

CLEVELAND METROPARKS Plant Community Assessment Program: Quality Control Form



Project Label:

PCAP

Plot No: 1380

Date Sampled: 8/13/13 Lead: J. Miller

		Comment required if item answer is NO	
		If yes, write details in Comments section below	
Parking/Access outside of Park Boundaries.		Y	(N)
Field journals completed		<input checked="" type="radio"/>	N
Site sketch made on 1:3000 map?		<input checked="" type="radio"/>	N
Check cover page	X-axis Bearing of plot recorded	<input checked="" type="radio"/>	N
	GPS coords Recorded	<input checked="" type="radio"/>	N
	North direction recorded	<input checked="" type="radio"/>	N
	Photographs taken?	<input checked="" type="radio"/>	N
Plot No., Date agreement on all pages?		<input checked="" type="radio"/>	N
Header data completed all pages?		<input checked="" type="radio"/>	N
Cover classes recorded in all Intensive modules		<input checked="" type="radio"/>	N
Browse Level By Species		<input checked="" type="radio"/>	N
Woody stem quality control check		<input checked="" type="radio"/>	N
Invasive plant quality control check		<input checked="" type="radio"/>	N
Ash trees mapped		<input checked="" type="radio"/>	N
Cover by Strata? (confirm cover type)		<input checked="" type="radio"/>	N
Soil samples collected with matching plot #.		<input checked="" type="radio"/>	N
Vouchers labeled on datasheet with initials and number		<input checked="" type="radio"/>	N
Vouchers labeled on collection bag		<input checked="" type="radio"/>	N
Pink flags removed		<input checked="" type="radio"/>	N
Data sheet QA before leaving site?		<input checked="" type="radio"/>	N
Common equipment returned to tub.		<input checked="" type="radio"/>	N
Data sheets scanned?		CL 8-16-13 Enter date to left	
Final data sheets scanned?		Enter date to left	
Buffer Widths measured?		<input checked="" type="radio"/>	N CL 8-16-13
Web Soil Survey		<input checked="" type="radio"/>	N
Voucher Location (# vouchers collected) JAM 214 211	Refrigerator	<input checked="" type="radio"/>	N
	Press (#)	Enter number to left	
	Drier	Y	N
	Identified	Y	N
	Mounted	Y	N
	Thrown away	Y	N

GRTS point verification: Is plot sampleable?

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

Additional Comments:



CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet

Project Label: PCAP Project Name: 01 NC 2013

Plot No.: 1380

Page 2 of 2

Glacialland/Marshland

MODIFIED NATUREERVE CLASS*	Fit=	Conf=
CODE (on separate form): D		

COMMUNITY NAME:

Mixed

HOMOGENEITY

- Homogeneous
- Compositional trend across the plot

Conspicuous inclusions

- Irregular/pattern mosaic

HYDROLOGIC REGIME*

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

(by default unless plot is a wetland)

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

In the shrub layer, with smaller Fragaria, Rubus, Sugar maple, Vitis and Ligustrum. Cinna was the dominant grass in the "shrub layer". Several different grasses & sedges, hydrophytic plants like Boraginaceae and Impatiens.

**L=low, M=med low, M=med, MH=med high, H=high, VH=very high
Current Land Use:
Former Land Use:

DISTURBANCES

type*	severity**	yrs ago	% of plot	description
Human	M	>1	100%	Volvo 3k
Natural	M	0	30%	Flodding
Fire				
Cut				
Animal	M	0	100%	deer trail, deer house
Other				

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

Project Label: PCAP		Plot No.: 1380										
Project Name: 01 NC 2013		Page 2 of 2										
<p>SALINITY*</p> <ul style="list-style-type: none"> <input type="checkbox"/> Saltwater <input type="checkbox"/> Brackish <input checked="" type="checkbox"/> Fresh <input type="checkbox"/> Upland (n/a) 												
<p>HYDROLOGIC REGIME*</p> <table border="1"> <tbody> <tr> <td><input type="checkbox"/> Upland (seldom flooded)</td> <td><input type="checkbox"/> Intermittently flooded</td> </tr> <tr> <td><input type="checkbox"/> Intermittently/seasonally saturated (seldom flooded)</td> <td><input type="checkbox"/> Semipermanently flooded</td> </tr> <tr> <td><input type="checkbox"/> Permanently/Semipermanent saturated (dry <1/yr, seldom flooded)</td> <td><input type="checkbox"/> Permanently flooded</td> </tr> <tr> <td><input checked="" type="checkbox"/> Occasionally flooded (<1/yr)</td> <td><input type="checkbox"/> Tidal/Seiche flooded monthly (e.g. wind, storms)</td> </tr> <tr> <td><input type="checkbox"/> Temporarily flooded</td> <td><input type="checkbox"/> Unknown</td> </tr> </tbody> </table>			<input type="checkbox"/> Upland (seldom flooded)	<input type="checkbox"/> Intermittently flooded	<input type="checkbox"/> Intermittently/seasonally saturated (seldom flooded)	<input type="checkbox"/> Semipermanently flooded	<input type="checkbox"/> Permanently/Semipermanent saturated (dry <1/yr, seldom flooded)	<input type="checkbox"/> Permanently flooded	<input checked="" type="checkbox"/> Occasionally flooded (<1/yr)	<input type="checkbox"/> Tidal/Seiche flooded monthly (e.g. wind, storms)	<input type="checkbox"/> Temporarily flooded	<input type="checkbox"/> Unknown
<input type="checkbox"/> Upland (seldom flooded)	<input type="checkbox"/> Intermittently flooded											
<input type="checkbox"/> Intermittently/seasonally saturated (seldom flooded)	<input type="checkbox"/> Semipermanently flooded											
<input type="checkbox"/> Permanently/Semipermanent saturated (dry <1/yr, seldom flooded)	<input type="checkbox"/> Permanently flooded											
<input checked="" type="checkbox"/> Occasionally flooded (<1/yr)	<input type="checkbox"/> Tidal/Seiche flooded monthly (e.g. wind, storms)											
<input type="checkbox"/> Temporarily flooded	<input type="checkbox"/> Unknown											
<p>(by default unless plot is a wetland)</p> <p>Additional notes & diagrams: (Representativeness of plot to the stand, successional status, maturity, etc.)</p> <p>In the shrub layer, with smaller <u>Fragaria</u>, <u>Rubus</u>, <u>Sugar maple</u>, <u>Vitis</u> and <u>Ligustrum</u>. <u>Cinna</u> was the dominant grass in the "shrub layer". Several different grasses & sedges, hydrophytic plants like <u>Boraginaceae</u> and <u>Impatiens</u>.</p>												

CLEVELAND METROPARKS Plant Community Assessment Report

Project Label

PCAP

Program Species Cover Data Sheet 2a

Page 1 of 4

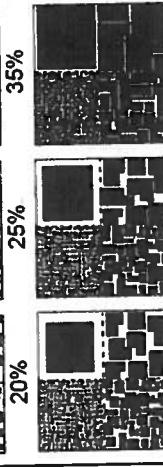
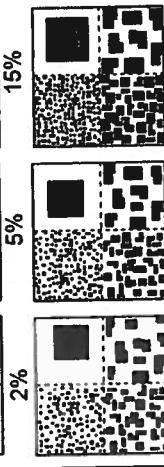
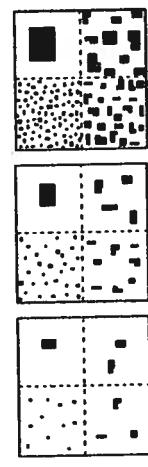
ପ୍ରତିକାଳିକ

5

卷之三

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.



20% 50%

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

BROWSE RATING NARRATIVE DESCRIPTION

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

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

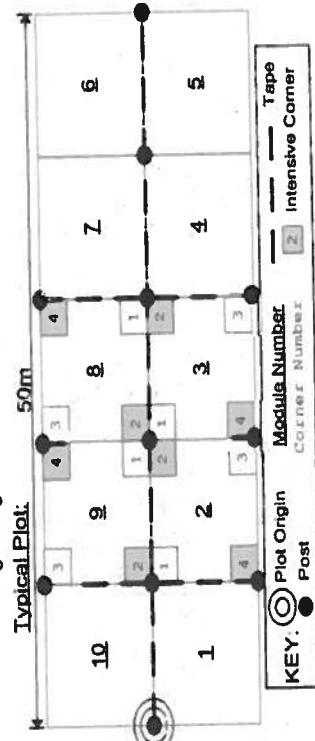
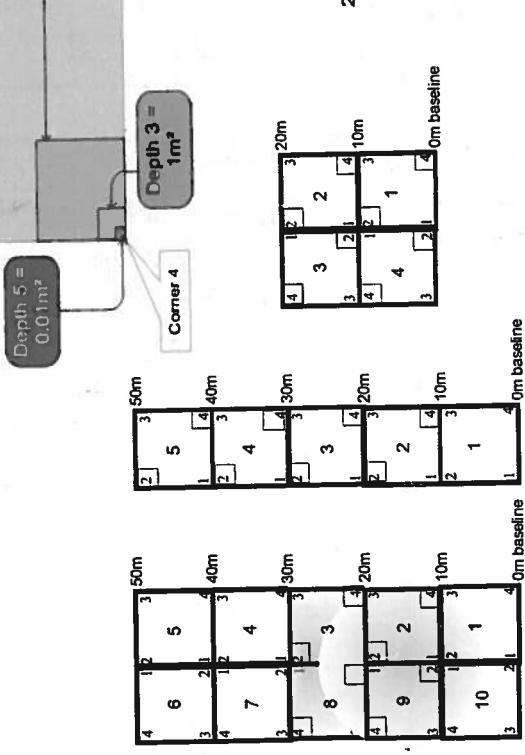
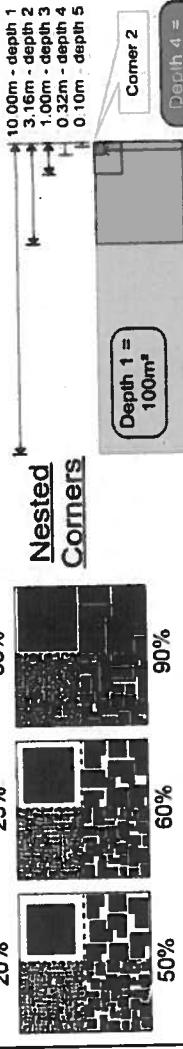
MEDIUM: browse affects greater than 10 percent and less than 25 percent of stems in the 1 m² nested quadrat and intensive module. A browse line is usually not evident or obvious for all classes and species of vegetation, but careful examination may show preferential browse and/or browse lines for some 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 23

Project Label: PCAP

Project name: O Nc 201

Plot no.: i380

Page 2 of 4

Total modules:

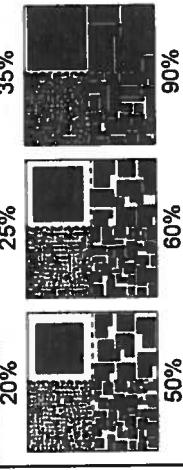
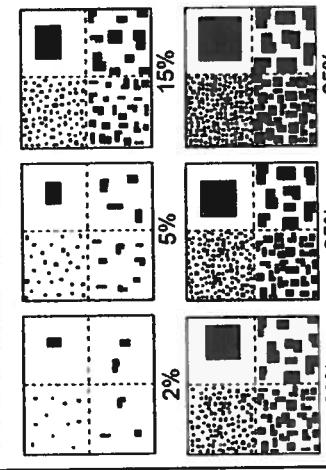
10

Intensive modules: 4 **Plot configuration:** 2

Plot area (ha): 0.1

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.

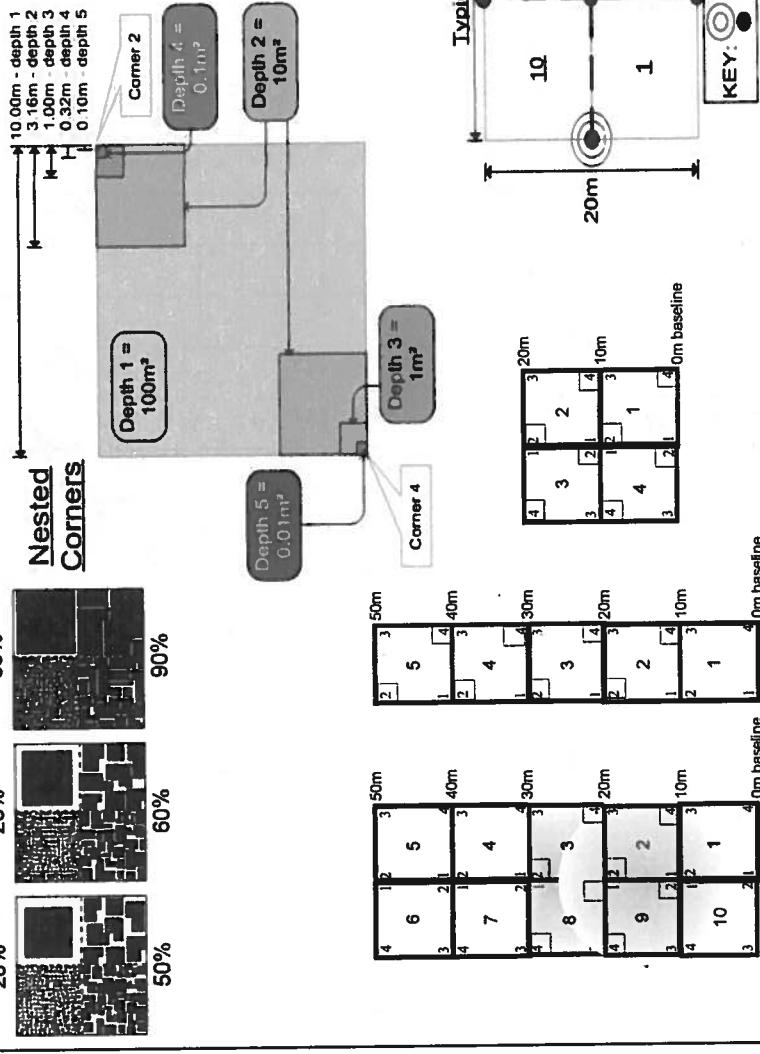
MEDIUM: browse affects greater than 10 percent and less than 25 percent of stems in the 1 m² nested quadrat and intensive module. A browse line is usually not evident or obvious for all classes and species of vegetation, but careful examination may show preferential browse and/or browse lines for some 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.

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



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

Project Label: PCAP

Project name: 01 NC 2013

Page 3 of 4

Total modules: 16

Intensive modules: 4 Plot configuration: 2x5

Plot area (ha): 0.1



Cleveland
Metroparks

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

Estimate for each
intensive module:

mod	corner	mod	corner	mod	corner	mod	corner	mod	corner	mod	corner	mod	corner	mod	corner
depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
%unvegetated open water															
%unveg. ground (bare soil)	1														
%unveg. litter (bare litter)	1														

Strata - Cov. entire plot

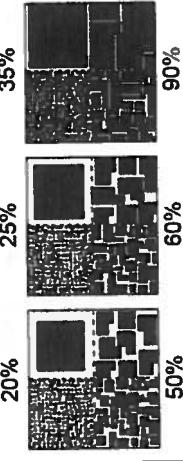
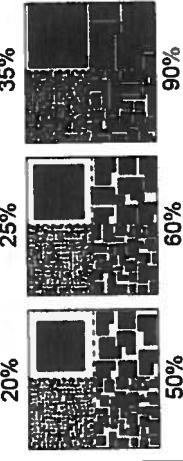
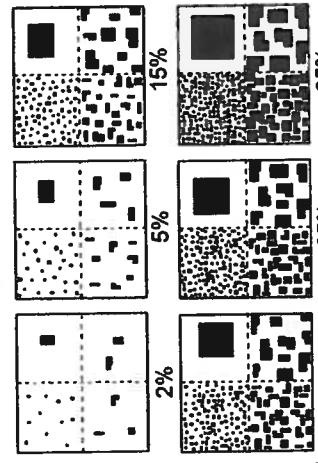
T	S	H	(F)	(A)	Br	Species	C	Voucher #	depth	cov	depth	cov	depth	cov	depth	cov
1	1					Ulmus dir 2	Erythronium	C3-1648								
1	1					Rhus spp.	Juncus glauca	SKE 10-30-13								
1	1					Juncus spp.	Juncus tenuis	Sistrurus sp. sp. regalis								
2	2					Calostoma arborescens	Calostoma arborescens	X	JAM 219							
1	1					Timonella cordifolia	Timonella cordifolia		3	2						
1	1					Grevillea spp.	Grevillea spp.				2	1				
2	2					Rubus pensylvanicus	Rubus pensylvanicus				3	1				
1	1					Imperati capensis	Imperati capensis				2	2				
1	1					Ulk. dict 3	Ulk. dict 3				1	1				
1	1					Prunella vulgaris	Prunella vulgaris				1	1				
1	1					Mitchella repens	Mitchella repens	diplylla spp.	diplylla spp.	Seta 24-13						
1	1					Anemone canadensis	Anemone canadensis				1	2				
1	1					Crataegus spp.	Crataegus spp.				2	1				
1	1					Pilea pumila	Pilea pumila									
2	2					Solanum dulcamara	Solanum dulcamara									
2	2					Ranunculus repens	Ranunculus repens									
1	1					Laurus ocellata	Laurus ocellata									
2	2					Gramine canadense	Gramine canadense									
2	2					Oxalis spp.	Oxalis spp.									
1	1					Berberis thunbergii	Berberis thunbergii									
1	1					Vaccinium ditector	Vaccinium ditector									
1	1					Rumex spiculifolius	Rumex spiculifolius									
1	1					Geum menziesii	Geum menziesii	Linaria reticulata								
1	1					Aneurina monilia	Aneurina monilia	Thalictrum virginicum								
1	1					Polygonum perfoliatum	Polygonum perfoliatum									
1	1					Agrostis gigantea	Agrostis gigantea									

2aCM PCAP Species Cover Data sheet Page 1 of x_ver 3.xls last revised 5/29/2012 oeh

SKE 11-12-13

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.

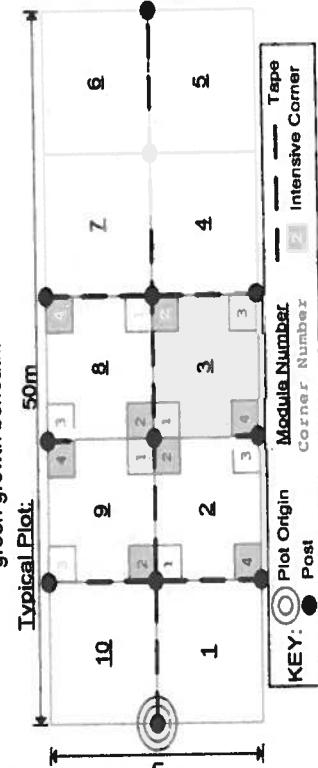
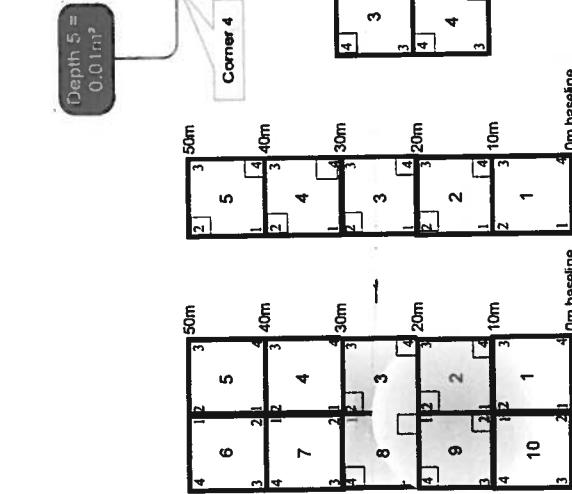
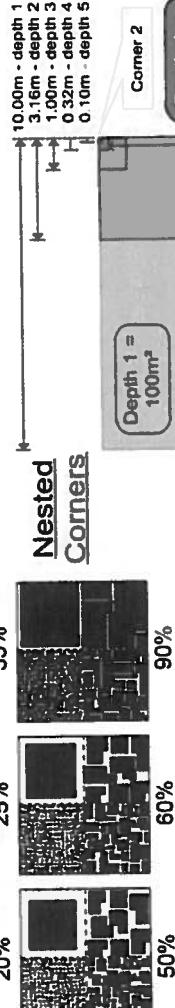
MEDIUM HIGH values include evidence of a browse line and 25 percent of stems browsed with very little vegetation regeneration evident. In this rating, for some species of plants, reproduction does not appear to occur or it is very severely limited.

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.

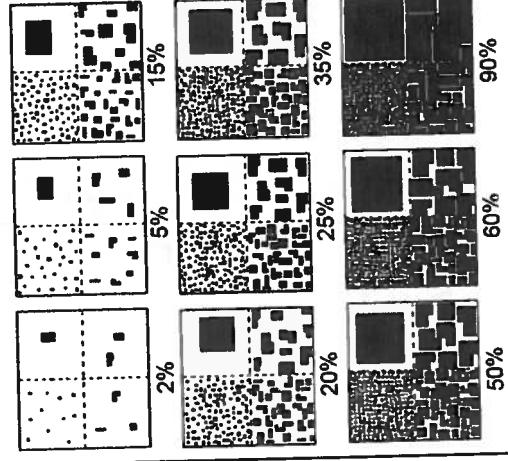
Browse line may be 5 to 6 feet in height with no or little green growth beneath.

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



EXAMPLES OF PERCENT OF AREA COVERED

The following graphic can be used for various data elements to convey "Amount" or "Quantity". NOTE: Within any open 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.

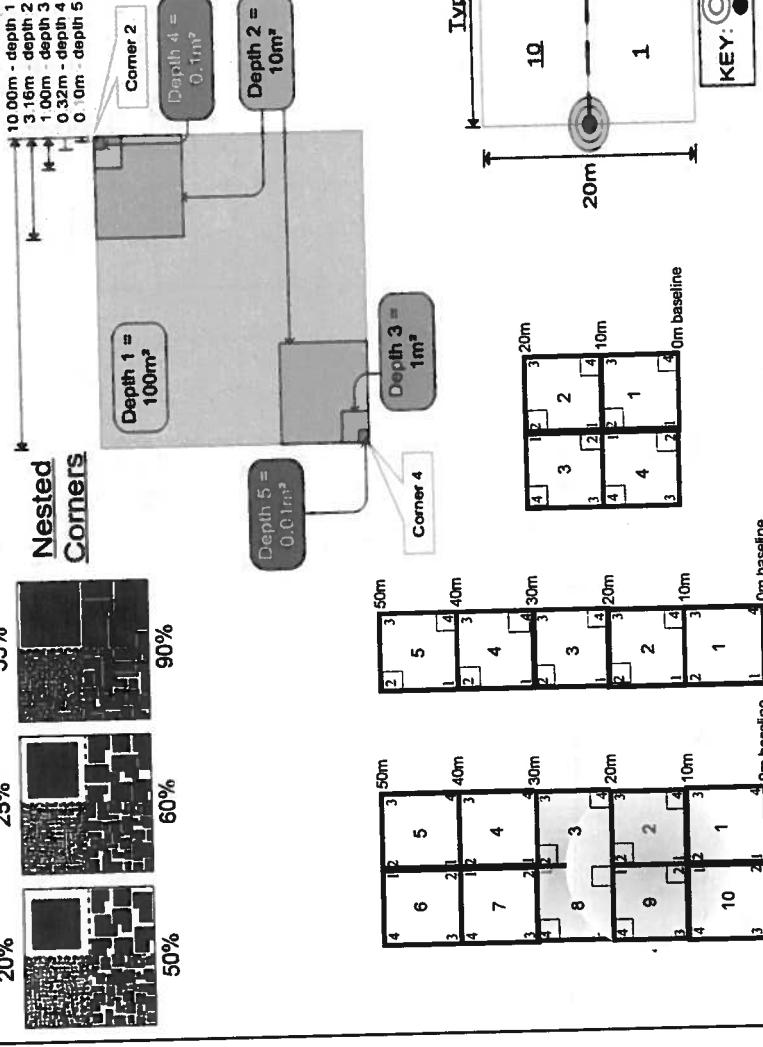
MEDIUM: browse affects greater than 10 percent and less than 25 percent of stems in the 1 m² nested quadrat and intensive module. A browse line is usually not evident or obvious for all classes and species of vegetation, but careful examination may show preferential browse and/or browse lines for some 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.

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



CLEVELAND METROPARKS Plant Community Assessment Program

Project Label: PCAP

Project Name: O1NC2013

Natural Woody Stem Data Sheet

Plot No.: 1380

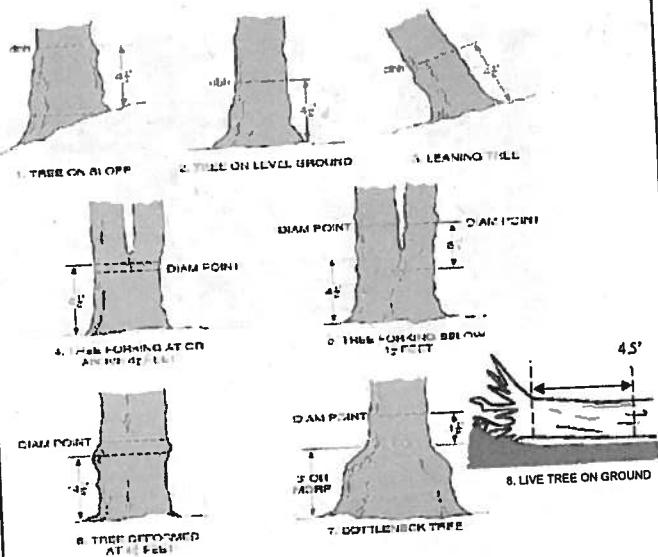
Page: 1 of 4

© Cleveland Metroparks

Explain subsample (additional room on back):

mod #	species	c	voucher#	# stems 0-1.4m browsed	% sub shrub sample	# shrub clumps	size class (cm) woody stems > 1.4m										>40 (record each tree)
							1	2	3	4	5	6	7	8	9	10	
1	<i>Rosa multiflora</i>			50	50	50											
1	<i>Lindera benzoin</i>																
1	<i>Fraxinus pennsylvanica</i>			50	50	50											
1	<i>Bixa orellana</i>																
1	<i>Pyrus sp.</i>																
1	<i>Acer saccharum</i>																
1	<i>Acer rubrum</i>																
1	<i>Ulmus americana</i>																
1	<i>Ligustrum vulgare</i>																
1	<i>Fraxinus sp.</i>			50	50	50											
2	<i>Lindera benzoin</i>																
2	<i>Rosa multiflora</i>			50	50	50											
2	<i>Acer saccharum</i>																
2	<i>Ligustrum vulgare</i>			50	50	50											
2	<i>Acer rubrum</i>																
2	Standing dead																
2	<i>Ulmus americana</i>																
2	<i>Fraxinus pennsylvanica</i>			50	50	50											
3	<i>Lindera benzoin</i>																
3	<i>Ulmus americana</i>																
3	<i>Fagus grandifolia</i>			50	50	50											
3	<i>Acer saccharum</i>																
3	<i>Fraxinus pennsylvanica</i>			50	50	50											
3	<i>Ligustrum vulgare</i>			50	50	50											
																	40.3

DBH Measurement Rules



Woody Stem Deer Browse

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

Record using the tally system from 1 to 10



1

2

3

4

5

ASH CANOPY CONDITION

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



A

B

C

D

E

ASH CANOPY BREAKUP CONDITION (for dead trees):

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

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

CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet

Project Label: PCAP

Project Name: OLINCO 13

Plot No.: 1380

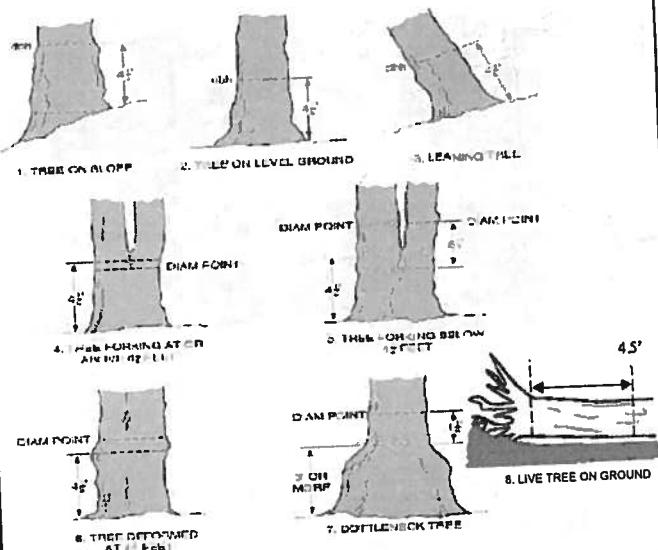
Page: 2

of 5

mod #	species	c	voucher#	# stems 0-1.4m browsed	% sub shrub sample	# clumps	size class (cm) woody stems >1.4m										
							1	2	3	4	5	6	7	8	9	10	11
3	S T windmg dead						0										
3	R ROSA MULTIFLORA			;;			0										
3	Cacyca cordifolia						0										
3	O Pinus strobus						0										
3	L Liriodendron tulipifera						0										
4	L Lindera benzoin						0										
4	R ROSA Multiflora			..			1:										
4	A Acer saccharum						00										
4	L Liriodendron tulipifera						00										
4	S Standing dead						00	00	00								
4	U Ulmus americana						0	0	0	0	0	0	0	0	0	0	0
4	P Prunus pensylvanica						0	0	0	0	0	0	0	0	0	0	0
4	B Betula Thunbergii						0	0	0	0	0	0	0	0	0	0	0
4	C Crataegus sp.						0	0	0	0	0	0	0	0	0	0	0
5	S Standing dead						0	0	0	0	0	0	0	0	0	0	0
5	L Lindera benzoin						00	X	0	0	0	0	0	0	0	0	0
5	A Acer saccharum						0	0	0	0	0	0	0	0	0	0	0
5	L Liriodendron tulipifera			00			00	00	00	00	00	00	00	00	00	00	00
5	L LIGUSTIUM vulgare			00			00	00	00	00	00	00	00	00	00	00	00
5	R ROSA Multiflora			00			00	00	00	00	00	00	00	00	00	00	00
5	F Fagus grandifolia						0	0	0	0	0	0	0	0	0	0	0
5	A Acer rubrum						0	0	0	0	0	0	0	0	0	0	0
5	B BERBERIS THUNBERGII						0	0	0	0	0	0	0	0	0	0	0
5	U Ulmus americana						0	0	0	0	0	0	0	0	0	0	0

68.8, 81.8

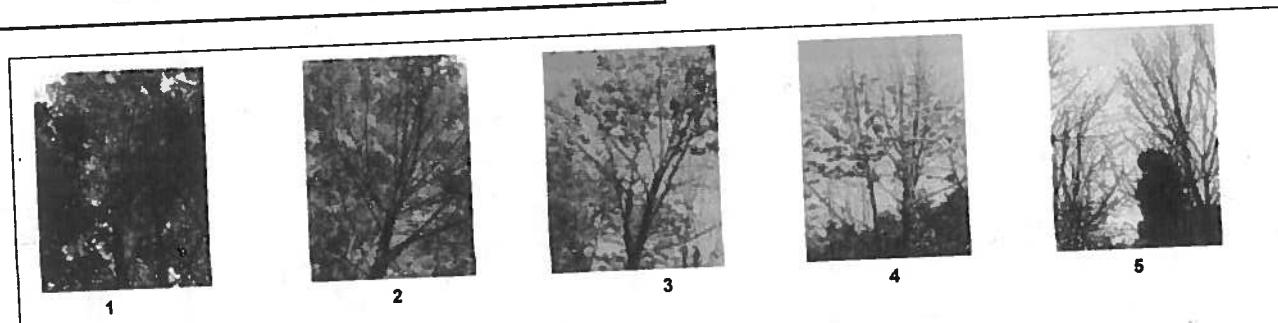
DBH Measurement Rules



Woody Stem Deer Browse

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

Record using the tally system from 1 to 10



ASH CANOPY CONDITION

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



A



B



C



D



E

ASH CANOPY BREAKUP CONDITION (for dead trees):

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

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

Cleveland Metroparks Plant Community Assessment Program Natural Woody Stem Data Sheet

Project Label: PCAP

Project Name: 01NC2013

Plot No.: 1380

Page: 3 of 4

© Cleveland Metroparks

Explain subsample (additional room on back):

mod #	species	c	voucher#	# stems 0-1.4m browsed	% sub or super sample	# shrub clumps	size class (cm) woody stems >1.4m										>40 (record each tree)
							1	2	3	4	5	6	7	8	9	10	
5	<i>Fraxinus pennsylvanica</i>			12			1										
6	<i>Prunus serotina</i>							1									
6	<i>Acer subspicatum</i>							1									
6	<i>Cinnaea benzoin</i>							1									
6	<i>ROSA multiflora</i>			00				1									
6	<i>Acer saccharum</i>						00										
6	<i>Fraxinus pennsylvanica</i>			00				1									
6	<i>Liriodendron tulipifera</i>							1									
6	Standing dead							1									
6	<i>Vitis americana</i>						00										
6	<i>LITBUSTRUM vulgare</i>			00				1									
7	<i>Acer saccharum</i>							1									
7	<i>BETULUS THUNBERGII</i>						0										
7	<i>Liriodendron tulipifera</i>						0										
7	Standing dead						00										
7	<i>Vitis americana</i>							1									
7	<i>Fraxinus pennsylvanica</i>							1									
7	<i>Lindera benzoin</i>						00										
8	<i>Acer saccharum</i>							1									
8	<i>Liriodendron tulipifera</i>							00									
8	<i>ROSA multiflora</i>			00				1									
8	<i>Lindera benzoin</i>						00										
8	<i>Celastrus orbiculatus</i>						00										
8	<i>Fraxinus pennsylvanica</i>			00				1									

SNV
Assisted
by
Wittesawat

CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet

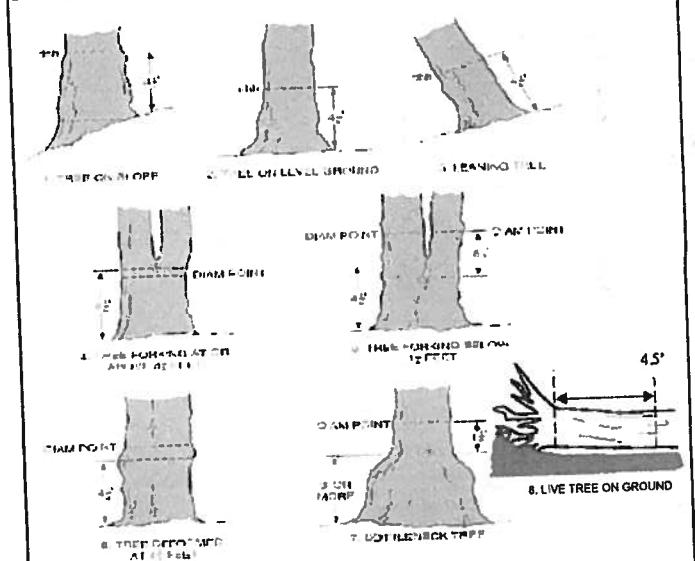
Project Label: PCAP
Project Name: OH NC 2013Plot No.: 1380
Page: 4 of 4

© Cleveland Metroparks

Explain subsample (additional room on back):

mod #	species	c	voucher#	# stems 0-1.4m browsed	% sub sample	# shrub clumps	size class (cm) woody stems >1.4m											11 >40 (record each tree)
							1	2	3	4	5	6	7	8	9	10		
8	<i>Stuckenia</i> dead			0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8	<i>Ulmus americana</i>			0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8	<i>Acer rubrum</i>			0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9	<i>Liriodendron tulipifera</i>			0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9	<i>Rosa multiflora</i>	3:		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9	<i>Acer saccharum</i>			0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9	<i>Ulmus americana</i>			0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9	<i>Standleya</i> dead			0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9	<i>Fragaria ananassa</i>			00	0	0	0	0	0	0	0	0	0	0	0	0	0	
9	<i>Acp.</i> <i>rubrum</i>			0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9	<i>Rhus</i> <i>septina</i>			0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9	<i>Ligustrum vulgare</i>			0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	<i>Lindera benzoin</i>			0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	<i>Rosa multiflora</i>			0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	<i>Ulmus americana</i>			0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	<i>Crateagus</i> sp.			0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	<i>Staudleya</i> dead			0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	<i>Ligustrum vulgare</i>			0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	<i>Acer saccharum</i>			0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	<i>Acer rubrum</i>			0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	<i>Fraxinus pennsylvanica</i>			0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	L <i>Liriodendron tulipifera</i>			0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	<i>Vitis</i> <i>destinallis</i>			0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9	<i>Fagus grandifolia</i>			0	0	0	0	0	0	0	0	0	0	0	0	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



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: CIVC2013

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

Plot No.: 1380 Date: 8-13-13

Plot Measurement
Page: 1 of 2

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

Baseline

9

8

2

3



*** 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 1.25in \times 24.5in
- 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						
Tier 2: Assess as Needed		# of Plants				comments	
		NE	SE	SW	NW		
<i>Acer platanoides</i>	Norway Maple						
<i>Ailanthus altissima</i>	Tree of Heaven						
<i>Lonicera japonica</i> (vine)	Japanese Honeysuckle						
<i>Lythrum salicaria</i> (wetland)	Purple Loosestrife		2				
<i>Aegopodium podagraria</i> (G-cover)	Bishop's Goutweed		2				
<i>Celastrus orbiculatus</i> (vine)	Asian Bittersweet	2	1	3			
<i>Torilis sp.</i>	Hedgeparsley						
<i>Conium maculatum</i>	Poison Hemlock						
<i>Rhamnus cathartica</i>	Common Buckthorn (shrub)						
<i>Berberis thunbergii</i>	Japanese Barberry (shrub)			3			
<i>Alnus glutinosa</i>	European Alder						
<i>Dipsacus laciniatus</i>	Cut-leaf Teasel						
<i>Elaeagnus umbellata</i>	Autumn Olive (shrub)						
<i>Lonicera maackii</i>	Amur Honeysuckle (shrub)						
<i>Euonymus fortunei</i>	Wintercreeper						
Tier 3: Presence is of Interest		# of Plants				comments	
		NE	SE	SW	NW		
<i>Convallaria majalis</i> (G-cover)	Lily of the Valley						
<i>Coronilla varia</i> (G-cover)	Crown Vetch						
<i>Eleutherococcus pentaphyllus</i>	Five-leaf Aralia (shrub)						
<i>Pachysandra terminalis</i> (G-cover)	Japanese Pachysandra						
<i>Philadelphus coronarius</i>	Mock Orange (shrub)						
<i>Pulmonaria officinalis</i> (G-cover)	Lungwort						
<i>Rubus phoenicolasius</i>	Wineberry						
<i>Iris pseudacorus</i> (wetland)	Yellow Flag Iris						
<i>Ornithogalum umbellatum</i>	Star of Bethlehem						
<i>Viburnum opulus</i> var. <i>opus</i>	European Cranberry (shrub)	1	1	1	1		
<i>Viburnum plicatum</i>	Doublefile Viburnum (shrub)						
Tier 4: Widespread and abundant		Presence				comments	
		NE	SE	SW	NW		
<i>Alliaria petiolata</i>	Garlic Mustard						
<i>Ligustrum vulgare</i>	Common Privet (shrub)	1	4	1	1		
<i>L. morrowii</i> , <i>L. tatarica</i>	Bush Honeysuckles (shrub)		1				
<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	2	32			
<i>Rosa multiflora</i>	Multiflora Rose (shrub)	3	4	5	3		
<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						

Presence
X: yes

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

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

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

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

4bCM PCAP Invasive species datasheet.xls last revised 6/11/2012 ceh

Natural Resources

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

Project Label: PCAP

Project Name: OH NC 2013

Plot No.: 1380

© Cleveland Metroparks
Page: 1 of 1

STANDING BIOMASS (required for emergent wetlands) collected in 0.1 m clip plots (32x37 cm) from corners 1 and 3 in each intensive module. Required for VIBI-E score calculation. C = check when collected

CLASSIFICATION

4.1 = ecological fit and Confidence

Hydrogeomorphic class (WETLANDS ONLY):

- DEPRESSION
 - IMPOUNDMENT
 - RIVERINE
 - Headwater
 - Beaver
 - Marsh
 - Human
 - SLOPE (ground water hydrology or a pH soil slope)
 - FRINGING
 - Reservoir
 - Natural Lake
 - COASTAL (specify substrate)
 - BOG (strongly, moderately, weakly, ombrotrophic)
- Fit= _____ Conf= _____
 Fit= _____ Conf= _____

Ohio EPA VIBI Plant Community Class (WETLANDS ONLY):

- FOREST
 - swamp forest
 - bog forest
 - forest step
 - EMERGENT
 - marsh
 - wet meadow
 - open bog
 - SHRUB
 - shrub swamp
 - tall sh. bog
 - tall sh. fen
- Fit= _____ Conf= _____
 Fit= _____ Conf= _____
 Fit= _____ Conf= _____

MICROTOPOGRAPHIC FEATURE COUNTS - intensive modules only

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

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

0 feature is absent or functionally absent from the wetland

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

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

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

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

no. of tussocks	no. of hummocks	no macro. depressions	c.w.d (2-12 cm)	c.w.d (12-40 cm)	c.w.d >40 cm	microhab. interspers.	microhab.
depth 3	depth 2	depth 1	depth 1	depth 1	depth 1	depth 1	SLOPE
1x1m	1x1.6x1.6m	10x10m	10x10m	10x10m	10x10m	10x10m	10x10m
mod#	corner	(count)	(count)	(count)	(count)	(rank)	(rank)

2	O	O	2	3	O	4	O
3	O	O	3	1	O	3	O
8	O	O	3	2	O	4	O
9	O	O	5	2	O	3	O

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

MCNAB INDICES (degrees) + for up - for down

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

MCNAB INDICES (degrees) + for up - for down

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

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

.. Landform Index (position within landscape)
 .. Terrain Shape Index (site microtopographic shape)

Module	N	S	E	W
2	35	5	11	10
3	8	6	7	10
8	14	14	4	8
9	14	13	4	7

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

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.

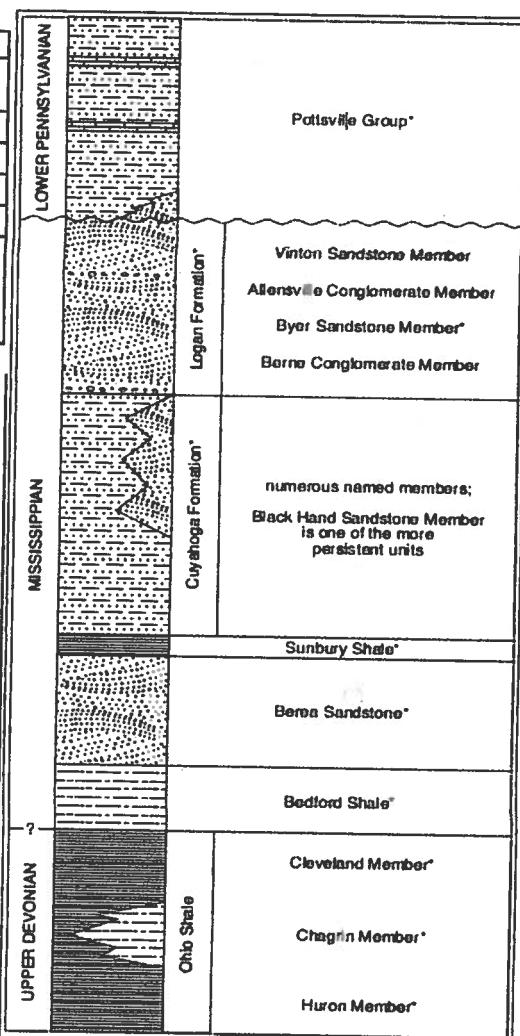
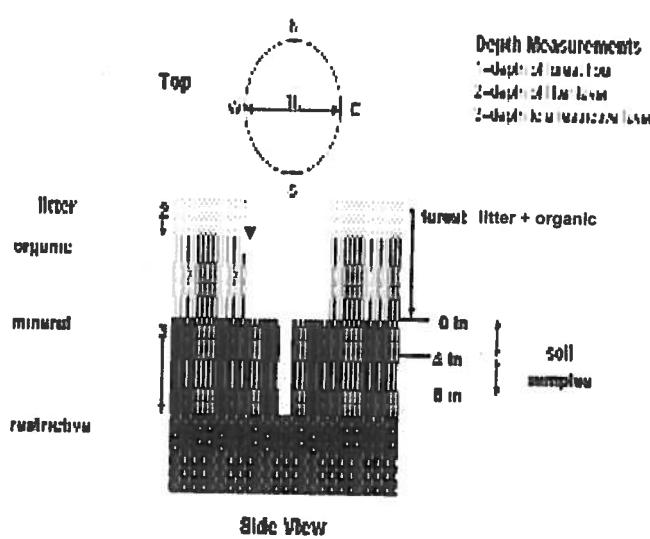


FIGURE 3-20.—Generalized section of Upper Devonian, Mississippian, and Lower Pennsylvanian formations in northeastern Ohio. Asterisks indicate units that are fossiliferous. This composite section represents about 400 meters of rock exposed across the area. The section is not to scale, but the thicknesses 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 3-18 for explanation of rock types.



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

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 pit module #	3 (one per entire plot)
5 cm	matrix color <u>2.5 Y 3/3</u>
	moisture color <u>1</u>
%smectite	<u>0</u>
oxid roots	<u>Y</u> <u>N</u>
texture*	<u>3</u>
redox features**	<u>Y</u> <u>N</u>
hydr. cond. ***	<u>I S D</u>
20 cm	matrix color <u>2.5 Y 4/4</u>
	moisture color <u>1</u>
%smectite	<u>0</u>
oxid roots	<u>Y</u> <u>N</u>
texture*	<u>3</u>
redox features**	<u>Y</u> <u>N</u>
hydr. cond. ***	<u>I S M D</u>

Depth to rest Layer more than 30 cm 10 cm

Parent Material: Alluvium

DRAINAGE*

- Well drained
- Excessively dry
- Somewhat excessively dry
- Moderately well dr.
- Very poorly dr.
- Impermeable surface

CL 846-13

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

* refer to texture classes on reverse side
 ** e.g. hydrogen sulfide odor, gleying, etc.

†=Indundated

S=saturated

M=mist

D=dry

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

COVER BY STRATA
 estimate using midpoints of 5, ex: 3, 8, 13 %

Strata	Height Range (in)	Total Cover (%)
Tree	> 5	93%
Shrub	0.5 - 5	68%
Herb	≤ 0.5	53%
(Floating)*	N/A	-
(Aquatic)*	N/A	-

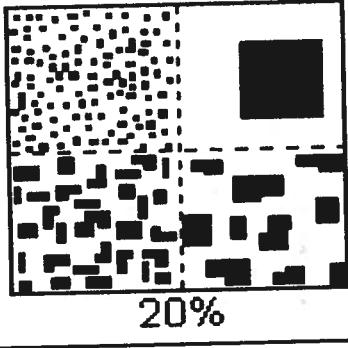
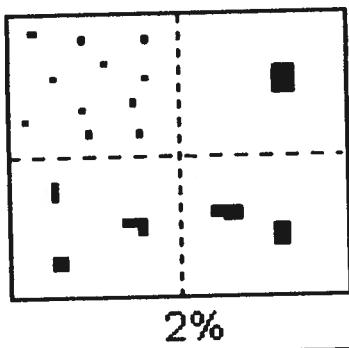
mod#	1 liter organic depth (cm)	2 liter depth (cm)	water depth (cm)	depth sat (cm)
2	0.4	0.4	0.0	730
3	0.4	0.4	0.0	730
8	0.5	0.5	0.0	730
9	0.6	0.6	0.0	730

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

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

PERCENT MOTTLES (USE CLASS CODES):

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

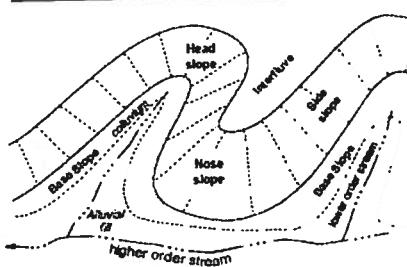
3= Sandy

4= Coarse Sand

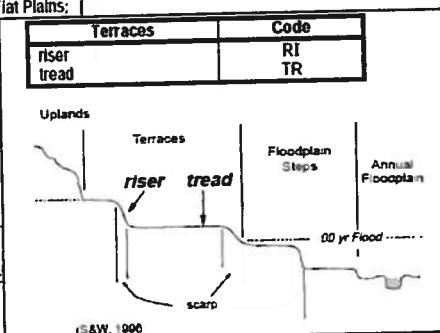
9= Not measured - make plot note

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

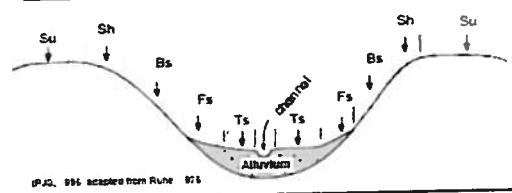


PJS 1998; adapted from Ruhe, 1975



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

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



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

UPLAND: Not a wetland. Very rarely flooded.

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

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

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

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

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

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

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

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

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial): _____

Site ID: PCA9 NC 1380

DATE: 08/13/2013

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

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

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

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

Buffer Sample Plots 05/27/2011

2428168304

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

Reviewed by (Initial): _____

Site ID: PCAP NC 1380

DATE: 08 / 13 / 2013

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

FIII bubble If present - Plot	1	2	3	Flag	FIII bubble If present - Plot	1	2	3	Flag	FIII 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° 56' 37" Longitude West 081° 41' 77"

Use Decimal Degrees; NAD83

7966623548

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial): _____

Site ID: PLAR NC 1380

DATE: 08/13/2013

Location:

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

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

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

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

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

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

2428168304

Buffer Sample Plots 05/27/2011

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

Reviewed by (initial): _____

Site ID: PCAPNC1380

DATE: 08/13/2013

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

FIII bubble If present - Plot	1	2	3	Flag	FIII bubble If present - Plot	1	2	3	Flag	FIII 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):

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

Flag

Latitude North

41.56462

Longitude West

81.41813

Use Decimal Degrees: NAD83

7966623548

rosa

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial): _____

Site ID: PCAP NC 1380

DATE: 08 / 13 / 2013

W N S E

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

2

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. ●

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

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

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

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

2428168304

Buffer Sample Plots 05/27/2011

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

Reviewed by (initial): _____

Site ID: PCAP NC 1380

DATE: 08/13/2013

 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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		Johnson Grass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Water hyacinth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Knotweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Kudzu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Yellow Floating Heart	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Japanese Knotweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Multiflora Rose	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input 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

4

Latitude North 41.57.070 Longitude West 081.423.70
Use Decimal Degrees; NAD83

Flag	Comments
1	Unsure if trail is part of sanctioned bridle trail system or bootleg - deer trail
2	Very, very dense Privet (<i>Ligustrum vulgare</i>) thicket unable to proceed
3	Park through way between buffer plot 1+2
4	Only walked 15m out of 45m for buffer plot 2 due to dense privet hedges

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial): _____

Site ID: PCAPNC1380

DATE: 08/13/2013

Location:

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

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

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

Industrial Development Stressors

Habitat/Vegetation Stressors

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

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

Buffer Sample Plots 05/27/2011

2428168304

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

Reviewed by (Initial): _____

Site ID: PCAP NC1380

DATE: 08/13/2013

② Confirm a filled data bubble indicates presence and an unfilled bubble indicates absence by filling in this bubble

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

PLOT COORDINATES

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

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

Location of coordinates (choose one):

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

Latitude North

41.516347

Longitude West

081.41698

Elaq

7966623548

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial): _____

Site ID: PCAP NC 1380

DATE: 08 / 13 / 2013

Location:

AA Center ON OS OE W

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

Plot 1 Plot 2 Plot 3

1

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

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

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

Industrial Development Stressors

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

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

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

2428168304

Buffer Sample Plots 05/27/2011

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

Reviewed by (Initials): _____

Site ID: PCAPNC1380

DATE: 08 / 13 / 2013

② Confirm a filled data bubble indicates presence and an unfilled bubble indicates absence by filling in this bubble

FIII bubble if present - Plot	1	2	3	Flag	FIII bubble If present - Plot	1	2	3	Flag	FIII 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)

Latitude North 41° 56' 38.5"

Longitude West 081.41824

Use Decimal Degrees: NAD83

7966623548