Comments				
Elutherococcus pentaphyllus (G-cover) Five-leaf Aralia							NE SE SW NW			# of Plants			Presence			Comments			Berberis thunbergii (Japanese Barberry)			Presence			Comments				
Convallaria majalis (G-cover) Lily of the Valley							NE SE SW NW			# of Plants			Presence			Comments			Clethra alnifolia (Sweet Pepperbush)			Presence			Comments				
Corynilla varia (G-cover) Crow's Nest							NE SE SW NW			# of Plants			Presence			Comments			Cornus amomum (Common Witch-hazel)			Presence			Comments				
Elutherococcus pentaphyllus (G-cover) Five-leaf Aralia							NE SE SW NW			# of Plants			Presence			Comments			Lonicera xylosteum (Honeysuckle)			Presence			Comments				
Convallaria majalis (G-cover) Lily of the Valley							NE SE SW NW			# of Plants			Presence			Comments			Lonicera japonica (Japanese Honeysuckle)			Presence			Comments				
Corynilla varia (G-cover) Crow's Nest							NE SE SW NW			# of Plants			Presence			Comments			Lonicera xylosteum (Honeysuckle)			Presence			Comments				
Elutherococcus pentaphyllus (G-cover) Five-leaf Aralia							NE SE SW NW			# of Plants			Presence			Comments			Lonicera xylosteum (Honeysuckle)			Presence			Comments				
Convallaria majalis (G-cover) Lily of the Valley							NE SE SW NW			# of Plants			Presence			Comments			Lonicera xylosteum (Honeysuckle)			Presence			Comments				
Corynilla varia (G-cover) Crow's Nest							NE SE SW NW			# of Plants			Presence			Comments			Lonicera xylosteum (Honeysuckle)			Presence			Comments				
Elutherococcus pentaphyllus (G-cover) Five-leaf Aralia							NE SE SW NW			# of Plants			Presence			Comments			Lonicera xylosteum (Honeysuckle)			Presence			Comments				
Convallaria majalis (G-cover) Lily of the Valley							NE SE SW NW			# of Plants			Presence			Comments			Lonicera xylosteum (Honeysuckle)			Presence			Comments				
Corynilla varia (G-cover) Crow's Nest							NE SE SW NW			# of Plants			Presence			Comments			Lonicera xylosteum (Honeysuckle)			Presence			Comments				
Elutherococcus pentaphyllus (G-cover) Five-leaf Aralia							NE SE SW NW			# of Plants			Presence			Comments			Lonicera xylosteum (Honeysuckle)			Presence			Comments				
Convallaria majalis (G-cover) Lily of the Valley							NE SE SW NW			# of Plants			Presence			Comments			Lonicera xylosteum (Honeysuckle)			Presence			Comments				
Corynilla varia (G-cover) Crow's Nest							NE SE SW NW			# of Plants			Presence			Comments			Lonicera xylosteum (Honeysuckle)			Presence			Comments				
Elutherococcus pentaphyllus (G-cover) Five-leaf Aralia							NE SE SW NW			# of Plants			Presence			Comments			Lonicera xylosteum (Honeysuckle)			Presence			Comments				
Convallaria majalis (G-cover) Lily of the Valley							NE SE SW NW			# of Plants			Presence			Comments			Lonicera xylosteum (Honeysuckle)			Presence			Comments				
Corynilla varia (G-cover) Crow's Nest							NE SE SW NW			# of Plants			Presence			Comments			Lonicera xylosteum (Honeysuckle)			Presence			Comments				
Elutherococcus pentaphyllus (G-cover) Five-leaf Aralia							NE SE SW NW			# of Plants			Presence			Comments			Lonicera xylosteum (Honeysuckle)			Presence			Comments				
Convallaria majalis (G-cover) Lily of the Valley																													

CLEVELAND METROPARKS Emerald Ash Borer - <i>Fraxinus</i> Sheet						
Project Label: <u>PCAP</u>			Project Name: <u>01412-11</u>			INTENSIVE MODULES ONLY
						TREES $\geq 10\text{CM ONLY}$
						Plot No.: <u>3406</u>
						Date: <u>8/8/11</u>
						Page: 1 of 2
© 2011 Cuyahoga Metroparks						
ASH ONLY						
Module ID.	Tree Species	Dead c	Voucher #	DBH (cm)	Ht @ DBH condition	# Dead holes
1						
2	<b>NO ASH</b>					
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						

*** Change intensive module numbers when necessary	
Baseline	
<b>9</b>	<b>8</b>
<b>2</b>	<b>3</b>

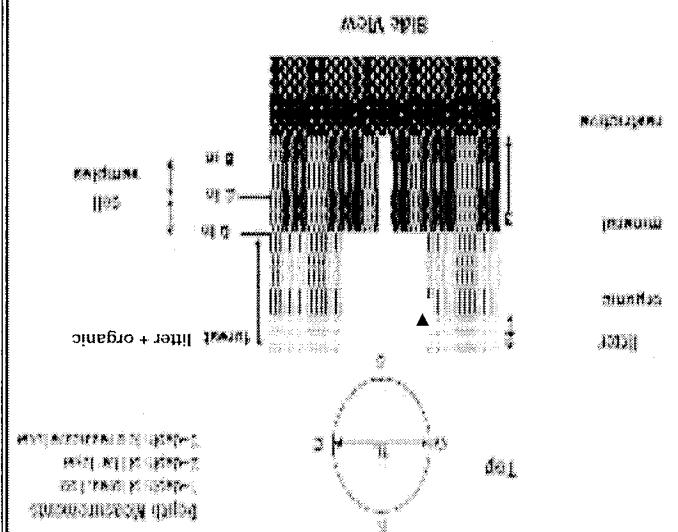
Map all ash trees  $\geq 10\text{cm}$  in each module using Tree ID number

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



**HOTEL 3-30**—Grosvenor Hotel, London, England—The Grosvenor Hotel is a large, modern hotel located in the heart of London's West End. It is a member of the Leading Hotels of the World and is known for its excellent service and comfortable accommodations. The hotel features 200 guest rooms, including suites, and a variety of dining options. It is a popular destination for tourists and business travelers alike.

Pottsville Group	Vulcan Sandstone Member Alluvial Conglomerate Member Gray Sandstone Member Eocene Conglomerate Member Quaternary Fluvial Dunefield Member	Lignite Formation Cayuga Formation Black Island Sandstone Member Black Island Sandstone Member Benton Sandstone	Subury Shale Benton Sandstone Benton Shale	MISSISSIPPIAN
Ohio Shale	Benton Shale Benton Sandstone Gray Sandstone Member Quaternary Fluvial Dunefield Member	Benton Shale Benton Sandstone Gray Sandstone Member Quaternary Fluvial Dunefield Member	Subury Shale Benton Sandstone Gray Sandstone Member Quaternary Fluvial Dunefield Member	UPPER DEVONIAN
Union Member	Quaternary Fluvial Dunefield Member Gray Sandstone Member Benton Shale Benton Sandstone	Quaternary Fluvial Dunefield Member Gray Sandstone Member Benton Shale Benton Sandstone	Quaternary Fluvial Dunefield Member Gray Sandstone Member Benton Shale Benton Sandstone	UPPER DEVONIAN
Ohio Shale	Benton Shale Benton Sandstone Gray Sandstone Member Quaternary Fluvial Dunefield Member	Benton Shale Benton Sandstone Gray Sandstone Member Quaternary Fluvial Dunefield Member	Benton Shale Benton Sandstone Gray Sandstone Member Quaternary Fluvial Dunefield Member	UPPER DEVONIAN
Ohio Shale	Benton Shale Benton Sandstone Gray Sandstone Member Quaternary Fluvial Dunefield Member	Benton Shale Benton Sandstone Gray Sandstone Member Quaternary Fluvial Dunefield Member	Benton Shale Benton Sandstone Gray Sandstone Member Quaternary Fluvial Dunefield Member	UPPER DEVONIAN



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

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

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

**CLEVELAND METROPARKS Plant Community Assessment Program - Soils, Crown Cover, Standing Biomass Data Sheet**

Project label: PCAP Project Name: COLLIER

Plot No.: 3406

Page: **1 of 1**

**SOIL PIT DESCRIPTION:** Excavate 20 cm

plug with shovel. Describe using Munsell chart,

visual exam, texture, and odor.

Soil pit module # 2 (one per entire plot)

5 cm	matrix color	<b>10YR 3/3</b>
	mottle color	—
% mottle		—
oxid. roots	Y	∅
texture*		1
redox features**	Y	∅
hydr. cond. ***	I S <u>M</u> D	
20 cm	matrix color	<b>10YR 3/3</b>
	mottle color	—
% mottle		—
oxid. roots	Y	∅
texture*	1	
redox features**	Y	∅
hydro. cond. ***	I S <u>M</u> D	
	refer to texture classes on reverse side	
*** e.g. hydrogen sulfide odor, gleying, etc.		
** e.g. hydrogen sulfide odor, gleying, etc.		
*** Circle one: I=indundated S=saturated M=moist D=dry (worms, castings, middens)		
<b>Notes:</b> include evidence of earthworms		
— <b>Castings found throughout plot.</b>		
— <b>Worms found under litter layer</b>		

**SOIL SAMPLES** Standard procedure: collect a soil sample of the top 10 cm of soil from center of each intensive module and composite the sample

intensive module and composite the sample

**STANDING BIOMASS** (required for emergent wetlands): collected in 0.1 m clip plots (32x32 cm) from corners 1 and 3 in each intensive module. Required for VIBI-E score calculation. C? = check when collected

Soil Collection Module	Horizon (A, B, C)
2,3,8,9 composted	A

Soil Description/notes:

Module #	C?	Corner	Corner

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

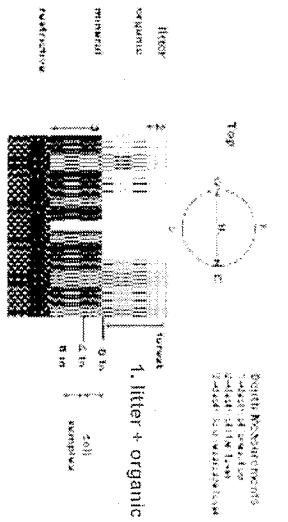
mod#	1 litter + organic depth (cm)	2 litter depth(cm)	3 restrict. depth(cm)	water depth (cm)	sat. soil depth (cm)	*WSS
2	5.25	5.25	7.3	0	>30	
3	3.2	3.2	>10.0	0	>30	
8	6.25	6.25	9.5	0	>30	
9	3.0	3.0	8.4	0	>30	

Length of soil probe = 125 cm

\* Use Web Soil Survey for #3 Restrictive layer dept.

Top	0.0	0.5	1.0	2.0
Bottom	0.0	0.5	1.0	2.0
0.0	0.5	1.0	2.0	3.0
0.0	0.5	1.0	2.0	3.0
0.0	0.5	1.0	2.0	3.0

Well drained	
Moderately well dr.	
Somewhat poorly dr.	
Poorly dr.	
Very poorly dr.	
Impenetrable surface	



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

**PERMANENTLY FLOODED:** Water covers the land surface at all times of the year in all years. Equivalents to Gowardin's permanent

**SEMIPERENNIAL FLOWERS** (exposed  $<1$  year): Surface perennials that grow 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

**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 would be used in cases where the substrate is exposed to surface water for short periods but does not have a regular pattern.

**TEMPORARILY FLOODED:** Surface water present for brief periods during growing season, but water table usually lies well below soil surface. Oils charac- terizes flood-plain levees and lower reaches Equivalents to C-wayatin's T-embayment model.

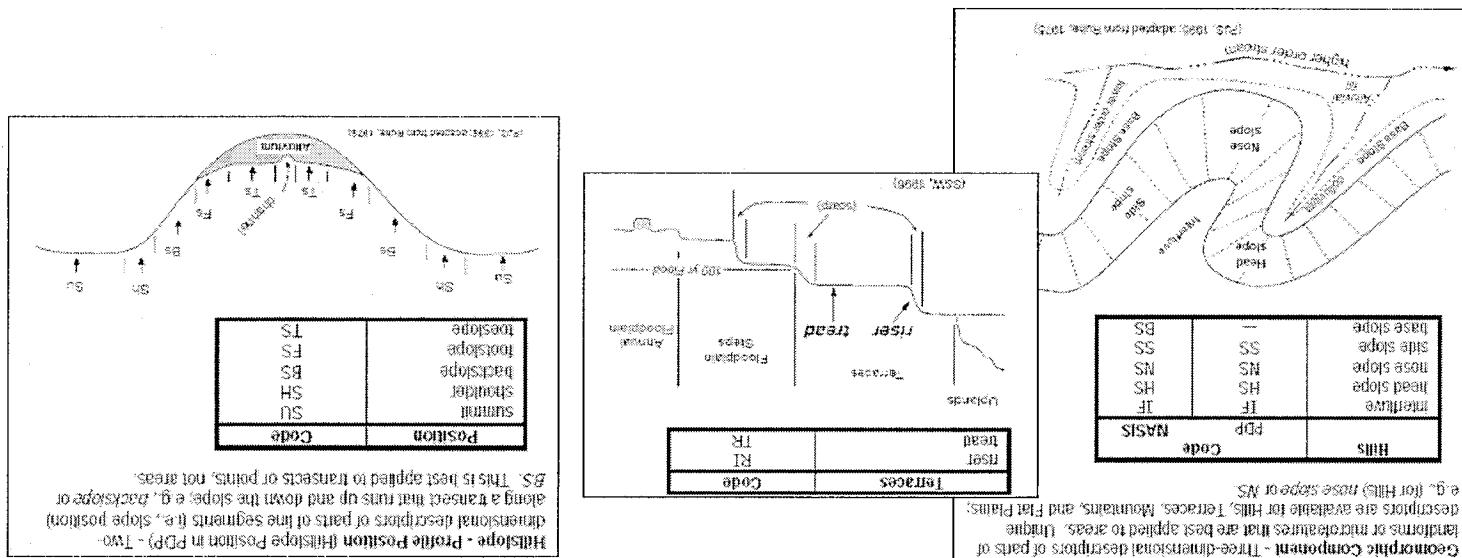
**SCARCITY/NONRELIABILITY** Scarce water can be present for brief periods during growing season, but for multi-year, often

**PERMANENTLY/SUPERMANENTLY SATURATED:** Dry less than once per year. Surface water is seldom present, but substrate is too saturated for extended periods during the growing season.

**INTERMITTENTLY/SEASONALLY SATURATED:** Dry at least once per year. Surface water is seldom present, but substrate is saturated, often for extended periods of time.

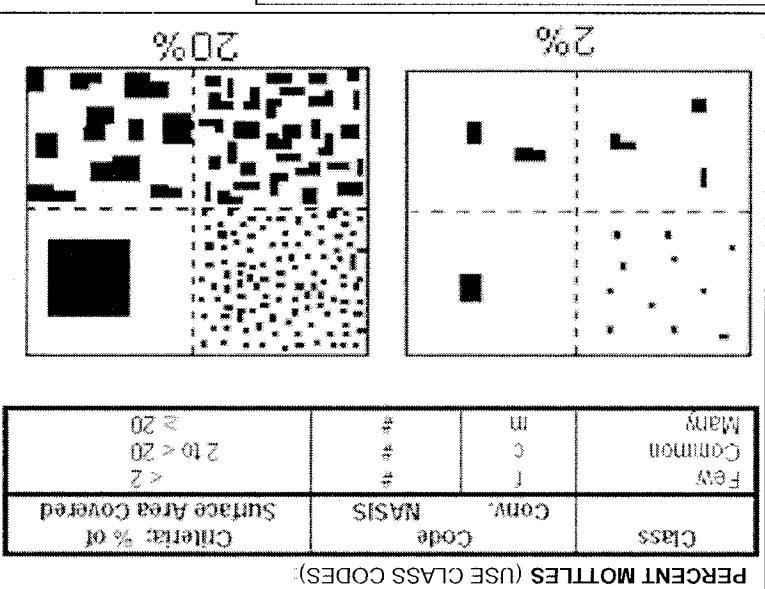
**HYDROLOGIC REGIME** Modified from Grossman et al. 1998. (Frequency and duration of flooding.)

For more information, contact the Office of the Vice President for Research and the Office of the Vice President for Student Affairs.



**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 modelling 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 soil alluvium 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 ball, soft a ribbon should be coded as clayey, samples which form a ball but not a ribbon should be coded as loamy.

**SOIL CLAY** Record the code for the clay content of the soil sample. If the sample is 0-10% clay, it is loamy. If the sample is 11-30% clay, it is clayey. If the sample is 31-50% clay, it is sandy. If the sample is 51-75% clay, it is coarse sand. If the sample is 76-100% clay, it is not measured - make plot note



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

Reviewed by (initial):

Site ID: PCAPHI3406

DATE: 05 / 08 / 2011

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

## Buffer Natural Cover Strata

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

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

Buffer Plot 1	Canopy Type: <input type="radio"/> D <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"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			Big Trees (>0.3m DBH)	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			Big Trees (>0.3m DBH)	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		
Small Trees (<0.3m DBH)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4			Small Trees (<0.3m DBH)	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			Small Trees (<0.3m DBH)	<input checked="" 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"/> 0 <input checked="" 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"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		
Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		
Herbs, Forbs and Grasses	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4			Herbs, Forbs and Grasses	<input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4			Herbs, Forbs and Grasses	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4		
Bare ground	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			Bare ground	<input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			Bare ground	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		
Litter, duff	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			Litter, duff	<input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			Litter, duff	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		
Rock	<input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			Rock	<input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			Rock	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		
Water	<input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			Water	<input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			Water	<input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		
Submerged Vegetation	<input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			Submerged Vegetation	<input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4			Submerged Vegetation	<input checked="" type="radio"/> 0 <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/Roof Exposure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Dairy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Urban/Multifamily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Wall/Riprap	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Orchard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Landfill	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Inlets, Outlets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Confined Animal Feeding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Dumping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Point Source/Pipe (EFFLUENT OR STORMWATER)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Rural Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Trash	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		Impervious Surface Input (SHEETFLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Gravel Pit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Irrigation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		

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

DATE:

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

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

## PLOT COORDINATES

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

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

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

**Flag**

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

Latitude North 41 20559      Longitude West 81 69682

### Use Decimal Degrees: NAD83

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

7966623548

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

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

Site ID: PCAP # 3406

DATE: 08/08/2011

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

## Buffer Natural Cover Strata

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

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

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

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

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

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

2428168304

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

Reviewed by (initials):

Site ID: PCAP HI 3406

DATE: 08/08/2011

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

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

## PLOT COORDINATES

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

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

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

Flag

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

Latitude North 41 20471      Longitude West 81 69533

**Use Decimal Degrees: NAD83**

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

Reviewed by (Initial):

Site ID: PCAP HI 3406

DATE: 08/08/2011

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

## Buffer Natural Cover Strata

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

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

Buffer Plot 1	Canopy Type: <input type="radio"/> D <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 type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/>	Big Trees (>0.3m DBH)	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/>	Big Trees (>0.3m DBH)	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		
Small Trees (<0.3m DBH)	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4		<input type="radio"/>	Small Trees (<0.3m DBH)	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/>	Small Trees (<0.3m DBH)	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		
Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/>	Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/>	Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		
Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/>	Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/>	Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		
Herbs, Forbs and Grasses	<input type="radio"/> 0 <input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/>	Herbs, Forbs and Grasses	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/>	Herbs, Forbs and Grasses	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		
Bare ground	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/>	Bare ground	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/>	Bare ground	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		
Litter, duff	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4		<input type="radio"/>	Litter, duff	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/>	Litter, duff	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		
Rock	<input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/>	Rock	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/>	Rock	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		
Water	<input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/>	Water	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/>	Water	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		
Submerged Vegetation	<input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/>	Submerged Vegetation	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4		<input type="radio"/>	Submerged Vegetation	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input 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"/>	<input type="radio"/>	Ditches, Channelization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pasture/Hay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Road - two lane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Dike/Dam/Road/RR Bed (IMPEDE FLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Range	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Road - four lane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Water Level Control Structure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Row Crops	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parking Lot/Pavement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Excavation, Dredging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fallow Field (RECENT-RESTING ROW CROP FIELD)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Golf Course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fill/Spoil Banks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fallow Field (OLD - GRASS, SHRUBS, TREES)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lawn/Park	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Freshly Deposited Sediment (UNVEGETATED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Nursery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Suburban Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Soil Loss/Root Exposure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Dairy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Urban/Multifamily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Wall/Riprap	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Orchard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Landfill	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Inlets, Outlets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Confined Animal Feeding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dumping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Point Source/Pipe (EFFLUENT OR STORMWATER)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Rural Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trash	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Impervious Surface Input (SHEETFLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Gravel Pit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Irrigation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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

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

2428168304

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

Reviewed by (initials):

Site ID: PCAPHI3406

DATE: 08/08/2011

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

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

## PLOT COORDINATES

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

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

Location of coordinates (choose one):

### Flag

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

### Latitude North

41 20575

### Longitude West

81 69538

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

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

7966623548

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

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

Site ID: PCAP 3406 HI

DATE: 08/08/2011

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

## Buffer Natural Cover Strata

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

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

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

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

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

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

2428168304

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

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

Site ID: PCAPHI 3406

DATE: 08/08/2011

• 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 checked="" type="radio"/>	<input type="radio"/>		Kudzu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Yellow Floating Heart	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Japanese Knotweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Multiflora Rose	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	
Giant Salvinia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Perennial Pepperweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Common Buckthorn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Garlic Mustard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Giant Reed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Himalayan Blackberry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Poison Hemlock	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Cheatgrass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tamarisk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Mile-A-Minute Weed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Reed Canary Grass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Birdsfoot Trefoil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Common Reed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Canada Thistle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Leafy Spurge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

## 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 20676

### Longitude West

8169564

**Use Decimal Degrees; NAD83**

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

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

Site ID: RAP HI 3406

DATE: 08/08/2011

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

## Buffer Natural Cover Strata

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

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

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

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

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

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

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

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

2428168304

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

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

Site ID: PCAP HI 3406

DATE: 08/08/2010

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

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

## PLOT COORDINATES

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

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

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

Flag

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

Latitude North 41° 20' 56" S Longitude West 81° 69' 40" W

**Use Decimal Degrees: NAD83**

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

7966623548



# CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet

Project Label: PCAP

Project Name:  

Plot No.:  

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 Cleveland Metroparks

<b>CLASSIFICATION</b>		<b>STAND SIZE</b>	<b>DISTURBANCES</b>				
			<b>type*</b>	<b>severity**</b>	<b>yrs ago</b>	<b>% of plot</b>	<b>description</b>
(FIT = excellent, good, fair, poor; CONF = high, med, low)		Fit and Confidence					
<b>Hydrogeomorphic class (WETLANDS ONLY):</b>							
□ DEPRESSION		Fit= <u> </u> Conf= <u> </u>	□ > 1,000 x plot size	Natural			
□ IMPOUNDMENT □ Beaver □ Human		Fit= <u> </u> Conf= <u> </u>	□ 10-100 x plot size	Fine			
□ RIVERINE □ Headwater □ Mainstem □ Channel		Fit= <u> </u> Conf= <u> </u>	□ 3-10 x plot size	Cut			
□ SLOPE (ground water hydrology or on a physical slope)		Fit= <u> </u> Conf= <u> </u>	□ 1-3 x plot size	Animal			
□ FRINGING □ Reservoir □ Natural Lake		Fit= <u> </u> Conf= <u> </u>	□ < plot size	Other			
□ COASTAL (specify subclass)		Fit= <u> </u> Conf= <u> </u>					
□ BOG (strongly, moderately, weekly ombrotrophic)		Fit= <u> </u> Conf= <u> </u>					
<b>Ohio EPA VIBI Plant Community Class (WETLANDS ONLY):</b>							
□ FOREST □ swamp forest □ bog forest □ forest seep		Fit= <u> </u> Conf= <u> </u>					
□ EMERGENT □ marsh □ wet meadow □ open bog		Fit= <u> </u> Conf= <u> </u>					
□ SHRUB □ shrub swamp □ tall sh. bog □ tall sh. fen		Fit= <u> </u> Conf= <u> </u>					
<b>MODIFIED NATURE RESERVE CLASS*</b>							
CODE (on separate form):		Fit= <u> </u> Conf= <u> </u>					
<b>COMMUNITY NAME:</b>							
<b>HOMOGENEITY</b>		Additional notes & diagrams: (Representativeness of plot to the stand, successional status, maturity, etc.)					
□ Homogeneous							
□ Compositional trend across the plot							
□ Conspicuous inclusions							
□ Irregular/pattern mosaic							