**PCAP PLOT DATA QUALITY CONTROL**

**Project Label:** PCAP **Plot No:** 3399 **Date Sampled:** 6/14/11 **Lead:** DS

| | | | Comment required if item answer is NO |
|---|---|---|---|
| Parking/Access outside of Park Boundaries: | | Y (N) | If yes, write information in Comments section below |
| Field journals completed | | (Y) N | |
| Site sketch made on 1:3000 map? | | Y N | N/A |
| Check cover page | X-axis Bearing of plot recorded | Y N | N/A |
| | GPS coords Recorded | Y N | N/A |
| | North direction recored | Y N | N/A |
| | Photographs taken? | Y N | N/A |
| Plot No., Date agreement on all pages? | | (Y) N | |
| Header data completed all pages? | | (Y) N | |
| Cover classes recorded in all Intensive modules | | Y N | N/A |
| Browse Level By Species | | Y N | N/A |
| Woody stem quality control check | | Y N | N/A |
| Invasive plant quality control check | | (Y) N | * |
| Ash trees mapped | | Y N | N/A |
| Cover by Strata? (confirm cover type) | | (Y) N | |
| Soil samples collected? | | (Y) N | |
| Vouchers labeled on datasheet with initials and number | | Y N | N/A |
| Vouchers labeled on collection bag | | Y N | N/A |
| Data sheet QA before leaving site? | | (Y) N | |
| Data sheets scanned? | | 6/23/11 | Enter date to left |
| Final data sheets scanned? | | | Enter date to left |
| Web Soil survey | | (Y) N | |
| Voucher Location | Refrigerator | Y N | N/A |
| ( # vouchers collected) | Press (#) | | Enter number to left |
| | Drier | Y N | |
| | Identified | Y N | |
| | Mounted | Y N | |
| | Thrown away | Y N | |

7/1/11 Buffers entered

**Was there a wetland at the point?:** (Y) N If NO, go to the next question. If YES, stop.

**Was there a wetland within 60m of this point?** Y N If NO, go to the next section. If YES, stop.

**Pick one of the next three options below:**

- ☐ **The soils ARE NOT hydric and the area at the point is**
- ☐ Developed with buildings, roads, pavement, fill
- ☐ Farmed, turf
- ☐ Other (specify)

- ☐ **The soils ARE hydric and the area at the point is**
- ☐ Developed with buildings, roads, pavement, fill
- ☐ Farmed, turf
- ☐ Other (specify)

- ☐ **No wetland determination can be made (explain below)**

**Additional Comments:**

* Buffer plots measured and entered - JEM 6/17/11

# Plot Data: CVS Levels 4 & 5



## General Information

**Project Label:** WPDG
Project Name: Project 1
**Team:** #2
**Plot:** RRW4
☐ Level 4 (no nested corners sampled)
☑ Level 5 (nested corners sampled)
**Date** (dd/mmm/yyy): 10 / 1 / 09
End Date (if > 1 day): 10 / 1 / 09

| Party | Role** |
|---|---|
| J. Mack | Plot Leader |
| N. Mikash | Asst |
| | |
| | |
| | |
| | |
| | |

**Roles: Co-leader, Assistant, Guide, Land owner, Taxonomist, Other

## Sampling Quality*

**Effort Level:**
☑ Very thorough
☐ Accurate
☐ Hurried

Lat/Long entered in excel from map - different

**Taxonomic Accuracy:** (for each category)

| Category | High | Moderate | Low | Not sampled |
|---|---|---|---|---|
| Vascular: | X | | | n/a |
| Bryophyte: | | | X | |
| Lichen: | | | X | |

## Location

General: Fairview Park
**State:** OH County: Cuy.
Quadrangle: Lakewood SKE 9-12
Place Names: 1) RRMC
2) Big Met 3)
Land Owner: C.M.

**Data Confidentiality:**
Check one: ☑ Public Data ☐ Private Data
☐ Fuzz 1 km ☐ Fuzz 10 km ☐ Fuzz 100 km

**Reason:** If data not public, why? —

Source of coordinates (map, GPS):

GPS location in plot (meters): x= — y= —

**Coordinate System:** ☑ Lat/Long ☐ UTM ☐ State Plane ☐ Other (*specify*): _____

**Coord. Units:** ☑ deg. ☐ deg. min. ☐ m ☐ ft ☐ _____

**Datum:** ☑ NAD83/WGS84 ☐ NAD27

**Zone:** — (if applicable)

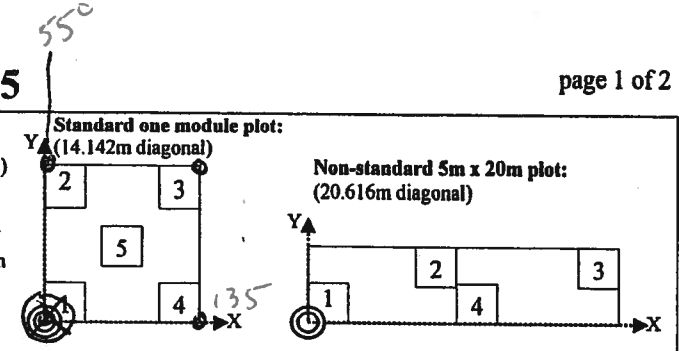
**Lat:** 41.38916 **(or Northing)**
**Long:** 81.87029 **(or Easting)**
**Coord. Accuracy** (m radius): ± 8 ft.
GPS File Name: RRW4

## Site Characteristics

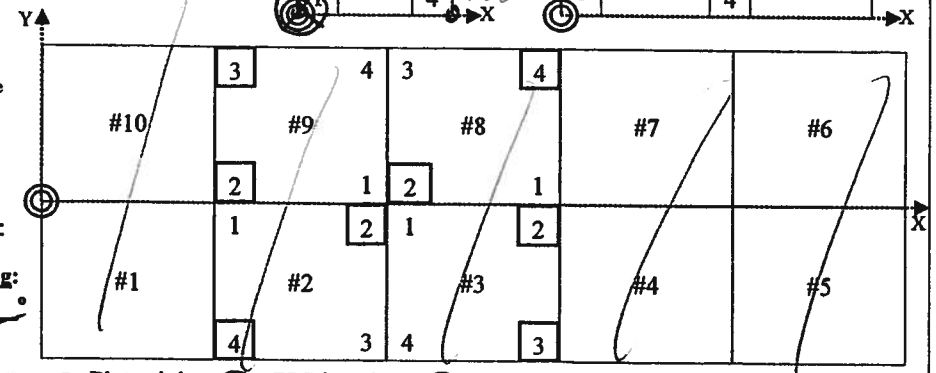
Elevation: 686 ± — ☐m ☑ft.
Slope (degrees): ~~0~~ 3
Aspect (degrees): 65
Compass Type: ☑ magnetic ☐ true

## Plot Diagram

Fill in the template below (2+ modules) or one on the right (1 module plot), using the key below. Edit shape if needed, to show actual arrangement of modules, sampled corners, and location of any landmarks.




2-10 module plot:




**Plot X-Axis Bearing:** 135

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

**Plot Size for Cover Data** (ares): 0.01
☐ Stems not sampled on this plot
☐ Stems present ☑ Stems absent
**Plot Size, Stems** (ares): 0.01
**Depth** (1-5): 4 (Level 5 Only)
**Intensive Modules:** 1, —, —
○→ Photo Identifier(s): —

## Cover by Strata

Canopy Height (m):

| Strata | Height Range (m) | Total Cover (%) |
|---|---|---|
| Tree | - | |
| Shrub | - | |
| Herb | - | |
| (Floating) | - | |
| (Aquatic Submerged) | - | |

Strata in parentheses often not present, but should be filled in if they exist.

## Notes

If more space is needed, check the box and use back of datasheets.

Layout: (anything unusual about plot layout and shape)
1x1 plot because of very small size of WTLD
☐ more...

Plot Location: (directions to plot, landscape content)
just west of RRMC main entrance
☐ more...

Plot Rationale: (why location was chosen for the plot)
representative
☐ more...

Vegetation: (characterization of community, dominants, and principle strata)
Festuca / Typha meadow
☐ more...

OVER

## Classification*

Fit: excellent, good, fair, poor; Conf: high, med, low
Provisional comm. IIB3e (Festuca)
Comm.(1) _____ Fit= G Conf= M
Comm.(2) _____ Fit= __ Conf= __
Classifier J Mack Date 10/1/09

**Plot Placement:**
☐ Representative
☐ Random
☐ Stratified random
☐ Transect component
☐ Systematic (grid)
☐ Capture specific feature

## Taxonomic Standard Used for Plants

**Authority:** Ohio FQA1, **Publ. Date:** 2004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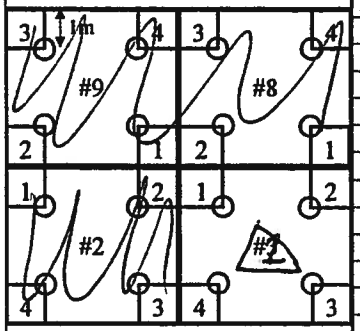
Project: Proj 1 Team: #2 Plot: RRWY

# Plot Data: CVS Levels 4 & 5 (page 2)



## Soil Instructions

Depths (right): After measuring a corner (at the circle) cross it out on the diagram below.
Samples (below): Mark location of soil samples with a triangle and horizon, e.g.: B
Other soil data: enter below.




## Soil Samples

| Module* 1-10, S (plot deep sample) | Horizon (A,B,C) |
|---|---|
| center | A |
| | |
| | |
| | |
| | |
| | |
| | |

Soil Series / Type:

Soil Series Source:

Soil Texture*:

Rock Type*:

Surficial Deposits*:

Soil Description:

## Soil Depths

Length of soil probe: 30 cm
standard corners given below, correct if needed

| Module | Corner | Soil Depth (cm) |
|---|---|---|
| 2 | 1 | |
| 2 | 2 | |
| 2 | 3 | |
| 2 | 4 | |
| 3 | 1 | |
| 3 | 2 | |
| 3 | 3 | |
| 3 | 4 | |
| 8 | 1 | |
| 8 | 2 | |
| 8 | 3 | |
| 8 | 4 | |
| 9 | 1 | |
| 9 | 2 | |
| 9 | 3 | |
| 9 | 4 | |

Organic layer depth: 0 cm

## Homogeneity

- ☒ Homogeneous
- ☐ Compositional trend across plot
- ☐ Conspicuous inclusions
- ☐ Irregular / pattern mosaic

## Stand Size

- ☐ >1,000 × plot size
- ☐ > 100 × plot size
- ☐ 10-100 × plot size
- ☐ 3-10 × plot size
- ☒ 1-3 × plot size
- ☐ < plot size

## Landform Type*:

—

## Earth Surface & Ground Cover

| Underlying Earth Surface: (sum =100%) | percent | Ground Cover: (each ≤100%) | percent |
|---|---|---|---|
| Histosol | — | Coarse Woody Debris >5cm | 0 |
| Mineral Soil / Sediment | 100 | Fine Woody Debris <5cm | 0 |
| | | Litter | 100 |
| Gravel / Cobble | — | Duff (F+H) | 100 |
| | | Bryo / Lichen | — |
| Boulder | — | Water | — |
| Bedrock | — | Other (name): _____ | — |

## McNab Indices (degrees) + for upslope - for downslope

| | LFI: Landform Index (position within landscape) | TSI: Terrain Shape Index (site micro-topographic shape) |
|---|---|---|
| at aspect | | |
| +45 degrees | | |
| +90 degrees | | |
| +135 degrees | | |
| +180 degrees | | |
| +225 degrees | | |
| +270 degrees | | |
| +315 degrees | | |

## Water

### Hydrologic Regime*

- ☐ Upland (seldom flooded)
- ☒ Intermittently / seasonally saturated (seldom flooded)
- ☐ Permanently / semipermanently saturated (dry < 1 / yr, seldom flooded)
- ☐ Occasionally flooded (<1 / yr)
- ☐ Temporarily flooded
- ☐ Intermittently flooded
- ☐ Semipermanently flooded
- ☐ Permanently flooded
- ☐ Tidally flooded - daily
- ☐ Tidally flooded - monthly
- ☐ Tidally flooded - irregular (wind, storms)
- ☐ Unknown

### Salinity*

- ☐ Saltwater ☒ Fresh
- ☐ Brackish ☐ Upland (n/a)

### Aquatic Vegetation

Mean water depth: — cm
Closest distance to shore: — m

### Soil Drainage*

- ☐ Excessively drained
- ☐ Somewhat excessively
- ☐ Well drained
- ☐ Moderately well dr.
- ☐ Somewhat poorly dr.
- ☒ Poorly drained
- ☐ Very poorly drained
- ☐ Impermeable surface

## Disturbances

| Type | Severity (none, L,M,H) | Yrs ago | % of plot | Description |
|---|---|---|---|---|
| human | H | 5 | 100 | RRMC construction |
| natural | | | | |
| fire | | | | |
| clear-cut | | | | |
| animal | | | | |
| other | | | | |

**Current Land Use:** wetland

**Former Land Use:** ?

## Topographic Position*

- ☐ Interfluve (crest, summit, ridge)
- ☐ High slope (shoulder, upper, convex)
- ☐ High level
- ☐ Midslope
- ☐ Backslope (cliff)
- ☐ Step in slope
- ☐ Lowslope (lower, foot, colluvial)
- ☐ Toeslope
- ☐ Low level (terrace)
- ☐ Channel wall (bank)
- ☒ Channel bed (valley bottom)
- ☒ Basin floor (depression)

## Season of Plot Sampling

- ☒ Typical growing season
- ☐ Vernal
- ☐ Aestival
- ☐ Autumnal
- ☐ Winter
- ☐ Temporarily flooded
- ☐ Temporarily dry

## Physiognomy*

- ☐ I Forest
- ☐ II Woodland
- ☐ III Shrubland
- ☐ IV Dwarf Shrubland
- ☒ V Herbaceous
- ☐ VI Nonvascular
- ☐ VII Sparsely Vegetated
- ☐ VIII Barren

## Additional Notes:

(Representativeness of the plot to the stand, Successional Status, Stand Maturity, etc.)

☐ more...

Required Fields in Bold and Underlined. *Definitions & values in Definitions section of the CVS Field Guide. EntryTool2.2.5 ©2008 Carolina Vegetation Survey. cvs.bio.unc.edu Form PLT45, ver 8.1

| | |
|---|---|
| Investigator(s) | J Mack |
| Site | RKW4 |
| County | Cuyahoga |
| Date | 10-1-09 |

| | |
|---|---|
| Total Modules | 1 |
| Intensive Modules | 1 |
| Plot configuration | 1x1 |
| Total area (ha) | 0.01 |

| | |
|---|---|
| Centerline bearing | NW 55 |
| 1° Plant Community | IIB3e |
| 2° Plant Community | — |
| 1° and 2° HGM class | N A |

Forest/cattail



| Latitude | 41.38916 |
|---|---|
| Longitude | 81.87029 |

| Species name | voucher # | mod# | corner# | mod# | corner# | mod# | corner# | mod# | corner# | mod# | corner# | mod# | corner# | mod# | corner# | mod# | corner# | mod# | corner# | mod# | corner# | mod# | corner# |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 1 | 4 | | | | | | | | | | | | | | | | | | |
| | | level | covclass | level | covclass | level | covclass | level | covclass | level | covclass | level | covclass | level | covclass | level | covclass | level | covclass | level | covclass | level | covclass |
| %open water | | 1 | 0 | 1 | 0 | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | |
| %unvegetated open water | | 1 | 0 | 1 | 0 | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | |
| %bare ground | | 1 | 0 | 1 | 0 | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | |
| %litter cover | | 1 | 9 | 1 | 9 | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | |
| Typha latifolia | | 4 | 7 | | | | | | | | | | | | | | | | | | | | |
| Agrostis stolonifera | | 4 | 5 | | | | | | | | | | | | | | | | | | | | |
| Festuca arundinacea | | 2 | 6 | | | | | | | | | | | | | | | | | | | | |
| Erechtites hieracifolia | | 2 | 2 | | | | | | | | | | | | | | | | | | | | |
| Cirsium canadense | | 1 | 2 | | | | | | | | | | | | | | | | | | | | |
| Bidens frondosa | | 1 | 1 | | | | | | | | | | | | | | | | | | | | |
| Echinochloa crusgalli | | | | 4 | 6 | | | | | | | | | | | | | | | | | | |
| Rumex crispus | | | | 2 | 1 | | | | | | | | | | | | | | | | | | |
| Polygonum / persicaria | | 1 | 1 | | | | | | | | | | | | | | | | | | | | |

- I UPLAND COMMUNITIES
  - A Oak Forest and Woodland
    - 1 Dry Oak forest and Woodland
    - 2 Dry-Mesic Oak Forest and Woodland
  - B Northern (Hemlock)-Hardwood Forest
  - C Beech-Maple Forest
  - D Mesophytic Forest
  - E Pine-Oak Rocky Woodland
  - F Glade and Barrens or Woodland
    - 1 Dry Acidic Glade and Barrens
    - 2 Alkaline Glade and Woodland
    - 3 Calcareous Glade and Barrens
  - G Oak Savanna/Barrens
    - 1 Interior (deep soil) Oak Savanna
    - 2 Oak Barrens
  - H Tallgrass Prairie
    - 1 Dry-Mesic Prairie
    - 2 Mesic Prairie
    - 3 Wet-Mesic Prairie
  - I Cliff and Talus
    - 1 Acidic Cliff and Talus
    - 2 Calcareous Cliff and Talus
    - 3 Circumneutral Cliff and Talus
    - 4 Acidic Cliff and Rockhouse
  - J Great Lakes Rocky Shore and Cliff
    - 1 Acidic Rocky Shore and Cliff
    - 2 Alkaline Rocky Shore and Cliff
  - K Alvar
  - L Dune
- II UPLAND FLOODPLAIN COMMUNITIES
  - A Floodplain Forest
    - 1 Riverfront and Levee Forest
    - 2 Bottomland Hardwood Forest
  - B Stream and Riparian Forest
- III WETLAND COMMUNITIES
  - A SWAMP FORESTS
    - 1 Wet Flatwoods
      - a *Quercus bicolor swamp*
      - b *Quercus palustris swamp*
      - c Maple-Ash-Elm swamp
      - d Maple-Ash swamp
      - e Oak-Maple swamp
      - f Black Ash swamp
      - g Green Ash swamp
      - h Pumpkin Ash swamp
      - i Mixed swamp forest
      - j Cottonwood swamp
      - k Beech-Maple-Oak swamp
      - l River Birch Swamp
      - m Other (specify dominants)
    - 2 Acidic Swamp
      - a Basin Swamp
      - b Seepage Swamp (FOREST SEEP)
        - i skunk cabbage seep
        - ii skunk cabbage-sedge seep
        - iii sedge seep
        - iv white pine bog
    - 3 Rich Swamp
      - a Tamarack-Hardwood Bog
      - b Black Ash-Red Maple Swamp
      - c Maple-Ash-Elm Swamp
    - 4 Floodplain Forest (Wetland Forest Areas)
      USE SMALL "alpha" CODES UNDER NO. 1
    - 5 Great Lakes Wooded Dune and Swale
  - B EMERGENT (HERBACEOUS)
    - 1 Marsh
      - a Coastal Marsh
      - b Freshwater Marsh
        - i Submergent Marsh
        - ii Floating-Leaved Marsh
        - iii Mixed Emergent Marsh
        - iv Cattail Marsh
    - 2 Fen
      - a Shrub-GRAMINOID Alkaline Fen
        - i Cinquefoil-Sedge Fen
        - ii Tamarack Fen
      - b Seepage Fen
      - c Acidic Basin Fen (Poor Fen)
      - d Skunk-Cabbage Sedge Seeps
    - 3 WET MEADOW-Shrub Swamp
      - a Wet Prairie
        - i cordgrass-bluejoint slough
        - ii bluejoint-muhly slough
        - iii prairie (southern) sedge meadow (*C. atherodes, C. lacustris, C. stricta*)
      - b sedge meadow
        - i lake sedge meadow
        - ii hyaline sedge meadow
        - iii wool-grass meadow
        - iv *Carex trichocarpa* meadow
        - v successional sedge meadow (*C. vulpinoidea, scoparia, tribuloides, cristatella, lurida)*
      - c rice-cutgrass meadow
      - d reed canary grass meadow
      - e other wet meadow (specify dominants)
    - 4 Wet-Mesic Lake Plain Prairie (OO Prairie)
      - a Twigrush Meadow
      - b Weak Sedge Meadow
      - c Northern Bluejoint Meadow
    - 5 Skunk Cabbage-Sedge Seeps
    - 6 Floodplain Herbaceous Wetlands
      USE SMALL "alpha" CODES Nos. 1, 2, 3
    - 7 Great Lakes Interdunal Wetland
    - 8 Natural Lakes and Ponds (>2 m deep)
    - 9 Streams and Rivers
  - C Shrub Swamp
    - 1 SHRUB-(Graminoid) Alkaline Fen
      - a Tall Shrub Fen
    - 2 Acidic Peatland
      - a Leatherleaf bog
      - b Tall Shrub Bog
    - 3 Wet Meadow-SHRUB SWAMP
      - a Buttonbush Swamp
      - b Alder Swamp
        - i *Alnus incana* Swamp
        - ii *Alnus serrulata* Swamp
      - c Mixed Shrub Swamp
      - d Willow Thicket
      - e Dogwood Thicket
      - f Other (specify dominants)
    - 4 Skunk Cabbage-Sedge Seeps
    - 6 Floodplain Forest (Shrub Swamp Areas)
      USE SMALL "alpha" CODES UNDER NO.
- IV SUCCESSIONAL COMMUNITIES
  - A Farming and Forest Harvesting
    - 1 Active Farming
      - i Upland Farm Field
      - ii Converted Farm Field (Hydric Soils)
    - 2 Hayfield
      - i Upland Hay Field
      - ii Converted Hay Field (Hydric Soils)
      - iii Wet Hay Field
    - 3 Pasture
      - i Active, High Intensity
      - ii Active, Low Intensity
      - iii Passive
    - 4 Old Field
      - i Young (<5 years)
      - ii Middle (5-10 years)
      - iii Old (>10 years)
    - 5 Post Clearcut Communities
      - i Young (<5-10years)
      - ii Middle (10-25 years)
      - iii Old (>25 years)
  - B Atypical Successional Woody Communities
    - 1 Upland Forests
      - i Cottonwood Thickets and Woodland
      - ii Ash Thickets
      - iii Other (Specify)
    - 2 Upland Shrub Thickets
      - i Dogwood Thickets
      - ii Prickly-Ash Thickets
      - iii Blackberry Thickets
      - iv Other (Specify)
  - C Disturbed Soil Communities
    - 1 Slag Barrens
    - 2 Landfill
    - 3 Urban Vacant Land
    - 4 Recently Graded Soils
    - 5 Abandoned Mine Land Soil
    - 6 Other (specify)
  - E Pond and Reservoir
    - 1 Stormwater Pond
    - 2 Farm Pond
      - i Young (<10 years)
      - ii Middle (10-50 years)
      - iii Old (>50 years)
    - 3 Reservoir
      - i Small (<25 ac)
      - ii Medium (25-50 ac)
      - iii Large (>50 ac)
  - F Human Structures
    - 1 Buildings and Other Structu
    - 2 Parking Lots
      - i Paved
      - ii Unpaved
    - 3 Roads and Trails
      - I Paved
      - ii Unpaved
      - iii Aggregate

| | |
|---|---|
| Investigator(s) | J. Mack N. M. Kerr |
| Site | RRW4 |
| County | Cuy. |
| Date | 10-1-09 |

| | |
|---|---|
| Total Modules | 1 |
| Intensive Modules | 1 |
| Plot configuration | 1 K 1 |
| Total area (ha) | 0.01 |

| | |
|---|---|
| Centerline bearing | 55 |
| Sub or Super Sample? | NO |
| total plot canopy closure% | 0 |
| total plot herbaceous cover% | 100 |



| mod # | species | %sub or super sample | shrub clumps | 1 0-<1 | 2 1-<2.5 | 3 2.5-<5 | 3 5-<10 | 5 10-<15 | 6 15-<20 | 7 20-<25 | 8 25-<30 | 9 30-<35 | 10 35-<40 | 11 >40 (record each tree) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | NO WOODY SPECIES | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | |

## Cover Classes

| class | % cover |
|---|---|
| 1 | solitary/few |
| 2 | 0-1% |
| 3 | 1-2% |
| 4 | 2-5% |
| 5 | 5-10% |
| 6 | 10-25% |
| 7 | 25-50% |
| 8 | 50-75% |
| 9 | 75-90% |
| 10 | 95-99% |

## Depth (level) Code

| quadrat size | quadrat area | code |
|---|---|---|
| 10x10m | 1000m$^2$ | 1 (releve) |
| 3.16x3.18m | 10m$^2$ | 2 |
| 1x1m | 1m$^2$ | 3 |
| 0.32x0.32m | 0.1m$^2$ | 4 |
| 0.1x0.1m | 0.01m$^2$ | 5 |

## Vertical Strata Codes

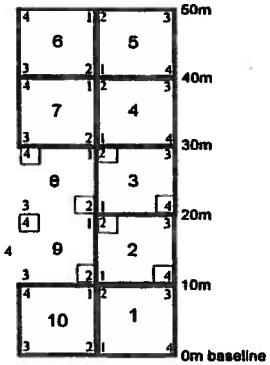
| stratum | height | code |
|---|---|---|
| herb layer | 0-2m | 1 |
| shrub/sapling | 2-5m | 2 |
| pole timber | 5-15m | 3 |
| tree | 15-35m | 4 |
| canopy tree | >35 | 5 |

## Standard plot

| nest corners |
|---|
| 2-2 2-4 |
| 3-2 3-4 |
| 8-2 8-4 |
| 9-2 9-4 |

## Part 2. Modifiers for dominant vegetation used for each HGM class

| class | | community | | type |
|---|---|---|---|---|
| 1 | Forest | a | Swamp forest | (i) oak-maple, (ii) oak -maple-ash, (iii) maple-ash, (iv) pin oak, (v) pumpkin ash, (vi) mixed forest, (vii) red maple, (viii) white pine, (ix) cottonwood, (x) river birch, (xi) other (specify) |
| | | b | Bog forest | (i) tamarack bog, (ii) tamarack-hardwood bog |
| | | c | Forest seep | (i) skunk cabbage seep, (ii) sedge seep, (iii) skunk cabbage-sedge seep, (iv) other (specify) |
| 2 | Shrub | a | Shrub Swamp | (i) buttonbush swamp, (ii) alder swamp, (iii) mixed shrub swamp, (iv) other (specify) |
| | | b | Bog Shrub Swamp | (i) tall shrub bog, (ii) leatherleaf bog |
| | | c | Fen Shrub Swamp | (i) tall shrub fen |
| 3 | Emergent | a | Marsh | (i) submergent marsh, (ii) floating-leaved marsh, (iii) mixed emergent marsh, (iv) cattail |
| | | b | Wet meadow | (i) wet prairie, (ii) oak openings sand prairie, (iii) prairie sedge meadow, (iv) fen (v) reed canary grass meadow, (vi) other (specify) |
| | | e | Bog | (i) Sphagnum bog |




## Wetland Classification System Part 1

| | class | subclass |
|---|---|---|
| I | Depression | (A) Surface water<br>(B) Ground water |
| II | Impound-ment | (A) Beaver<br>(B) Human |
| III | Riverine | (A) Headwater depression (1st, 2nd order)<br>(B) Mainstem depression (3rd or > order)<br>(C) Channel |
| V | Slope | (A) Headwater<br>(B) Mainstem<br>(C) Isolated<br>(D) Fringing |
| VI | Fringing | (A) Reservoir<br>(B) Natural lake |
| VII | B og | (A) Strongly ombrotrophic<br>(B) Moderately ombrotrophic<br>(C) Weakly ombrotrophic |
| VIII | Coastal | (A) Open embayment<br>(B) Closed embayment<br>(C) Barrier-beach lagoon<br>(D) Drowned river mouth<br>(E) Diked - managed<br>(F) Diked - unmanaged<br>(G) Diked - failed |
| add code | Mitigation | Add appropriate pre-code to HGM class:<br>mr - mitigation, restoration<br>mc - mitigation, creation<br>e.g. "mrII" = mitigation, restoration, Impoundment |

**CLEVELAND METROPARKS Plant Community Assessment Program: Invasive Species Survey** Cleveland Metroparks

| Tier 1: Early detection/ Rapid response | | Presence | | | | GPS |
|---|---|---|---|---|---|---|
| | | NE | SE | SW | NW | |
| Microstegium vimineum | Japanese stiltgrass | | | | | |
| Ranunculus ficaria | Lesser Celandine | X | | | X | |
| Cynanchum louiseae (vine) | Black Swallow-wort | | | | | |
| Butomus umbellatus (wetland) | Flowering Rush | | | | | |
| **Tier 2: Assess as Needed** | | **# of Plants** | | | | **comments** |
| | | NE | SE | SW | NW | |
| Acer platanoides | Norway Maple | 1 | 2 | 1 | | Large trees |
| Ailanthus altissima | Tree of Heaven | | | | 1 | |
| Lonicera japonica (vine) | Japanese Honeysuckle | | | | | |
| Lythrum salicaria (wetland) | Purple Loosestrife | | | | | |
| Aegopodium podagraria (G-cover) | Bishop's Goutweed | | | | | |
| Celastrus orbiculatus (vine) | Asian Bittersweet | | | | | |
| Torilis sp. | Hedgeparsley | | | | | |
| Conium maculatum (wetland) | Poison Hemlock | | | | | |
| Rhamnus cathartica | Common Buckthorn (shrub) | | | | | |
| Berberis thunbergii | Japanese Barberry (shrub) | | | | | |
| Alnus glutinosa | European Alder | | | | | |
| Dipsacus laciniatus | Cut-leaf Teasel | | | | | |
| Elaeagnus umbellata | Autumn Olive (shrub) | | | | | |
| Lonicera maackii | Amur Honeysuckle (shrub) | | | | | |
| Euonymus fortunei | Wintercreeper | | | | | |
| **Tier 3: Presence is of Interest** | | **# of Plants** | | | | **comments** |
| | | NE | SE | SW | NW | |
| Convallaria majalis (G-cover) | Lily of the Valley | | | | | |
| Coronilla varia (G-cover) | Crown Vetch | 6 | | 4 | | Large patches |
| Eleutherococcus pentaphyllus | Five-leaf Aralia (shrub) | | | | | |
| Pachysandra terminalis (G-cover) | Japanese Pachysandra | | | | | |
| Philadelphus coronarius | Mock Orange (shrub) | | | | | |
| Pulmonaria officinalis (G-cover) | Lungwort | | | | | |
| Rubus phoenicolasius | Wineberry | | | | | |
| Iris pseudacorus (wetland) | Yellow Flag Iris | | | | | |
| Ornithogalum umbellatum | Star of Bethlehem | | | | | |
| Viburnum opulus var. opulus | European Cranberry (shrub) | | | | | |
| Viburnum plicatum | Doublefile Viburnum (shrub) | | | | | |
| **Tier 4: Widespread and abundant** | | **Presence** | | | | **comments** |
| | | NE | SE | SW | NW | |
| Alliaria petiolata | Garlic Mustard | X | X | | X | |
| Ligustrum vulgare | Common Privet (shrub) | | | | | |
| L. morrowii, L. tatarica | Bush Honeysuckles (shrub) | X | X | X | X | |
| Phalaris arundinacea | Reed Canarygrass | X | | X | | |
| Phragmites australis (wetland) | Phragmites | | | | | |
| Polygonum cuspidatum | Japanese Knotweed | | | X | | |
| Frangula alnus | Glossy Buckthorn (shrub) | X | | | | |
| Rosa multiflora | Multiflora Rose (shrub) | X | | | | |
| Typha angustifolia, T. x.glauca | Cattails (wetland) | X | X | X | X | |
| Cirsium arvense | Canada thistle | X | X | X | X | |
| Dipsacus fullonum | Common Teasel | X | X | X | X | |
| Hesperis matronalis | Dame's Rocket | | | | X | |
| Vinca minor (G-cover) | Periwinkle | | | | | |

| Presence |
|---|
| X: yes |

| # of Plants |
|---|
| 4: 50-100 |
| 5: 100-1,000 |
| 6: >1,000 |

| # of Plants |
|---|
| 1: 1-10 |
| 2: 11-50. |
| 3: >50 |

| Presence |
|---|
| X: yes |

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

**CLEVELAND METROPARKS Emerald Ash Borer - Fraxinus Sheet** — *INTENSIVE MODULES ONLY* — *TREES ≥ 10CM ONLY*

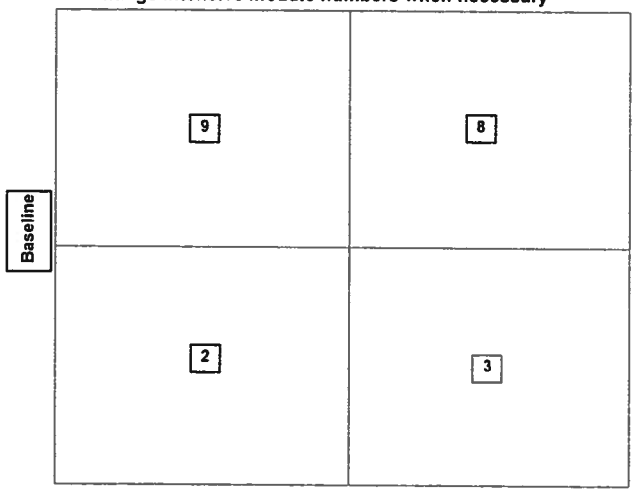
Project Label: PCAP  Project Name: ORRR2011  Plot No.: 3399  Date: 6-14-11



| Module | Tree ID. | Species | Dead | c | Voucher # | DBH (cm) | Ht @ DBH | ASH Only: Ash condition | ASH Only: *Dead condition | ASH Only: # Exit holes | ASH Only: Epicormic present | ASH Only: 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 | | | | | | | | | | | |

N

*** Change intensive module numbers when necessary




Map all ash trees ≥10cm in each module using Tree ID number

* If Ash Condition scores 5 (dead) provide breakup score (A-E)
Count EAB exit holes 1.25m≥ x ≥1.5m
Woodpecker and epicormic marked present (1) or absent (0)

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

Cleveland Metroparks

**Project label:** PCAP **Project Name:** 01RR2011 **Plot No.:** 3399



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

**Soil pit module #** 1 **(one per entire plot)**

| | | |
|---|---|---|
| 5 cm | matrix color | 10YR 3/2 |
| | mottle color | — |
| | %mottle | — |
| | oxid roots | Y (N) |
| | texture* | O |
| | redox features** | Y (N) |
| | hydr. cond.*** | I (S) M D |
| 20 cm | matrix color | 10YR 3/2 |
| | mottle color | — |
| | %mottle | — |
| | oxid roots | (Y) N |
| | texture* | 2 |
| | redox features** | (Y) N |
| | hydro. cond.*** | I (S) M D |

* refer to texture classes on reverse side

** e.g. hydrogen sulfide odor, gleying, etc.

*** Circle one:
I=indundated S=saturated M=moist D=dry

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

Soil color consistent throughout pit; organic soil/root layer extending 8 cm

Found earthworms in pit.

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

| Soil Collection Module | Horizon (A, B, C) |
|---|---|
| 2,3,8,9 composited | A |
| | |
| | |

Soil Description/notes:

**Web Soil Survey Information:**

Soil Series/Type: Euclid silt loam

Soil Series Source: Ohio Soil Survey

Landform type: Terrace

Parent Material: Loamy/silty glaciolacustrine deposits

**DRAINAGE***

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

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

| Module # | C? | Corner | Corner |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

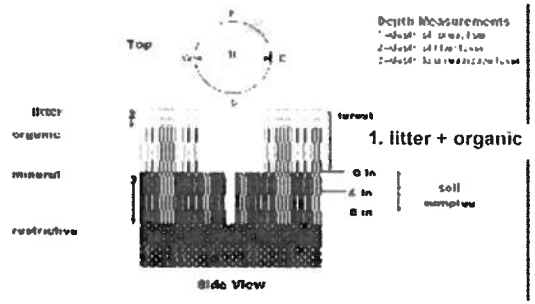
**SOIL DEPTH MEASUREMENT INSTRUCTIONS:** Measure to the nearest 0.1 cm in center of intensive modules. If >30.5 cm, record as >30

>80 inches

| mod# | 1 litter + organic depth (cm) | 2 litter depth (cm) | 3 restrict depth(cm) *[WSS] | water depth (cm) | depth sat soil (cm) |
|---|---|---|---|---|---|
| 1 | 8.0 | 3.0 | >125 | 4.0 | 0 |
| | | | | | |
| | | | | | |
| | | | | | |

**Length of soil probe = 125 cm**

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

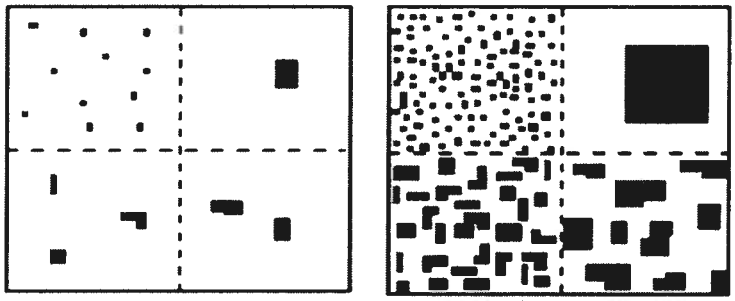





WSS 6-16-11 ZR

**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 |

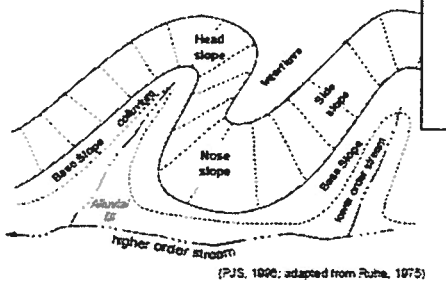



**SOIL TEXTURE**: Record the code for the soil texture of the 5 cm and 20 cm layers. To estimate texture, collect a soil sample from the appropriate layer and moisten it with water to the consistency of modeling clay/wet newspaper; the sample should be wet enough that all of the particles are saturated 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.

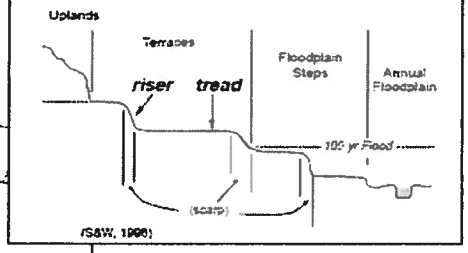
**0**= Organic
**1**= Loamy
**2**= Clayey
**3**= Sandy
**4**= Coarse Sand
**9**= Not measured - make plot note

**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 |

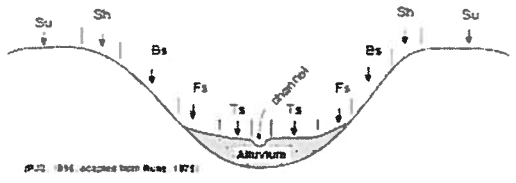



| Terraces | Code |
|---|---|
| riser | RI |
| tread | TR |




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

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

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

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

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

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

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

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

Project Label: PCAP Project Name: 01RR2011 Plot No.: 3399



**COVER BY STRATA** (% estimate using midpoints, of 5 ex: 3, 8, 13, 18%)

| Strata | Height Range (m) | Total Cover (%) |
|---|---|---|
| Tree | 5 - + | 0 |
| Shrub | 2.5 - 5 | 0 |
| Herb | 0 - 2.5 | 98 |
| (Floating)* | - | 0 |
| (Aquatic)** | - | 0 |

* 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.

**EARTH SURFACE & GROUND COVER**

| Underlying Earth Surface* (Sum = 100%) | percent | Ground Cover (Each ≤ 100%) | percent |
|---|---|---|---|
| Histosol | | Coarse Woody Debris*** | — |
| Mineral Soil | 100 | Fine Woody Debris**** | — |
| Gravel-Cobble* | | Litter | 100 |
| Boulder** | | Duff (Fern + Humus) | 100 |
| Bedrock | | Bryophyte-Lichen | — |
| | | Water | 50 |
| | | Bare Soil | — |
| | | Road/Trail | — |
| | | Other | — |

* Gravel-Cobble = 1/16 to 10 in

**Boulder = > 10 in

*** >5 cm in diameter

**** <5 cm in diameter

**Remember: In a standard 2x5 plot each module = 10% cover**

**TRAIL INFORMATION: If trail falls in plot record type and cover for each**

| Type | %Cover |
|---|---|
| ☐ All Purpose | |
| ☐ Bridle | |
| ☐ Hiking sanctioned | |
| ☐ Bootleg unsanctioned | |
| ☐ Gravel | |
| ☐ Deer | |

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

| Module | N | S | E | W |
|---|---|---|---|---|
| 1 | 96 | 96 | 96 | 96 |
| 3 | 96 | 96 | 96 | 96 |
| 8 | 96 | 96 | 96 | 96 |
| 9 | 96 | 96 | 96 | 96 |

DS

**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)

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

0 feature is absent or functionally absent (Golf Course Flat)

3 feature is present 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

| mod# | corner | no. of tussocks depth 3 1x1m (count) | no. of hummocks depth 2 3.16x3.16m (count) | no. macro depressions depth 1 10x10m (count) | c.w.d (2-12 cm) depth 1 10x10m (count) | c.w.d (12-40cm) depth 1 10x10m (count) | c.w.d >40 cm depth 1 10x10m (count) | microhab. interspers. depth 1 10x10m (rank) | microhab SLOPE 10x10m (rank) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2,4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

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

macro depressions = macrotopographic depressions with module. These may extend into other modules and be counted again.

c.w.d. = course woody debris

microhab. interspers.. = overall ranking of plot microtopographic interspersion complexity using scale below

**McNAB INDICES (degrees) + for up - for down**

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

| At aspect | N | LFI* | TSI** |
|---|---|---|---|
| +45 degrees | NE | | |
| +90 degrees | E | | |
| +135 degrees | SE | | |
| +180 degrees | S | | |
| +225 degrees | SW | | |
| +270 degrees | W | | |
| +315 degrees | NW | | |

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

* Landform Index (position within landscape)

** Terrain Shape Index (site microtopographic shape)

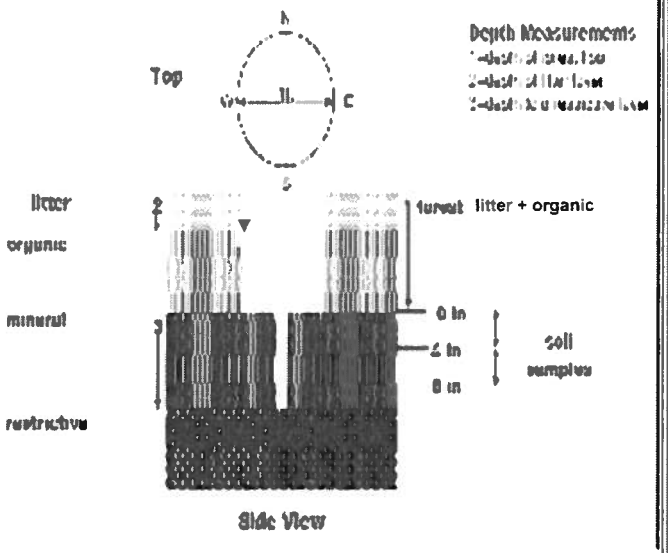
**COVER BY STRATA**

| 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.



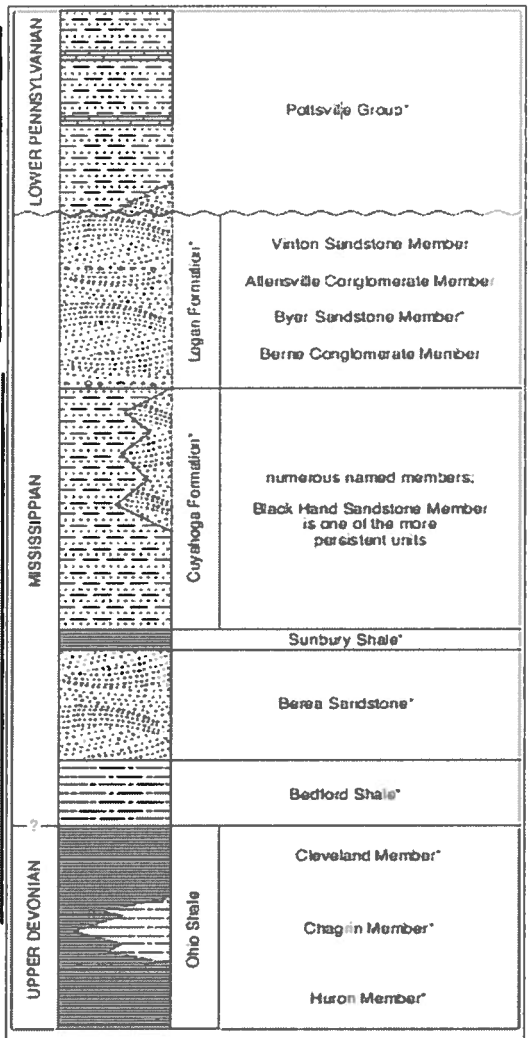




FIGURE 3-20.—Generalized section of Upper Devonian, Mississippian, and Lower Pennsylvanian formations in northeastern Ohio. Asterisks indicate units that are fossiliferous. This composite section represents about 400 meters of rock exposed across the area. The section is not to scale, but the thicknesses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

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

Reviewed by (initial): _____

**Site ID:** PCAP3394RR **DATE:** 6/14/2011

**Location:** ● AA Center ○ N ○ S ○ E ○ W

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

## Buffer Natural Cover Strata

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

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

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

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

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

### Residential and Urban Stressors

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Road - gravel | ○ | ○ | ○ | |
| Road - two lane | ○ | ○ | ○ | |
| Road - four lane | ○ | ○ | ○ | |
| Parking Lot/Pavement | ○ | ○ | ○ | |
| Golf Course | ○ | ○ | ○ | |
| Lawn/Park | ○ | ○ | ○ | |
| Suburban Residential | ○ | ○ | ○ | |
| Urban/Multifamily | ○ | ○ | ○ | |
| Landfill | ○ | ○ | ○ | |
| Dumping | ○ | ○ | ○ | |
| Trash | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

### Hydrology Stressors

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Ditches, Channelization | ○ | ○ | ○ | |
| Dike/Dam/Road/RR Bed (IMPEDE FLOW) | ○ | ○ | ○ | |
| Water Level Control Structure | ○ | ○ | ○ | |
| Excavation, Dredging | ○ | ○ | ○ | |
| Fill/Spoil Banks | ○ | ○ | ○ | |
| Freshly Deposited Sediment (UNVEGETATED) | ○ | ○ | ○ | |
| Soil Loss/Root Exposure | ○ | ○ | ○ | |
| Wall/Riprap | ○ | ○ | ○ | |
| Inlets, Outlets | ○ | ○ | ○ | |
| Point Source/Pipe (EFFLUENT OR STORMWATER) | ○ | ○ | ○ | |
| Impervious surface input (SHEETFLOW) | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

### Agricultural & Rural Stressors

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Pasture/Hay | ○ | ○ | ○ | |
| Range | ○ | ○ | ○ | |
| Row Crops | ○ | ○ | ○ | |
| Fallow Field (RECENT-RESTING ROW CROP FIELD) | ○ | ○ | ○ | |
| Fallow Field (OLD - GRASS, SHRUBS, TREES) | ○ | ○ | ○ | |
| Nursery | ○ | ○ | ○ | |
| Dairy | ○ | ○ | ○ | |
| Orchard | ○ | ○ | ○ | |
| Confined Animal Feeding | ○ | ○ | ○ | |
| Rural Residential | ○ | ○ | ○ | |
| Gravel Pit | ○ | ○ | ○ | |
| Irrigation | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

### Industrial Development Stressors

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Oil Drilling | ○ | ○ | ○ | |
| Gas Wells | ○ | ○ | ○ | |
| Mine (surface) | ○ | ○ | ○ | |
| Mine (underground) | ○ | ○ | ○ | |
| Military | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

### Habitat/Vegetation Stressors

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Forest Clear Cut | ○ | ○ | ○ | |
| Forest Selective Cut | ○ | ○ | ○ | |
| Tree Plantation | ○ | ○ | ○ | |
| Tree Canopy Herbivory (INSECT) | ○ | ○ | ○ | |
| Shrub Layer Browsed (WILD OR DOMESTIC) | ○ | ○ | ○ | |
| Highly Grazed Grasses (OVERALL <3" HIGH) | ○ | ○ | ○ | |
| Recently Burned Forest Canopy | ○ | ○ | ○ | |
| Recently Burned Grassland (BLACKENED) | ○ | ○ | ○ | |

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Herbicide Use | ○ | ○ | ○ | |
| Mowing/Shrub Cutting | ○ | ○ | ○ | |
| Trails | ○ | ○ | ○ | |
| Soil Compaction (ANIMAL OR HUMAN) | ○ | ○ | ○ | |
| Offroad vehicle damage | ○ | ○ | ○ | |
| Soil erosion (FROM WIND, WATER OR OVERUSE) | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

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

2428168304

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

Reviewed by (initial): _____

**Site ID:** _____ **DATE:** ____/____/_____

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

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

### PLOT COORDINATES

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

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

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

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

Latitude North 41 . 448065 Longitude West -81 . 838005

**Use Decimal Degrees; NAD83**

| Flag | Comments |
|---|---|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

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

Reviewed by (initial): _____

Site ID: PCAP 3399 RR DATE: 6/14/2011

**Location:** ○ AA Center ◉ N ○ S ○ E ○ W

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

## Buffer Natural Cover Strata

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

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

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

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

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

| Residential and Urban Stressors — Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Road - gravel | ○ | ○ | ○ | |
| Road - two lane | ○ | ○ | ○ | |
| Road - four lane | ○ | ○ | ○ | |
| Parking Lot/Pavement | ○ | ○ | ● | |
| Golf Course | ○ | ○ | ○ | |
| Lawn/Park | ● | ○ | ○ | |
| Suburban Residential | ○ | ○ | ○ | |
| Urban/Multifamily | ○ | ○ | ○ | |
| Landfill | ○ | ○ | ○ | |
| Dumping | ○ | ○ | ○ | |
| Trash | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

| Hydrology Stressors — Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Ditches, Channelization | ○ | ○ | ○ | |
| Dike/Dam/Road/RR Bed (IMPEDE FLOW) | ○ | ○ | ○ | |
| Water Level Control Structure | ○ | ○ | ○ | |
| Excavation, Dredging | ○ | ○ | ○ | |
| Fill/Spoil Banks | ○ | ○ | ○ | |
| Freshly Deposited Sediment (UNVEGETATED) | ○ | ○ | ○ | |
| Soil Loss/Root Exposure | ○ | ○ | ○ | |
| Wall/Riprap | ○ | ○ | ○ | |
| Inlets, Outlets | ○ | ○ | ○ | |
| Point Source/Pipe (EFFLUENT OR STORMWATER) | ○ | ○ | ○ | |
| Impervious surface input (SHEETFLOW) | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

| Agricultural & Rural Stressors — Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Pasture/Hay | ○ | ○ | ○ | |
| Range | ○ | ○ | ○ | |
| Row Crops | ○ | ○ | ○ | |
| Fallow Field (RECENT-RESTING ROW CROP FIELD) | ○ | ○ | ○ | |
| Fallow Field (OLD - GRASS, SHRUBS, TREES) | ○ | ○ | ○ | |
| Nursery | ○ | ○ | ○ | |
| Dairy | ○ | ○ | ○ | |
| Orchard | ○ | ○ | ○ | |
| Confined Animal Feeding | ○ | ○ | ○ | |
| Rural Residential | ○ | ○ | ○ | |
| Gravel Pit | ○ | ○ | ○ | |
| Irrigation | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

| Industrial Development Stressors — Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Oil Drilling | ○ | ○ | ○ | |
| Gas Wells | ○ | ○ | ○ | |
| Mine (surface) | ○ | ○ | ○ | |
| Mine (underground) | ○ | ○ | ○ | |
| Military | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

| Habitat/Vegetation Stressors — Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Forest Clear Cut | ○ | ○ | ○ | |
| Forest Selective Cut | ○ | ○ | ○ | |
| Tree Plantation | ○ | ○ | ○ | |
| Tree Canopy Herbivory (INSECT) | ○ | ○ | ○ | |
| Shrub Layer Browsed (WILD OR DOMESTIC) | ○ | ○ | ○ | |
| Highly Grazed Grasses (OVERALL <3" HIGH) | ○ | ○ | ○ | |
| Recently Burned Forest Canopy | ○ | ○ | ○ | |
| Recently Burned Grassland (BLACKENED) | ○ | ○ | ○ | |

| Habitat/Vegetation Stressors — Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Herbicide Use | ○ | ○ | ○ | |
| Mowing/Shrub Cutting | ● | ○ | ○ | |
| Trails | ○ | ○ | ○ | |
| Soil Compaction (ANIMAL OR HUMAN) | ○ | ○ | ○ | |
| Offroad vehicle damage | ○ | ○ | ○ | |
| Soil erosion (FROM WIND, WATER OR OVERUSE) | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

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

2428168304

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

Reviewed by (initial): _____

**Site ID:** _____ **DATE:** ____/____/_____

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

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

### 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):**

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

Flag: 2

Latitude North 41.44934 Longitude West -81.83801

**Use Decimal Degrees; NAD83**

| Flag | Comments |
|---|---|
| 1 | Landscaped area outside HQ building, right of front door |
| 2 | Point falls in HQ rear parking lot. |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

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

Reviewed by (initial): _____

Site ID: PCAP3399RR

DATE: 6/14/2011

**Location:** ○ AA Center ○ N ○ S ● E ○ W

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

## Buffer Natural Cover Strata

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

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

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Road - gravel | ○ | ○ | ○ | |
| Road - two lane | ○ | ○ | ○ | |
| Road - four lane | ○ | ○ | ○ | |
| Parking Lot/Pavement | ○ | ○ | ○ | |
| Golf Course | ○ | ○ | ○ | |
| Lawn/Park | ○ | ○ | ○ | |
| Suburban Residential | ○ | ○ | ○ | |
| Urban/Multifamily | ○ | ○ | ○ | |
| Landfill | ○ | ○ | ○ | |
| Dumping | ○ | ○ | ○ | |
| Trash | ○ | ○ | ● | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

### Hydrology Stressors

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Ditches, Channelization | ○ | ○ | ○ | |
| Dike/Dam/Road/RR Bed (IMPEDE FLOW) | ○ | ○ | ○ | |
| Water Level Control Structure | ○ | ○ | ○ | |
| Excavation, Dredging | ○ | ○ | ○ | |
| Fill/Spoil Banks | ○ | ○ | ○ | |
| Freshly Deposited Sediment (UNVEGETATED) | ○ | ○ | ○ | |
| Soil Loss/Root Exposure | ○ | ○ | ○ | |
| Wall/Riprap | ○ | ○ | ○ | |
| Inlets, Outlets | ○ | ○ | ○ | |
| Point Source/Pipe (EFFLUENT OR STORMWATER) | ○ | ○ | ○ | |
| Impervious surface input (SHEETFLOW) | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

### Agricultural & Rural Stressors

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Pasture/Hay | ○ | ○ | ○ | |
| Range | ○ | ○ | ○ | |
| Row Crops | ○ | ○ | ○ | |
| Fallow Field (RECENT-RESTING ROW CROP FIELD) | ○ | ○ | ○ | |
| Fallow Field (OLD - GRASS, SHRUBS, TREES) | ○ | ○ | ○ | |
| Nursery | ○ | ○ | ○ | |
| Dairy | ○ | ○ | ○ | |
| Orchard | ○ | ○ | ○ | |
| Confined Animal Feeding | ○ | ○ | ○ | |
| Rural Residential | ○ | ○ | ○ | |
| Gravel Pit | ○ | ○ | ○ | |
| Irrigation | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

### Industrial Development Stressors

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Oil Drilling | ○ | ○ | ○ | |
| Gas Wells | ○ | ○ | ○ | |
| Mine (surface) | ○ | ○ | ○ | |
| Mine (underground) | ○ | ○ | ○ | |
| Military | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

### Habitat/Vegetation Stressors

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Forest Clear Cut | ○ | ○ | ○ | |
| Forest Selective Cut | ○ | ○ | ○ | |
| Tree Plantation | ○ | ○ | ○ | |
| Tree Canopy Herbivory (INSECT) | ○ | ○ | ○ | |
| Shrub Layer Browsed (WILD OR DOMESTIC) | ● | ○ | ○ | |
| Highly Grazed Grasses (OVERALL <3" HIGH) | ○ | ○ | ○ | |
| Recently Burned Forest Canopy | ○ | ○ | ○ | |
| Recently Burned Grassland (BLACKENED) | ○ | ○ | ○ | |

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Herbicide Use | ○ | ○ | ○ | |
| Mowing/Shrub Cutting | ○ | ○ | ○ | |
| Trails | ○ | ○ | ○ | |
| Soil Compaction (ANIMAL OR HUMAN) | ○ | ○ | ○ | |
| Offroad vehicle damage | ○ | ○ | ○ | |
| Soil erosion (FROM WIND, WATER, OR OVERUSE) | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

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

2428168304

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

Reviewed by (initial): _____

**Site ID:** _____ **DATE:** ____ / ____ / _____

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

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

### PLOT COORDINATES

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

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

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

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

Latitude North 41 . 44799 Longitude West -81 . 83665

**Use Decimal Degrees; NAD83**

| Flag | Comments |
|---|---|
| | |
| | |
| | |
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| | |
| | |
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| | |
| | |
| | |

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

Reviewed by (initial): _____

Site ID: PCAP3399RR DATE: 6/14/2011

**Location:** ○ AA Center ○ N ● S ○ E ○ W

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

## Buffer Natural Cover Strata

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

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

**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

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Road - gravel | ○ | ○ | ○ | |
| Road - two lane | ○ | ○ | ○ | |
| Road - four lane | ○ | ○ | ○ | |
| Parking Lot/Pavement | ● | ○ | ○ | |
| Golf Course | ○ | ○ | ○ | |
| Lawn/Park | ● | ○ | ○ | |
| Suburban Residential | ○ | ○ | ○ | |
| Urban/Multifamily | ○ | ○ | ○ | |
| Landfill | ○ | ○ | ○ | |
| Dumping | ○ | ○ | ○ | |
| Trash | ○ | ○ | ● | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

### Hydrology Stressors

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Ditches, Channelization | ○ | ○ | ○ | |
| Dike/Dam/Road/RR Bed (IMPEDE FLOW) | ○ | ○ | ○ | |
| Water Level Control Structure | ○ | ○ | ○ | |
| Excavation, Dredging | ○ | ○ | ○ | |
| Fill/Spoil Banks | ○ | ○ | ○ | |
| Freshly Deposited Sediment (UNVEGETATED) | ○ | ○ | ○ | |
| Soil Loss/Root Exposure | ○ | ○ | ○ | |
| Wall/Riprap | ○ | ○ | ○ | |
| Inlets, Outlets | ○ | ○ | ○ | |
| Point Source/Pipe (EFFLUENT OR STORMWATER) | ○ | ○ | ● | |
| Impervious surface input (SHEETFLOW) | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

### Agricultural & Rural Stressors

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Pasture/Hay | ○ | ○ | ○ | |
| Range | ○ | ○ | ○ | |
| Row Crops | ○ | ○ | ○ | |
| Fallow Field (RECENT-RESTING ROW CROP FIELD) | ○ | ○ | ○ | |
| Fallow Field (OLD - GRASS, SHRUBS, TREES) | ○ | ○ | ○ | |
| Nursery | ○ | ○ | ○ | |
| Dairy | ○ | ○ | ○ | |
| Orchard | ○ | ○ | ○ | |
| Confined Animal Feeding | ○ | ○ | ○ | |
| Rural Residential | ○ | ○ | ○ | |
| Gravel Pit | ○ | ○ | ○ | |
| Irrigation | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

### Industrial Development Stressors

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Oil Drilling | ○ | ○ | ○ | |
| Gas Wells | ○ | ○ | ○ | |
| Mine (surface) | ○ | ○ | ○ | |
| Mine (underground) | ○ | ○ | ○ | |
| Military | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

### Habitat/Vegetation Stressors

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Forest Clear Cut | ○ | ○ | ○ | |
| Forest Selective Cut | ○ | ○ | ○ | |
| Tree Plantation | ○ | ○ | ○ | |
| Tree Canopy Herbivory (INSECT) | ○ | ○ | ○ | |
| Shrub Layer Browsed (WILD OR DOMESTIC) | ○ | ○ | ○ | |
| Highly Grazed Grasses (OVERALL <3" HIGH) | ○ | ○ | ○ | |
| Recently Burned Forest Canopy | ○ | ○ | ○ | |
| Recently Burned Grassland (BLACKENED) | ○ | ○ | ○ | |

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Herbicide Use | ○ | ○ | ○ | |
| Mowing/Shrub Cutting | ● | ○ | ○ | |
| Trails | ○ | ○ | ○ | |
| Soil Compaction (ANIMAL OR HUMAN) | ○ | ○ | ○ | |
| Offroad vehicle damage | ○ | ○ | ○ | |
| Soil erosion (FROM WIND, WATER, OR OVERUSE) | ○ | ○ | ● | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

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

2428168304

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

Reviewed by (initial): _____

**Site ID:** _____ **DATE:** ____/____/_____

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

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

### PLOT COORDINATES

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

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

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

○ AA CENTER ○ N3 ● S3 ○ E3 ○ W3 ○ Nearest practicable location (flag and comment below) [ ]

Latitude North 41.44701 Longitude West -81.83774

**Use Decimal Degrees; NAD83**

| Flag | Comments |
|---|---|
| 1 | old gravel parking area |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

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

Reviewed by (Initial): _____

**Site ID:** PCAP3399 RR **DATE:** 6/14/2011

**Location:** ○ AA Center ○ N ○ S ○ E ● W

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

## Buffer Natural Cover Strata

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

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

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

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

**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

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Road - gravel | ○ | ○ | ○ | |
| Road - two lane | ○ | ○ | ○ | |
| Road - four lane | ○ | ○ | ● | 3 |
| Parking Lot/Pavement | ● | ○ | ○ | 1 |
| Golf Course | ○ | ○ | ○ | |
| Lawn/Park | ○ | ○ | ○ | |
| Suburban Residential | ○ | ○ | ○ | |
| Urban/Multifamily | ○ | ○ | ○ | |
| Landfill | ○ | ○ | ○ | |
| Dumping | ○ | ○ | ○ | |
| Trash | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

### Hydrology Stressors

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Ditches, Channelization | ○ | ○ | ○ | |
| Dike/Dam/Road/RR Bed (IMPEDE FLOW) | ○ | ○ | ○ | |
| Water Level Control Structure | ○ | ○ | ○ | |
| Excavation, Dredging | ○ | ○ | ○ | |
| Fill/Spoil Banks | ○ | ○ | ○ | |
| Freshly Deposited Sediment (UNVEGETATED) | ○ | ○ | ○ | |
| Soil Loss/Root Exposure | ○ | ○ | ○ | |
| Wall/Riprap | ○ | ○ | ○ | |
| Inlets, Outlets | ○ | ○ | ○ | |
| Point Source/Pipe (EFFLUENT OR STORMWATER) | ○ | ○ | ○ | |
| Impervious surface input (SHEETFLOW) | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

### Agricultural & Rural Stressors

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Pasture/Hay | ○ | ○ | ○ | |
| Range | ○ | ○ | ○ | |
| Row Crops | ○ | ○ | ○ | |
| Fallow Field (RECENT-RESTING ROW CROP FIELD) | ○ | ○ | ○ | |
| Fallow Field (OLD - GRASS, SHRUBS, TREES) | ○ | ○ | ○ | |
| Nursery | ○ | ○ | ○ | |
| Dairy | ○ | ○ | ○ | |
| Orchard | ○ | ○ | ○ | |
| Confined Animal Feeding | ○ | ○ | ○ | |
| Rural Residential | ○ | ○ | ○ | |
| Gravel Pit | ○ | ○ | ○ | |
| Irrigation | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

### Industrial Development Stressors

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Oil Drilling | ○ | ○ | ○ | |
| Gas Wells | ○ | ○ | ○ | |
| Mine (surface) | ○ | ○ | ○ | |
| Mine (underground) | ○ | ○ | ○ | |
| Military | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

### Habitat/Vegetation Stressors

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Forest Clear Cut | ○ | ○ | ○ | |
| Forest Selective Cut | ○ | ○ | ○ | |
| Tree Plantation | ○ | ○ | ○ | |
| Tree Canopy Herbivory (INSECT) | ○ | ○ | ○ | |
| Shrub Layer Browsed (WILD OR DOMESTIC) | ○ | ○ | ○ | |
| Highly Grazed Grasses (OVERALL <3" HIGH) | ○ | ○ | ○ | |
| Recently Burned Forest Canopy | ○ | ○ | ○ | |
| Recently Burned Grassland (BLACKENED) | ○ | ○ | ○ | |

| Fill bubble if present - Plot | 1 | 2 | 3 | Flag |
|---|---|---|---|---|
| Herbicide Use | ○ | ○ | ○ | |
| Mowing/Shrub Cutting | ○ | ○ | ○ | |
| Trails | ○ | ● | ○ | 2 |
| Soil Compaction (ANIMAL OR HUMAN) | ○ | ○ | ○ | |
| Offroad vehicle damage | ○ | ○ | ○ | |
| Soil erosion (FROM WIND, WATER OR OVERUSE) | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |
| Other: _____ | ○ | ○ | ○ | |

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

2428168304

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

Reviewed by (initial): _____

**Site ID:** _____ **DATE:** ____ / ____ / _____

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

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

### 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):**

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

Flag: ____

Latitude North 41 . 44788 Longitude West -81 . 83926

**Use Decimal Degrees; NAD83**

| Flag | Comments |
|---|---|
| 1 | Entrance to Big Met golf course |
| 2 | APT |
| 3 | Valley Parkway |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

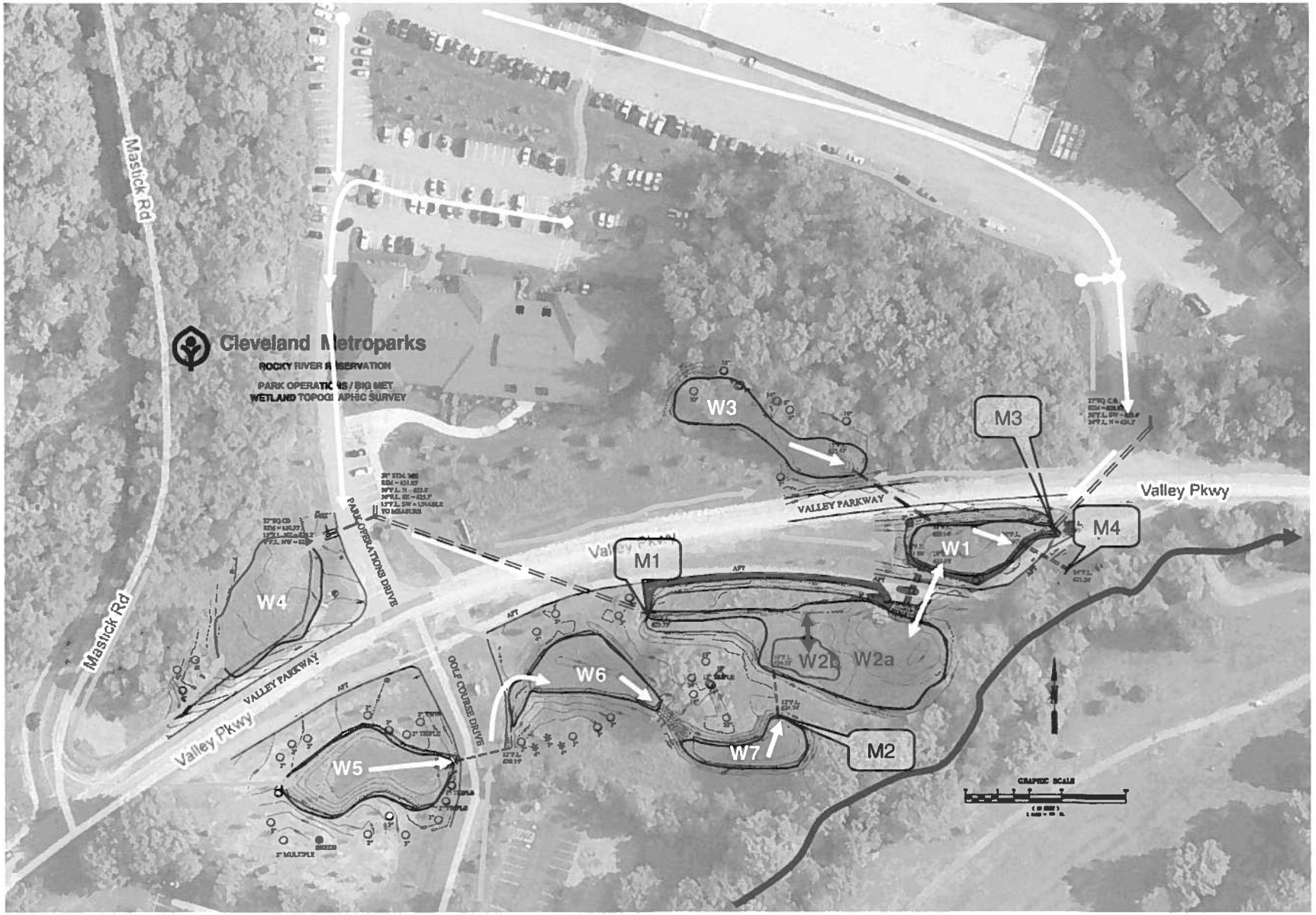


Figure 2. Wetland BMP Monitoring Network for Rocky River Maintenance Center. White arrows are piped input or connections. Yellow arrows are overland flow inputs. M1-4 are monitoring locations proposed in this application.