

CLEVELAND METROPARKS Plant Community Assessment Program: Quality Control Form



Project Label:

PCAP

Plot No:

1313

Date Sampled:

6/12-6/14

Lead: A. Lance

2013

Comment required if item answer is NO

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

GRTS point verification: Is plot sampleable?

 Yes

Original GRTS point is sampleable

 No

Original GRTS point lands in a non-sampleable area (fill in category below)

 Point falls in a water (i.e. river, lake) Managed mowed area (i.e. golf course, picnic area, right-of-way) Paved area (i.e. parkinglot, road) Unsafe to sample (i.e. steep slope) Other

Additional Comments:

There are two gravel pulloffs near the plot on Valley Pkwy
 one on the south side and one ~~on~~ the North side (right ~~not~~ in plot)
 Park at the North side one in the plot



CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet

Page 1 of 2
Cleveland Metroparks

GENERAL INFORMATION																	
Project Label:	PCAP																
Project Name:	01 B. 2013																
Plot Name:	Raccoon Residence																
Plot No.:	1313																
<input type="checkbox"/> Level 4 (no nested corners sampled) <input checked="" type="checkbox"/> Level 5 (nested corners sampled)																	
Date (mm/dd/yyyy): 06/12/2013																	
End date (if > 1 day): 06/14/2013																	
Party																	
Andrew Lance	Role**																
Project Leader																	
Alicia Baskowski	Wholly Green																
Rebecca Ballard	Wholly Green																
Plot NOT SAMPLED: <input type="checkbox"/> Perm. water <input type="checkbox"/> Paved <input type="checkbox"/> Slope <input type="checkbox"/> Safety																	
SAMPLING QUALITY* Effort Level: <input checked="" type="checkbox"/> Very thorough <input type="checkbox"/> Accurate <input type="checkbox"/> Hurried																	
TAXONOMIC ACCURACY <table border="1"> <tr> <td>high</td> <td>moder.</td> <td>low</td> <td>not samp</td> </tr> <tr> <td>vascul.</td> <td><input checked="" type="checkbox"/></td> <td>n/a</td> <td></td> </tr> <tr> <td>bryo</td> <td></td> <td><input checked="" type="checkbox"/></td> <td></td> </tr> <tr> <td>lichen</td> <td></td> <td></td> <td><input checked="" type="checkbox"/></td> </tr> </table>		high	moder.	low	not samp	vascul.	<input checked="" type="checkbox"/>	n/a		bryo		<input checked="" type="checkbox"/>		lichen			<input checked="" type="checkbox"/>
high	moder.	low	not samp														
vascul.	<input checked="" type="checkbox"/>	n/a															
bryo		<input checked="" type="checkbox"/>															
lichen			<input checked="" type="checkbox"/>														
TAXONOMIC STANDARD Authority: G&C Pub Date: 1998																	
Minimum required fields in Bold and Underlined																	

LOCATION			
State:	OH	County:	Cuyahoga
Quadrangle:			
Local Place Names: Seneca Golf Course Landowner: Cleveland Metroparks			
Data Confidentiality: <input checked="" type="checkbox"/> Public data <input type="checkbox"/> Private Data			
Check one: <input type="checkbox"/> Fuzz 100m <input type="checkbox"/> Fuzz 250m <input type="checkbox"/> Fuzz 500m			
Reason: If data not public why? Key: <ul style="list-style-type: none"> ● Plot origin (x0,y0) point ● GPS location ● photo taken. ● location of permanent posts. 			
Source of coordinates <input type="checkbox"/> MAP <input checked="" type="checkbox"/> GPS Coordinate system: <input type="checkbox"/> Lat/Long <input type="checkbox"/> UTM <input type="checkbox"/> StatePlane <input checked="" type="checkbox"/> Coord. Units <input type="checkbox"/> deg <input type="checkbox"/> deg min <input type="checkbox"/> Other (specify) <input type="checkbox"/> m <input type="checkbox"/> ft <input type="checkbox"/>			
Datum: <input checked="" type="checkbox"/> NAD83/WGS84 <input type="checkbox"/> NAD27 GPS location in plot x=0 to 5, y=-1,0,+1): x = 0 y = 0 (base of plot x=0, y=0) Latitude: 41.30190 Longitude: 81.06860			
Layout: 2 x 5 Location: N. side of Valley Pkwy past E. of Seneca golf course. Gravel pull off adjacent, plot is along forest edge Rationale: GRTS pt.			
Coord. Accuracy: <input checked="" type="checkbox"/> m <input type="checkbox"/> ft 2.3 + - GPS File Name: 1313A Plot size for cover data: 0.1 (hectares) X-axis Bearing of plot: 78°			
Depth (1-5): 4 Intensive modules: 2, 3, 8, 9 <small>(EDIT IF MODIFIED)</small>			
Camera No.: 4 Photo Nos.: 331 Plot placement: <input checked="" type="checkbox"/> GRTS <input type="checkbox"/> Representative <input type="checkbox"/> Random <input type="checkbox"/> Stratified Random <input type="checkbox"/> Transect component <input type="checkbox"/> Systematic (grid) <input type="checkbox"/> Capture specific feature <input type="checkbox"/> Other			
<small>*Definitions and values in CM PCAP FOM v. 1.0 and CVS Field Guide</small>			

OVER →

CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet

Project Label: PCAP

Project Name: 01 Br 2013

Plot No.: 13i3

Page 2 of 2

MODIFIED NATURE RESERVE CLASS*

CODE (on separate form):

C-04

COMMUNITY NAME:

Beech- Red Oak Forest

HOMOGENEITY

Homogeneous

Compositional trend across the plot

Irregular/pattern mosaic

HYDROLOGIC REGIME*

Upland (seldom flooded)

Intermittently/seasonally saturated (seldom flooded)

Permanently/Semipermanent saturated (dry <1/yr, seldom flooded)

Occasionally flooded (<1/yr)

Temporarily flooded (by default unless plot is a wetland)

Intermittently flooded

Semipermanently flooded (e.g. wind, storms)

Permanently flooded (Tidal/Seiche flooded daily)

Tidal/Seiche flooded monthly

Tidal/Seiche flooded irregular (e.g. wind, storms)

Unknown

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

harbors buttonbush and marginal wood fern. Several red maples were located throughout the plot. The red oaks seem to be the largest, and most likely, oldest trees.

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

Project Label: PCAP

Project name: 01 Br 2013

Plot no.: 1313

Page 1 of 3

Total modules: 10

Intensive modules: 4 Plot configuration: 2 x 5

Plot area (ha): 0.1



Cleveland
Metroparks

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

Strata - Cov. entire plot

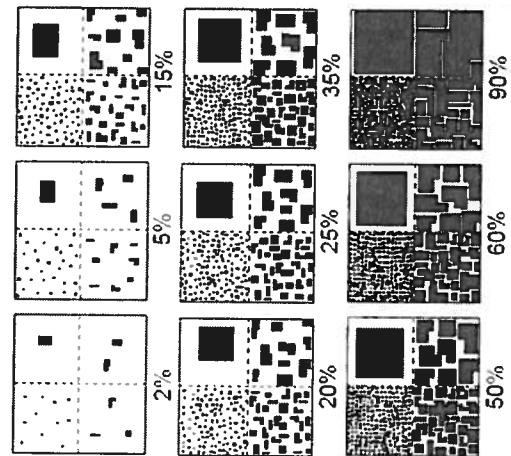
T	S	H	(F)	(A)	Br	Species	C	Voucher #	Estimate for each intensive module:											
									mod	corner	mod	corner	mod	corner	mod	corner	mod	corner	mod	corner
2	4	2	2	3	4	3	2	8	4	8	2	9	4	9	2	R	R			
1	8	1	0	1	0			1	0	1	0	1	0	1	0					
1	8	1	0	1	0			1	0	1	0	1	0	1	0					
2	2	2	2	2	2			2	2	2	2	2	2	2	2					
6	5	2	2	3	4	4	8	3	4	3	4	4	7	4	4	9	4			
5	Acer saccharum					4	6	4	4	6	3	4	8	4	4	7	4			
8	Quercus rubra					3	5	2	3	2	3	2	4	7	4					
2	Liriodendron tulipifera					2	2	2	2	2	2	2	2	2	2					
3	Alnus petiolarata					2	6	4	4	9	4	4	6	4	4	2	2			
1	Maianthemum canadense					2	1	1	1	1	1	1	1	1	1	1	1			
7	Fagus grandifolia					2	4	2	2	2	2	2	3	1	3	2	3	2		
3	Fraxinus pennsylvanica					2	2	2	2	2	2	2	3	2	2	3	2			
8	Acer sp.					2	4	2	2	2	2	2	3	1	3	2	3	2		
7	Anisacma triphyllum					2	4	2	2	2	2	2	3	2	2	3	2			
10	Prunus serotina (sedina)					2	4	2	2	2	2	2	3	2	2	3	2			
10	Prunus sp. #1					2	4	2	2	2	2	2	3	2	2	3	2			
10	Podophyllum peltatum					1	2	1	1	2	1	1	2	1	1	2	1			
Unknown woody #1	Oxalis stricta					1	2	1	1	2	1	1	2	1	1	2	1			
10	Unknown woody #1					1	2	1	1	2	1	1	2	1	1	2	1			
10	Polygonatum pubescens					1	2	1	1	2	1	1	2	1	1	2	1			
10	Maianthemum canadense					1	2	1	1	2	1	1	2	1	1	2	1			
10	Solidago rotundifolia					1	2	1	1	2	1	1	2	1	1	2	1			
10	Glyceria striata					1	2	1	1	2	1	1	2	1	1	2	1			
10	Prunella vulgaris					1	2	1	1	2	1	1	2	1	1	2	1			
10	Panicum sp. (seedling)					1	2	1	1	2	1	1	2	1	1	2	1			
6	Cirsium heterophyllum					1	2	1	1	2	1	1	2	1	1	2	1			
10	Asteraceae sp. 1					1	2	1	1	2	1	1	2	1	1	2	1			
10	Carex sp. 1					1	2	1	1	2	1	1	2	1	1	2	1			
10	Silene sp. 1					1	2	1	1	2	1	1	2	1	1	2	1			
10	Corex sp. 1					1	2	1	1	2	1	1	2	1	1	2	1			

SPF
11-18-13

Com
Open
Open
Open

EXAMPLES OF PERCENT OF AREA COVERED

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



BROWSE RATING NARRATIVE DESCRIPTION

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

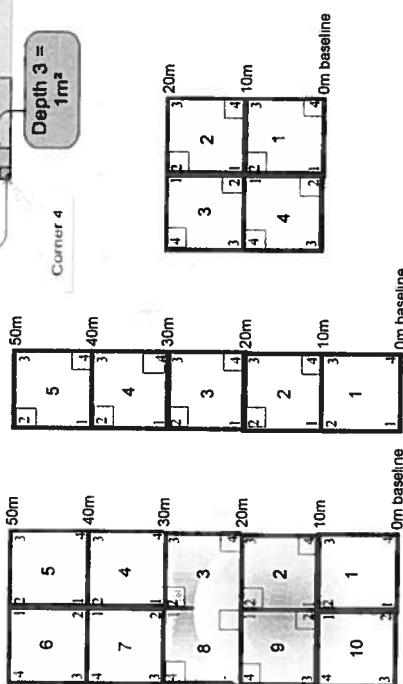
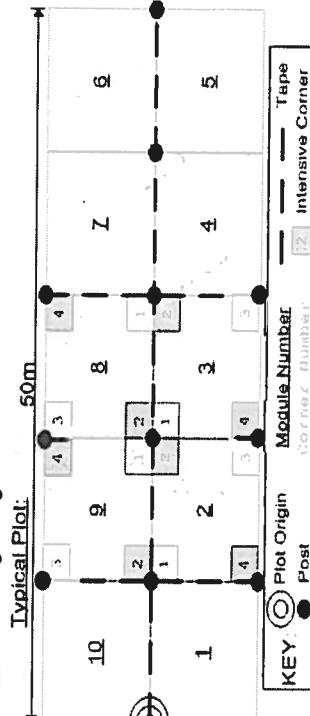
MEDIUM LOW values include evidence of browse at about 10 percent of the stems with no significant impact to plant reproduction evident. In this rating, plants are browsed but preferential species are observed to be reproducing in numbers that appear normal or near-normal in comparison to low browse areas.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

MEDIUM: browse affects greater than 10 percent and less than 25 percent of stems in the 1 m² 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 m² nested quadrat and intensive module **AND** a browse line is evident.

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



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

Project Label:

PCAII

Project name: Oil Br 2013

Plot no.: 33

Total modules:

10

Intensive modules: 4 Plot configuration: 2 x 5

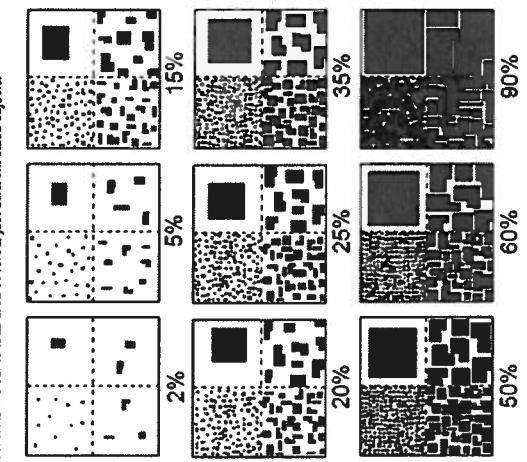
Plot area (ha): 0.1

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

Estimate for each intensive module:

EXAMPLES OF PERCENT OF AREA COVERED

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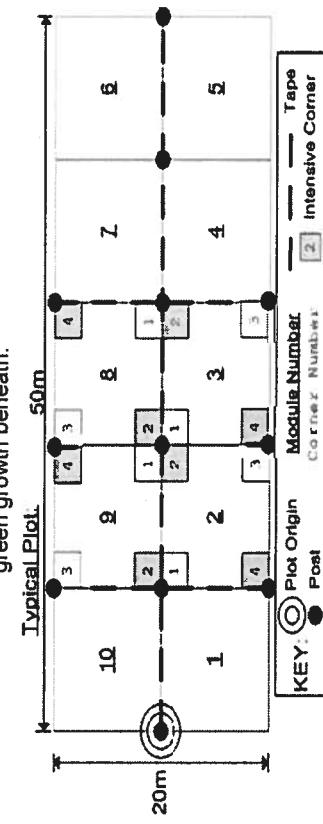
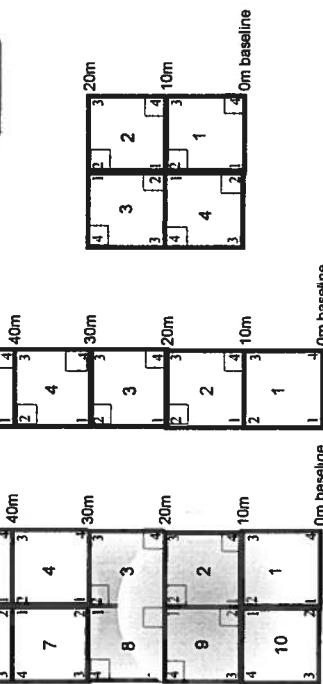
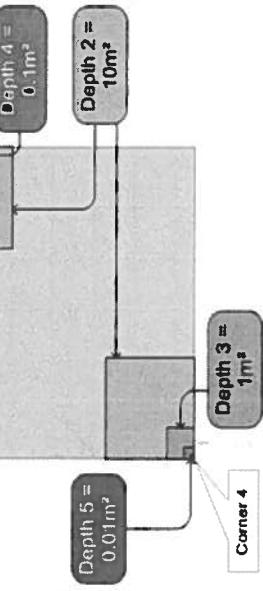
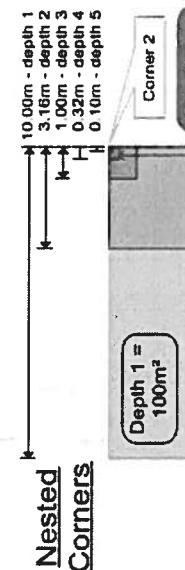
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cover class	% cover	midpoint
1	solitary or few	0.0001
2	0-1%	0.005
3	1-2%	0.015
4	2-5%	0.035
5	5-10%	0.075
6	10-25%	0.175
7	25-50%	0.375
8	50-75%	0.625
9	75-95%	0.850
10	95-100%	0.975



Project Label:

PCAP

Project name: 9 Br 2013

Flu 100...

Total modules: 10

Intensive modules: 4 Plot configuration

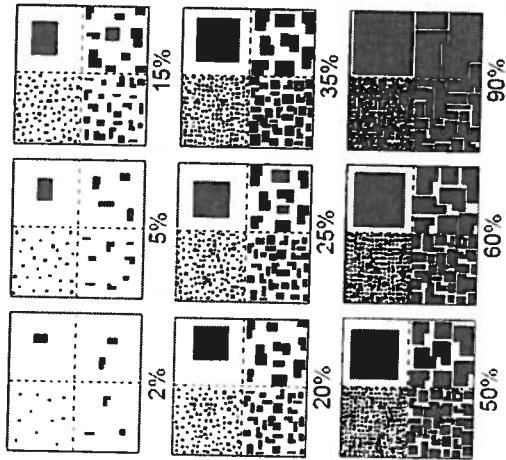
Plot area (ha):

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

Estimate for each intensive module:
%unvegetated ground (bare soil)
%open water

EXAMPLES OF PERCENT OF AREA COVERED

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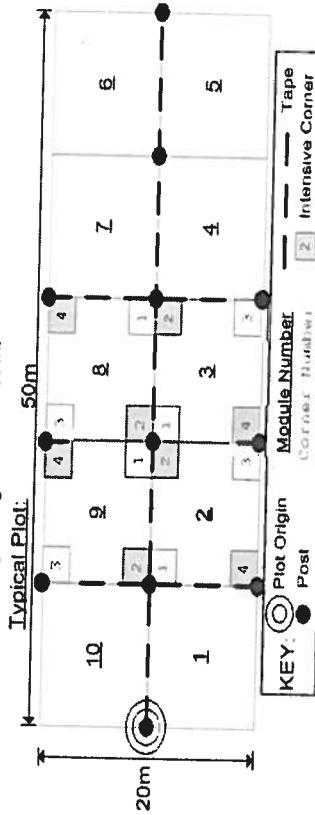
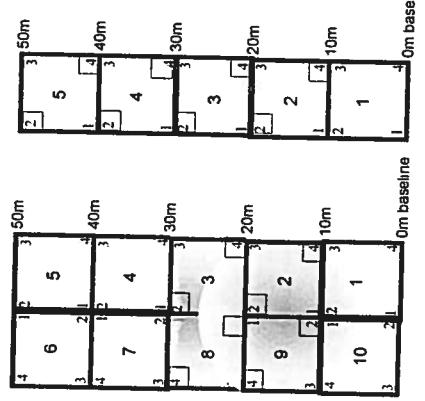
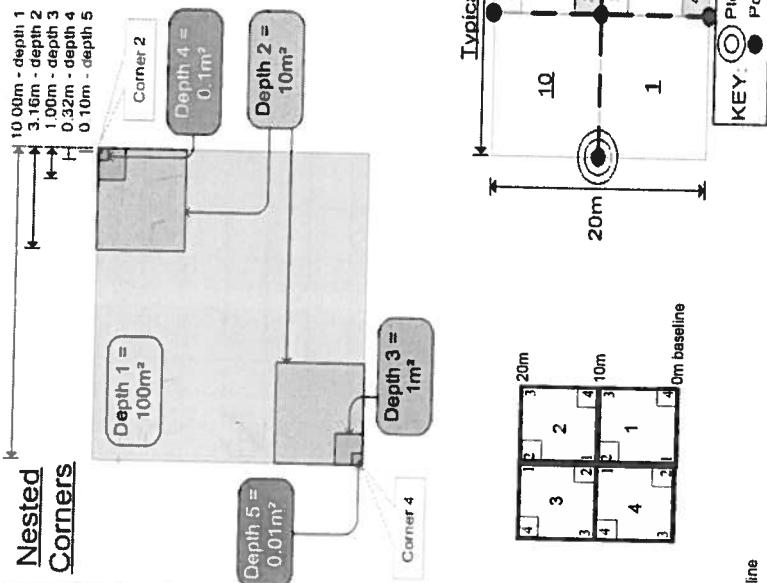
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CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet

Project Label: PCAP

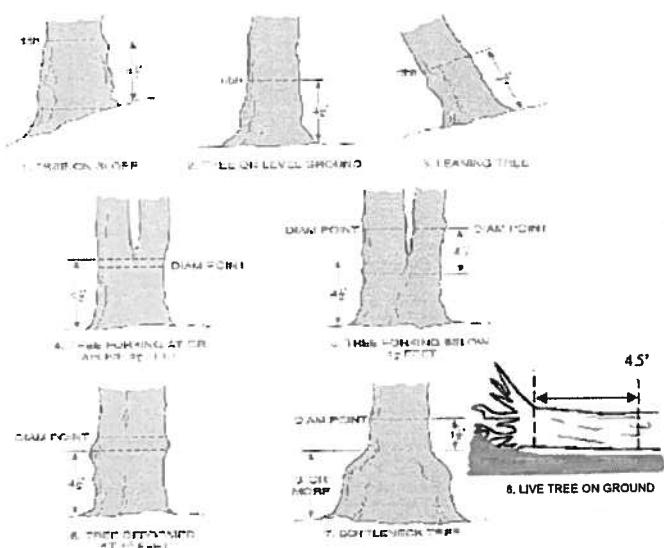
Project Name: 01 Br 2013

Plot No.: 1313

Page:

Explain subsample (additional room on back).

DBH Measurement Rules



Woody Stem Deer Browse

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

Record using the tally system from 1 to 10



1



2



3



4



5

ASH CANOPY CONDITION

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



A

B

C

D

E

ASH CANOPY BREAKUP CONDITION (for dead trees):

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

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

CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet

Project Label: PCAP

Project Name: DiBr 2013

Plot No.: 1313

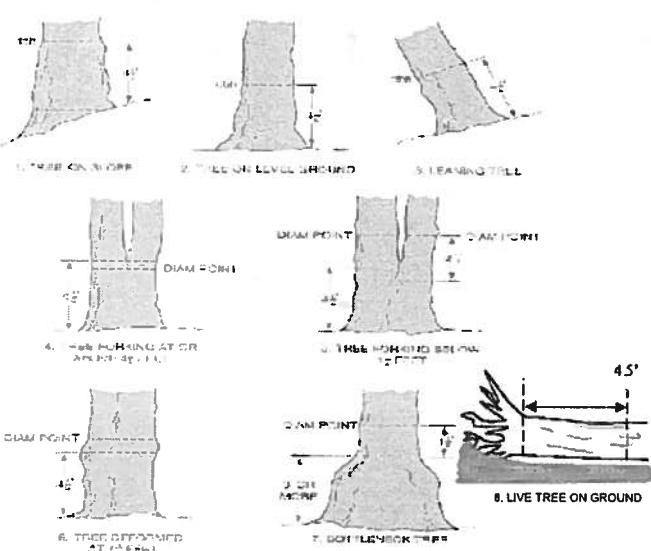
Page: 2

of 24

Explain subsample (additional room on back):

mod #	species	c	voucher#	browsed	# stems 0-1.4m	% sub sample	# shrub clumps	size class (cm) woody stems >1.4m										11 >40 (record each tree)
								0-1	1-2.5	2.5-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	
4	<i>Acer saccharum</i>				•	•	•	•	•	•	•	•	•	•	•	•	•	
4	<i>Rhamnus cathartica</i>				•	•	•	•	•	•	•	•	•	•	•	•	•	
4	Standing dead				•	•	•	•	•	•	•	•	•	•	•	•	•	
4	<i>Fraxinus alnus</i>				•	•	•	•	•	•	•	•	•	•	•	•	•	
4	<i>Fraxinus pennsylvanica</i>				•	•	•	•	•	•	•	•	•	•	•	•	•	
4	<i>Smilax rotundifolia</i>				•	•	•	•	•	•	•	•	•	•	•	•	•	
4	<i>Lindera benzoin</i>				•	•	•	•	•	•	•	•	•	•	•	•	•	
4	<i>Fraxinus sp.</i>				•	•	•	•	•	•	•	•	•	•	•	•	•	
5	Standing dead				•	•	•	•	•	•	•	•	•	•	•	•	•	
5	<i>Acer saccharum</i>				•	•	•	•	•	•	•	•	•	•	•	•	•	
5	<i>Acer rubrum</i>				•	•	•	•	•	•	•	•	•	•	•	•	•	
5	<i>Fagus grandifolia</i>				•	•	•	•	•	•	•	•	•	•	•	•	•	
5	<i>Liquidambar styraciflua</i>				•	•	•	•	•	•	•	•	•	•	•	•	•	
5	<i>Prunus serotina</i>				•	•	•	•	•	•	•	•	•	•	•	•	•	
5	<i>Fragaria alnus</i>				•	•	•	•	•	•	•	•	•	•	•	•	•	
5	<i>Lindera benzoin</i>				•	•	•	•	•	•	•	•	•	•	•	•	•	
5	<i>Fraxinus pennsylvanica</i>				•	•	•	•	•	•	•	•	•	•	•	•	•	
5	<i>Tilia americana</i>				•	•	•	•	•	•	•	•	•	•	•	•	•	
6	<i>Acer saccharum</i>				•	•	•	•	•	•	•	•	•	•	•	•	•	
6	Standing dead				•	•	•	•	•	•	•	•	•	•	•	•	•	
6	<i>Acer rubrum</i>				•	•	•	•	•	•	•	•	•	•	•	•	•	
6	<i>Fagus grandifolia</i>				•	•	•	•	•	•	•	•	•	•	•	•	•	
6	<i>Quercus rubra</i>				•	•	•	•	•	•	•	•	•	•	•	•	•	
6	<i>Fraxinus sp.</i>				•	•	•	•	•	•	•	•	•	•	•	•	•	

DBH Measurement Rules



Woody Stem Deer Browse

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

Record using the tally system from 1 to 10



ASH CANOPY CONDITION

1. **Healthy, full canopy:** A healthy ash canopy is normally thinner than many other trees such as maple.
2. **Thinning canopy:** There aren't as many leaves as there ought to be, but all top branches exposed to sunlight have leaves.
3. **Dieback:** Canopy is thinning and some top branches exposed to sunlight are dead (have no leaves). Lower branches, not exposed to sunlight, die naturally and are not considered.
4. **>50% Dieback:** The canopy has less than half of the leaves that should be there and/or half of the top branches are dead.
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B

C

D

E

ASH CANOPY BREAKUP CONDITION (for dead trees):

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

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

CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet

Project Label: PCAP

Project Name: 01 Br 2013

Plot No.: 1313

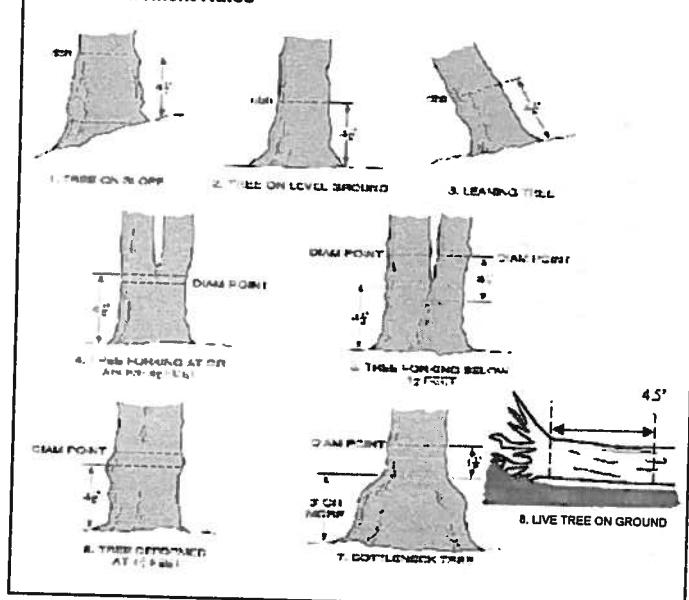
Page: 3 of 4

Cleveland Metroparks

Explain subsample (additional room on back):

mod #	species	c	voucher#	# stems browsed	% sub sample	# shrub clumps	size class (cm) woody stems >1.4m										11 >40 (record each tree)
							1	2	3	4	5	6	7	8	9	10	
6	<i>Viburnum dentatum</i>			0	0												
6	<i>Smilax rotundifolia</i>			0	0												
7	<i>Ostrya virginiana</i>			0	0												
7	Standing dead			0	0												
7	<i>Fagus grandifolia</i>			0	0												
7	<i>Acer saccharum</i>			0	0												
7	<i>Rubus serotina</i>			0	0												
7	<i>Smilax rotundifolia</i>			0	0												
8	<i>Fagus grandifolia</i>			0	0												
8	<i>Acer saccharum</i>			0	0												
8	<i>Quercus rubra</i>			0	0												
8	Standing dead			0	0												
8	<i>Acer rubrum</i>			0	0												
8	<i>Smilax rotundifolia</i>			0	0												
8	<i>Fraxinus sp.</i>			0	0												
8	<i>Fagus grandifolia</i>			0	0												
9	<i>Fagus grandifolia</i>			0	0												
9	<i>Acer saccharum</i>			0	0												
9	<i>Fraxinus rubra</i>			0	0												
9	<i>Ostrya virginiana</i>			0	0												
9	<i>Acer rubrum</i>			0	0												
9	Standing dead			0	0												
9	<i>Smilax rotundifolia</i>			0	0												
9	<i>Viburnum dentatum</i>			0	0												

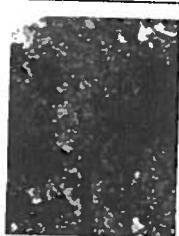
DBH Measurement Rules



Woody Stem Deer Browse

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

Record using the tally system from 1 to 10



ASH CANOPY CONDITIONS

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



A



ASH CANOPY BREAKUP CONDITIONS

ASH CANOPY BREAKUP CONDITION (for dead trees):
(if an ash receives a score of 5 (dead) under canopy condition It must also receive a breakup condition rank on described below)

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

CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet

Project Label: PCAP

Project Name: 01BS2013

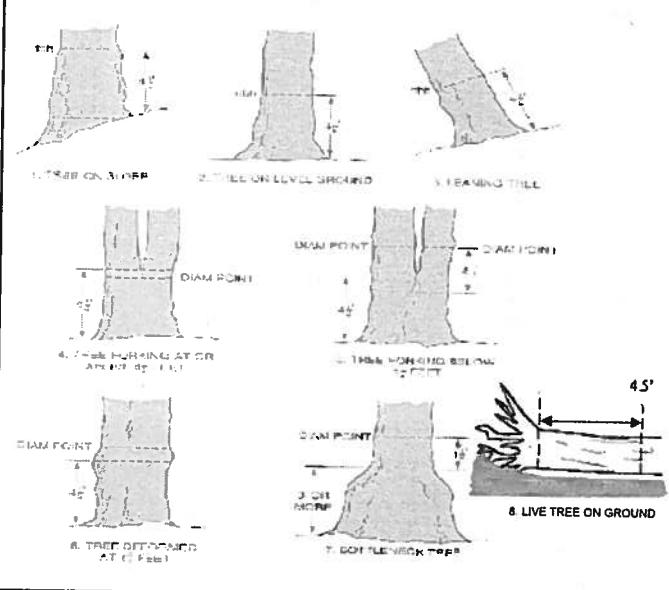
Plot No.: 1313

Page: 4 of 4
Cleveland Metroparks

Explain subsample (additional room on back):

mod #	species	c	voucher#	# stems 0-1.4m or super sample	# shrub clumps	size class (cm) woody stems >1.4m	# stems >1.4m 1 2 3 4 5 6 7 8 9 10 11										
							0-1	1-2.5	2.5-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	>40 (record each tree)
10	<i>Lindera benzoin</i>						•	•	•	•							
10	<i>Acer saccharum</i>						•	•	•	•							
10	<i>Prunus pensylvanica</i>						•	•	•	•							
10	<i>Frangula alnus</i>						•	•	•	•							
10	<i>Fagus grandifolia</i>						•	•	•	•							
10	<i>Spiraea alba</i>						•	•	•	•							
10	<i>Cephaelis occidentalis</i>						•	•	•	•							
3	<i>Magnolia denudata</i>						•	•	•	•							

DBH Measurement Rules



Woody Stem Deer Browse

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

Record using the tally system from 1 to 10



1



2



3



4



5

ASH CANOPY CONDITION

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



A

B

C

D

E

ASH CANOPY BREAKUP CONDITION (for dead trees):

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

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

CLEVELAND METROPARKS Emerald Ash Borer - *Fraxinus* Sheet

Project Label: PCAP

Project Name: 01 Br 2013

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

Page: 1 of 2

S10 = Management activities

Plot No.: 1313

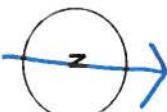
Date: 10/4/13

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

Baseline

S10 = Management activities

*** Change intensive module numbers when necessary

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

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

CLEVELAND METROPARKS Plant Community Assessment Program: Invasive Species Survey



Tier 1: Early detection/ Rapid response

Presence

GPS

NE SE SW NW

<i>Microstegium vimineum</i>	Japanese stiltgrass				
<i>Ranunculus ficaria</i>	Lesser Celandine				
<i>Cynanchum louiseae</i> (vine)	Black Swallow-wort				
<i>Butomus umbellatus</i> (wetland)	Flowering Rush				
<i>Heracleum mantegazzianum</i>	Giant Hogweed				

Presence

X: yes

Tier 2: Assess as Needed

of Plants

comments

NE SE SW NW

<i>Acer platanoides</i>	Norway Maple	1			
<i>Ailanthus altissima</i>	Tree of Heaven				
<i>Lonicera japonica</i> (vine)	Japanese Honeysuckle				
<i>Lythrum salicaria</i> (wetland)	Purple Loosestrife				
<i>Aegopodium podagraria</i> (G-cover)	Bishop's Goutweed				
<i>Celastrus orbiculatus</i> (vine)	Asian Bittersweet				
<i>Torilis</i> sp.	Hedgeparsley				
<i>Conium maculatum</i>	Poison Hemlock				
<i>Rhamnus cathartica</i>	Common Buckthorn (shrub)	1			
<i>Berberis thunbergii</i>	Japanese Barberry (shrub)	2	1		
<i>Alnus glutinosa</i>	European Alder				
<i>Dipsacus laciniatus</i>	Cut-leaf Teasel				
<i>Elaeagnus umbellata</i>	Autumn Olive (shrub)				
<i>Lonicera maackii</i>	Amur Honeysuckle (shrub)				
<i>Euonymus fortunei</i>	Wintercreeper				

of Plants

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

Tier 3: Presence is of Interest

of Plants

comments

NE SE SW NW

<i>Convallaria majalis</i> (G-cover)	Lily of the Valley				
<i>Coronilla varia</i> (G-cover)	Crown Vetch				
<i>Eleutherococcus pentaphyllus</i>	Five-leaf Aralia (shrub)				
<i>Pachysandra terminalis</i> (G-cover)	Japanese Pachysandra				
<i>Philadelphus coronarius</i>	Mock Orange (shrub)				
<i>Pulmonaria officinalis</i> (G-cover)	Lungwort				
<i>Rubus phoenicolasius</i>	Wineberry				
<i>Iris pseudacorus</i> (wetland)	Yellow Flag Iris				
<i>Ornithogalum umbellatum</i>	Star of Bethlehem				
<i>Viburnum opulus</i> var. <i>opulus</i>	European Cranberry (shrub)				
<i>Viburnum plicatum</i>	Doublefile Viburnum (shrub)				

of Plants

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

Tier 4: Widespread and abundant

Presence

comments

NE SE SW NW

<i>Alliaria petiolata</i>	Garlic Mustard	2	2	3	2
<i>Ligustrum vulgare</i>	Common Privet (shrub)				
<i>L. morrowii</i> , <i>L. tatarica</i>	Bush Honeysuckles (shrub)				
<i>Phalaris arundinacea</i>	Reed Canarygrass				
<i>Phragmites australis</i> (wetland)	Phragmites				
<i>Polygonum cuspidatum</i>	Japanese Knotweed				
<i>Frangula alnus</i>	Glossy Buckthorn (shrub)	2	1	3	2
<i>Rosa multiflora</i>	Multiflora Rose (shrub)	2	1	3	2
<i>Typha angustifolia</i> , <i>T. x. glauca</i>	Cattails (wetland)				
<i>Cirsium arvense</i>	Canada thistle				
<i>Dipsacus fullonum</i>	Common Teasel				
<i>Hesperis matronalis</i>	Dame's Rocket				
<i>Vinca minor</i> (G-cover)	Periwinkle				

of Plants

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

COVER BY STRATA

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

*Very tall shrubs are sometimes included in the tree stratum
**Can also include seedlings of shrubs, i.e. all shrubs <0.5m
***Tree seedlings are often defined as up to 1.4 m height or as <2.5 cm DBH in which case they would span the herb and shrub layers.

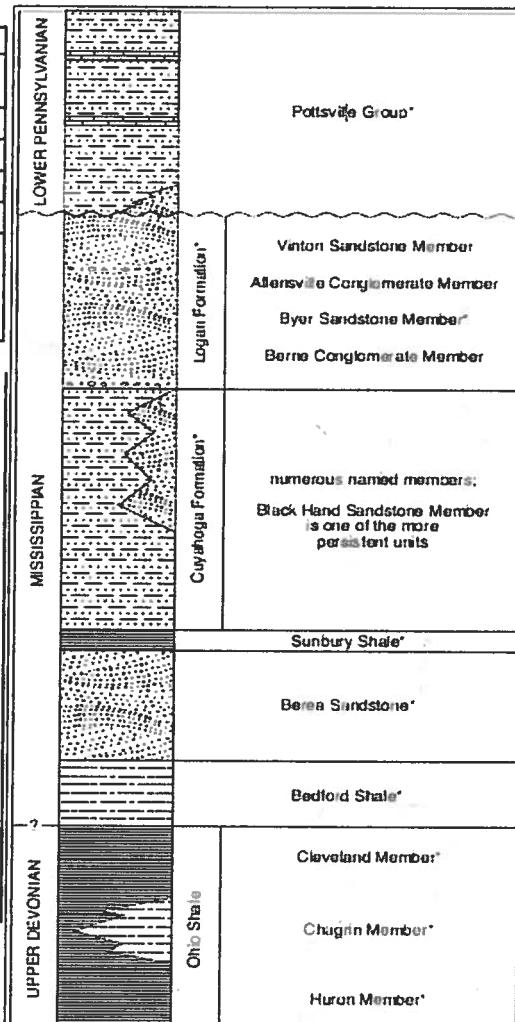
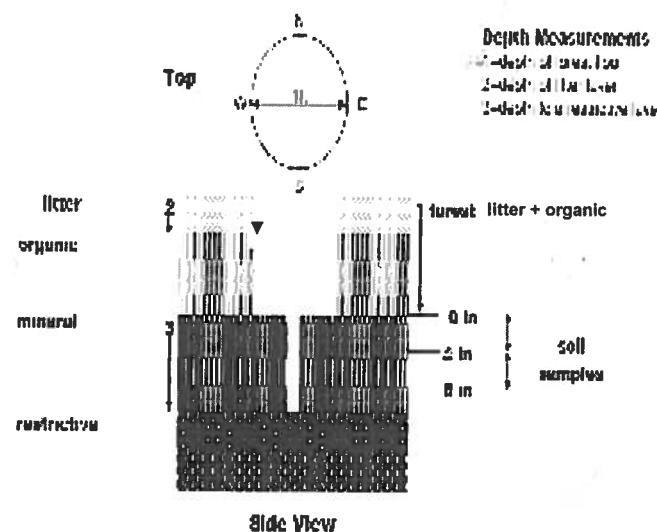


FIGURE 3-20.—Generalized section of Upper Devonian, Mississippian, and Lower Pennsylvanian formations in northeastern Ohio. Asterisks indicate units that are fossiliferous. This composite section represents about 400 meters of rock exposed across the area. The section is not to scale, but the thicknesses indicated are proportional. The term "Wavy" is used in the older literature to refer to Mississippian rocks in Ohio. Some geologists use the European term "Carboniferous," which encompasses the Mississippian and Pennsylvanian Periods of the U.S. Many units have been named within the Cuyahoga Formation, but most units are local and cannot be traced over great distances. The Black Hand Member is a spectacular massive sandstone that is fairly widespread but discontinuous. See Hyde (1953), Hoover (1960), and Collins (1979) for more information on Mississippian rocks in Ohio. See Figure 3-16 for explanation of rock types.



SOIL PIT DESCRIPTION: Excavate 20 cm plug w/ shovel. Describe using Munsell chart, visual exam, texture, and odor.

Soil pit module # <u>2</u> (one per entire plot) ✓	
5 cm	matrix color <u>2.5 YR 4/2</u>
mottle color	<u>N/A</u>
%smolte	<u>0</u>
oxid roots	<u>Y</u> (N)
texture*	<u>2</u>
redox features**	<u>Y</u> (N)
hydr cond ***	<u>1</u> (D)
20 cm	matrix color <u>2.5 YR 5/3</u>
mottle color	<u>N/A</u>
%smolte	<u>0</u>
oxid roots	<u>Y</u> (N)
texture*	<u>2</u>
redox features**	<u>Y</u> (N)
hydro. cond ***	<u>1</u> (D)

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

Soil Collection Module	Horizon (A, B, C)
2,3,8,9 composted	A
Soil Series/Type:	<u>RSB Rithmense loam</u>
Soil Series Source:	Ohio Soil Survey
Landform type:	<u>Depressions on hilltops</u>
Depth to rest. Layer:	<u>More than 80 in.</u>
Parent Material:	<u>R.11</u>
Drainage:	<u>Very poor</u>
Excessively dr.	<input type="checkbox"/> Somewhat excessively
Well drained	<input checked="" type="checkbox"/> Moderately well dr.
Somewhat poorly dr.	<input type="checkbox"/> Very poorly dr.
Impenetrable surface	<input type="checkbox"/>

RC 6/20

* refer to texture classes on reverse side
 ** e.g. hydrogen sulfide odor, gleying, etc.
 *** Circle one:
 I=Inundated S=saturated M=moist D=dry

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

Strata	Height Range (in)	Total Cover (%)
Tree	<u>5</u> - <u>5</u>	<u>88%</u>
Shrub	<u>5</u> - <u>5</u>	<u>18%</u>
Herb (Floating)*	<u>0.5</u> - <u>0.5</u>	<u>8%</u>

Notes: include evidence of earthworms (worms, castings, middens)

Midens, worms
Present
 (Worms (6) were
 Present in the hole,
 Not above ground)

EARTH SURFACE & GROUND COVER	
Underlying Earth Surface*	Ground Cover
(Sum = 100%)	percent (Each ≤ 100%)
Histosol	<u>0</u> Coarse Woody Debris***
Mineral Soil	<u>100</u> Fine Woody Debris****
Gravel-Cobble*	<u>0</u> Litter
Boulder**	<u>0</u> Duff (Fern + Humus)
Bedrock	<u>0</u> Bryophyte-Lichen
* Gravel-Cobble = 1/16-1"	Water <u>5%</u>
**Boulder = > 10 in	<u>1%</u>
*** >5 cm in diameter	<u>0%</u>
**** <5 cm in diameter	<u>0%</u>
Other	<u>0%</u>

STAND SIZE		
Strata	Height Range (in)	
Tree	<u>5</u> - <u>5</u>	<u>88%</u>
Shrub	<u>5</u> - <u>5</u>	<u>18%</u>
Herb (Floating)*	<u>0.5</u> - <u>0.5</u>	<u>8%</u>

> 600 x plot size
 > 100 x plot size
 10-100 x plot size
 3-10 x plot size
 1-3 x plot size
 < plot size

COVER BY STRATA
 estimate using midpoints of 5,6,7,8,13 %

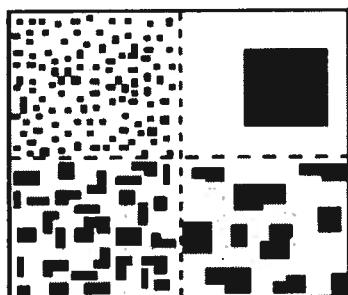
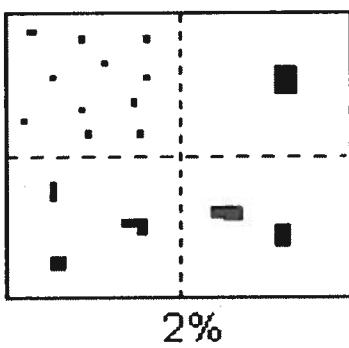
Strata	Height Range (in)	Total Cover (%)
Tree	<u>5</u> - <u>5</u>	<u>88%</u>
Shrub	<u>5</u> - <u>5</u>	<u>18%</u>
Herb (Floating)*	<u>0.5</u> - <u>0.5</u>	<u>8%</u>

> 600 x plot size
 > 100 x plot size
 10-100 x plot size
 3-10 x plot size
 1-3 x plot size
 < plot size

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

PERCENT MOTTLES (USE CLASS CODES):

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



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

0= Organic

1= Loamy

2= Clayey

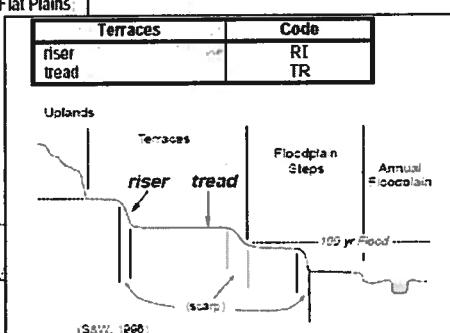
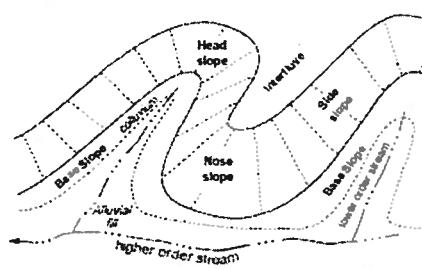
3= Sandy

4= Coarse Sand

9= Not measured - make plot note

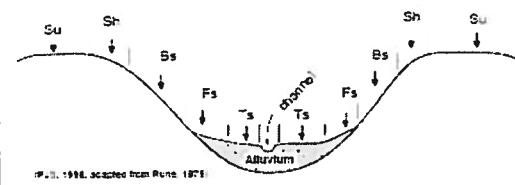
Geomorphic Component - Three-dimensional descriptors of parts of landforms or microfeatures that are best applied to areas. Unique descriptors are available for Hills, Terraces, Mountains, and Flat Plains, e.g., (for Hills) nose slope or NS.

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



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

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



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

UPLAND: Not a wetland. Very rarely flooded.

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

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

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

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

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

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

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

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

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial): _____

Site ID: 01 Br 2013 - Plot # 1313

DATE: 06/14/2013

Location:

AA Center ON OS OE OW

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

 Plot 1 Plot 2 Plot 3

Buffer Natural Cover Strata

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

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

Buffer Plot 1	Canopy Type: <input type="radio"/> D <input type="radio"/> L		Absent: <input type="radio"/> 0		Buffer Plot 2	Canopy Type: <input type="radio"/> D <input type="radio"/> E		Absent: <input type="radio"/> 0		Buffer Plot 3	Canopy Type: <input type="radio"/> D <input type="radio"/> E		Absent: <input type="radio"/> 0		
	Leaf Type: <input type="radio"/> B <input type="radio"/> N		Flag			Leaf Type: <input type="radio"/> B <input type="radio"/> N		Flag			Leaf Type: <input type="radio"/> B <input type="radio"/> N		Flag		
Big Trees (>0.3m DBH)	<input type="radio"/> 0	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<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 checked="" type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<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 type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<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"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<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 checked="" type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<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"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
Litter, duff	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<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"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<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"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<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"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<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"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0
Road - two lane	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0
Road - four lane	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0
Parking Lot/Pavement	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0
Golf Course	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0
Lawn/Park	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0
Suburban Residential	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0
Urban/Multifamily	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0
Landfill	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0
Dumping	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0
Trash	<input checked="" type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0
Other: _____	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0
Other: _____	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0

Industrial Development Stressors				Habitat/Vegetation Stressors											
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	
Oil Drilling	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0
Gas Wells	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0
Mine (surface)	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0
Mine (underground)	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0
Military	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 0	<input checked="" type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0
Other: _____	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0
Other: _____	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0
Other: _____	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 0

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

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

2428168304

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

Reviewed by (initials):

Site ID: 01 Br 2013 - Plot #1313 DATE: 06/14/2013

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

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

PLOT COORDINATES

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

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

Location of coordinates (choose one):

Flag

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

Latitude North 41 30.190 Longitude West 81 66.837
Use Decimal Degrees: NAD83

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial): _____

Site ID: 01 Br 2013 - Plot # 1313

DATE: 06/14/2013

Location:

O AA Center N OS OE OW

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

O Plot 1 O Plot 2 O Plot 3

Buffer Natural Cover Strata

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

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

Stressor Presence/Absence - Confirm that a filled data bubble indicates presence and an unfilled bubble indicates absence by filling this bubble. 0

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

Habitat/Vegetation Stressors

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

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

2428168304

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

Reviewed by (In-Hall):

Site ID: 01 Br 2013 - Plot #1313

DATE: 06/14/2013

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

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

PLOT COORDINATES

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

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

Location of coordinates (choose one):

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

Flag

Latitude North 41.30241

Longitude West

8166828

Use Decimal Degrees: NAD83

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (initial): _____

DATE: 06/14/2013

Site ID: 01 Br 2013 - Plot # 1313

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

Location:

O AA Center O N O S O E O W

O Plot 1 O Plot 2 O Plot 3

Buffer Natural Cover Strata

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

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

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

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

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

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

2428168304

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

Reviewed by (initials):

Site ID: 01 Br 2013 - Plot # 1313

DATE: 06 / 14 / 2013

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

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

PLOT COORDINATES

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

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

Location of coordinates (choose one):

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

Latitude North 41 30.178 Longitude West 81 66.673
Use Decimal Degrees: NAD83

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initials): _____

Site ID: 01 Br 2013 - Plot #1313

DATE: 06/14/2013

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

3

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

O Plot 1 O Plot 2 ● Plot 3

Buffer Natural Cover Strata

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

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

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

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

Habitat/Vegetation Stressors

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

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

2428168304

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

Reviewed by (Initial): _____

Site ID: 01 Br 2013- Site #1313

DATE: 06/14/2013

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

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

PLOT COORDINATES

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

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

Location of coordinates (choose one):

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

Flag

2

Latitude North

41.30127

Longitude West

81.66830

Use Decimal Degrees; NAD83

Flag	Comments
1	Plot 2 falls on the edge of Seneca G.C.
2	Point was taken at South buffer plot 2 (as close to the golf course as possible)
3	Plot 3 falls on Seneca G.C. This plot was not able to be safely sampled due to golf course activity.

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial): _____

Site ID: A1 Br 2013 - Plot #1313

DATE: 06/14/2013

Location:

O AA Center O N O S O E O W

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

Buffer Natural Cover Strata

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

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

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

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

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

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

2428168304

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

Reviewed by (initials):

Site ID: 01 Br 2013 - Plot #1313

DATE: 06/14/2013

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

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

PLOT COORDINATES

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

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

Location of coordinates (choose one):

Flag

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

Latitude North 41.30198

Longitude West

81.66967

Use Decimal Degrees: NAD83