



# PORTSMOUTH EM SITE SPECIFIC ADVISORY BOARD

•OSU Endeavor Center• 1862 Shyville Road • Piketon, Ohio 45661 • (740) 289-5249 •

## Proposed Agenda for the July 11, 2013 Board Meeting

### Chair

William E. Henderson II

### Vice Chair

Val E. Francis

### Board Members

Shirley A. Bandy

Al Don Cisco

Martha A. Cosby

Ervin S. Craft

Franklin H. Halstead

Adrian C. Harrison

Carl R. Hartley

Brian F. Huber

Sharon E. Manson

Daniel J. Minter

Michael E. Payton

Richard H. Snyder

Brandon K. Wooldridge

Connie E. Yeager

Kathy J. Zimmerman-Woodburn

### Deputy Designated

### Federal Official

Joel Bradburne

### DOE Federal Coordinator

Greg Simonton

### 6 p.m.

Call to Order, Introductions

Review of Agenda

Approval of May Minutes

### DDFO Comments

--15 minutes

### Federal Coordinator Comments

--10 minutes

### Liaison Comments

--10 minutes

### Presentation

--25 minutes

- PORTS Habitat Resource Inventory  
Summary of Field Work, Data Collection, and Analysis-Gary Conley. Ohio University (OU)

### Administrative Issues

--25 minutes

- Review of SSAB Communications Plan

### Draft Recommendation 13-03

- Public Comments on Recommendation 13-03
- Board Comments on Recommendation 13-03

### Draft Recommendation 13-04

- Public Comments on Recommendation 13-04
- Board Comments on Recommendation 13-04

### Subcommittee Updates

-- 5 minutes

### Public Comments

--15 minutes

### Final Comments from the Board

--10 minutes

### Adjourn

### Support Services

EHI Consultants, Inc.  
1862 Shyville Road  
Piketon, OH 45661  
Phone 740.289.5249  
Fax 740.289.1578

# DEPUTY DESIGNATED FEDERAL OFFICIAL PRESENTATION

Joel Bradburne, Site Lead  
U.S. Department of Energy



**Portsmouth Site Specific Advisory Board  
July 11, 2013**

# Agenda

- ▶ Plant Updates
- ▶ Regulatory Progress
- ▶ Community Outreach
- ▶ Upcoming Events





Plant Updates / X-344 Barter 9 Crew  
Completes Final Shipment of Lot 9

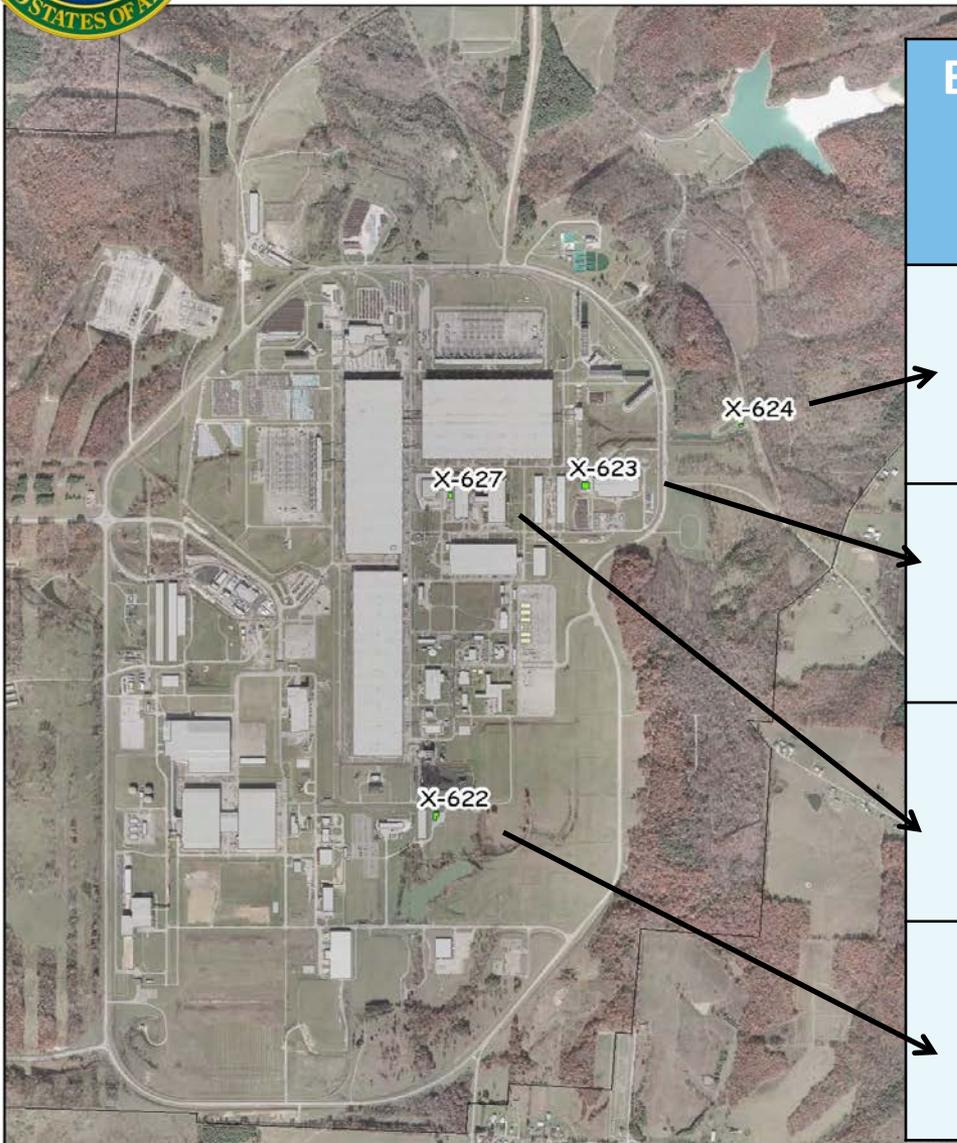


# Plant Updates / X-744G Operations Achieves 1000 Drums Overpacked, No Safety Issues





# Groundwater Remediation



Building	Treated FY2013 to March 23	TCE Removed FY13 -March 23
X-624	2,573,000 Gallons	134 lbs
X-623	21,000 Gallons	0.1 lbs
X-627	6,844,000 Gallons	133 lbs
X-622	10,737,000 Gallons	16 lbs



# Regulatory Progress: Submittals to Ohio EPA

## D&D

- Submitted the DFF&O Quarterly Report for the 1<sup>st</sup> Quarter.
- Submitted the X-600 Complex Removal Action Work Plan.
- Submitted the X-624-1, the X-744S, the X-102 and the X-106 Removal Action Work Plans.
- Submitted the revised Ohio EPA RTCs for the X-100 Removal Action Completion Report.
- Submitted the X-100 Removal Action Completion Report D2 R4.

## Soil and Groundwater

- Received Ohio EPA approval on the Technical Memorandum for the X-749, X-120 Area Ground Water Optimization Project, D2 R2.

## Waste Disposition

- Submitted the OSDC Preliminary Clay Liner Cap TPWP, D2 RH.



# DUF6 Conversion Plant



Production data Fiscal Year to Date 2013  
(as of 6/27/13)

Processed 3924 metric tons of DUF6  
Produced 621,524 gallons of HF  
Produced 3139 metric tons of oxide  
Emptied 305 cylinders



# Community Outreach



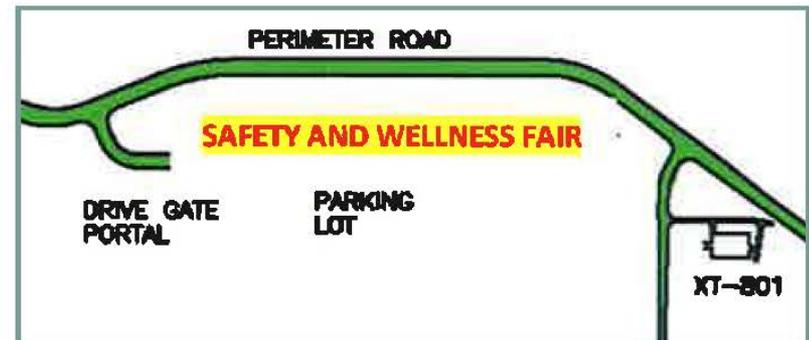


# Community Outreach

## Wellness and Safety Expo Coming July 17!

Members of the surrounding community are invited to attend.

Health Screenings and wellness and safety demonstrations will be available for all attendees.



Date: Wednesday, 07/17/2013 (rain or shine)

Time: 10 a.m. to 2 p.m.

X-206B South Parking Lot. A large tent will be installed. Portable restrooms will be available.



# Community Outreach





# Community Outreach





# Community Outreach





**DOE welcomed Ed Gortner, manager of the Division of Emergency and Remedial Response for Ohio, with the Ohio EPA and Jim Sferra, Chief, Ohio EPA Southeast District for a Tour May 9.**



## Community Outreach

**National  
Group of  
State  
Legislators  
Tours  
PORTS**





# D&D Project Economic Impact:

Building a Stronger Economy for Southern Ohio

Examples, 9/2010 - 5/2013



Regional Purchasing/Subcontract Goal

**\$75 Million**

Actual Dollars Spent

**\$195 Million**

Local Companies  
Awarded Contracts  
**107 Companies**

Contributions to  
Community Groups  
**\$145,000**

The economic stimulus of the D&D Project reaches beyond the site's borders to the four-counties surrounding the site.

Local Business Growth Awards

**2**



Total Dollars Awarded  
**\$100,000**

Contributions to Education  
**\$120,000**

36 Academic  
Scholarships  
**\$72,000**





# Community Outreach Calendar



**Jackson County Fair**  
**July 12-20**  
**Jackson Co Fair Grounds**



**Wellness and Safety Expo**  
**Wednesday, July 17**



**Pike County Fair**  
**July 29 – Aug 3**  
**Pike Co Fair Grounds**

*If you have a Community Event you'd like us to be a part of please contact Deneen Revel @ [deneen.revel@fbports.com](mailto:deneen.revel@fbports.com)*



# Upcoming Site Events



**Site Public Tour**  
**Saturday, July 20**



**SSAB Executive Planning Session**  
**August 23-24, Deer Creek State Park**



**Educator Workshop**  
**Wednesday, August 7 (tentative)**



**Media Day**  
**August/September (date TBD)**

**MARK YOUR  
CALENDAR!**

*For a full list of SSAB activities, check out the website at  
<http://www.ports-ssab.energy.gov>*

# PORTS Habitat Resource Inventory

## Summary of Field Work, Data Collection, and Analysis

Voinovich School of Leadership and  
Public Affairs

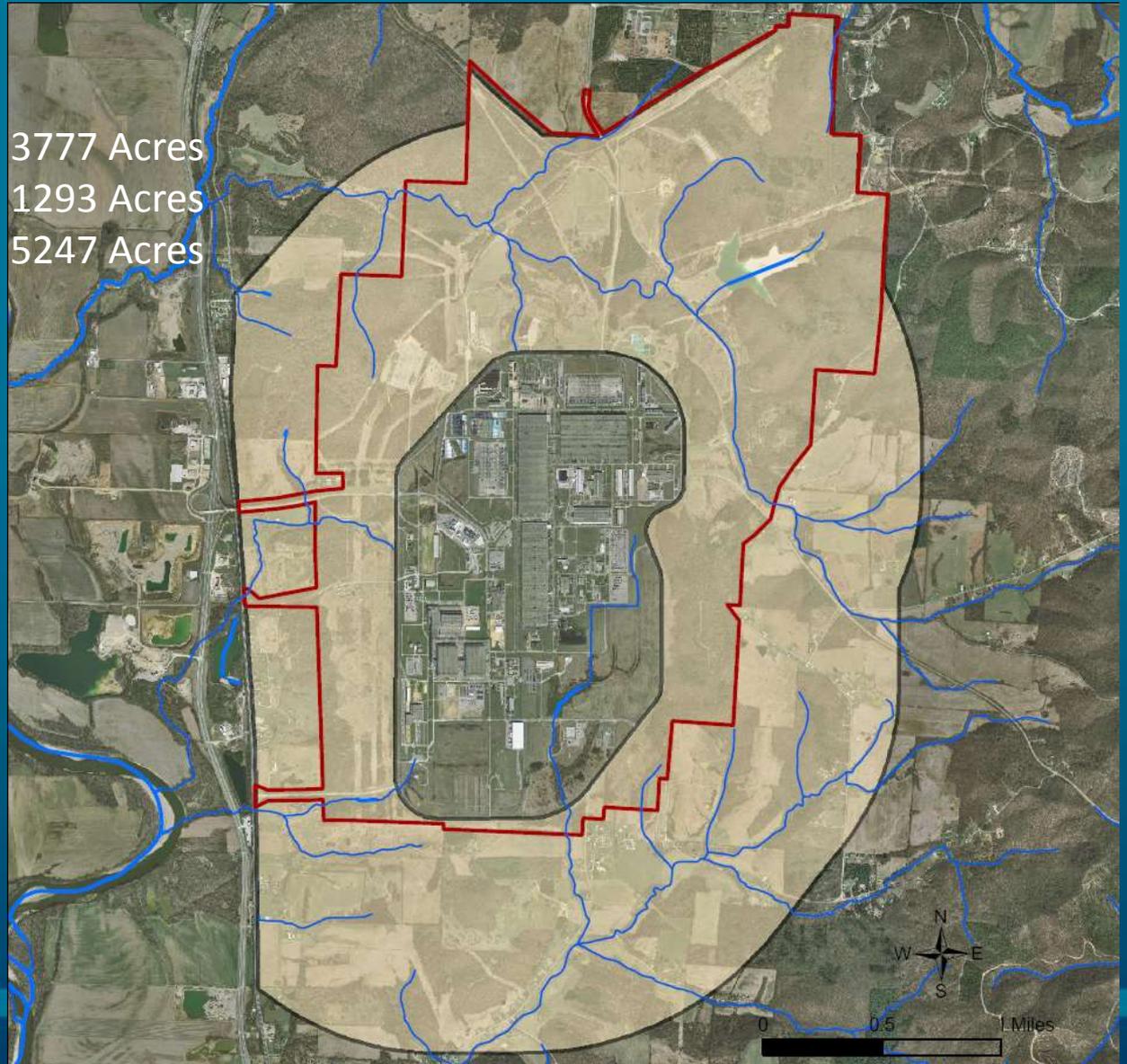
Presented by Gary Conley

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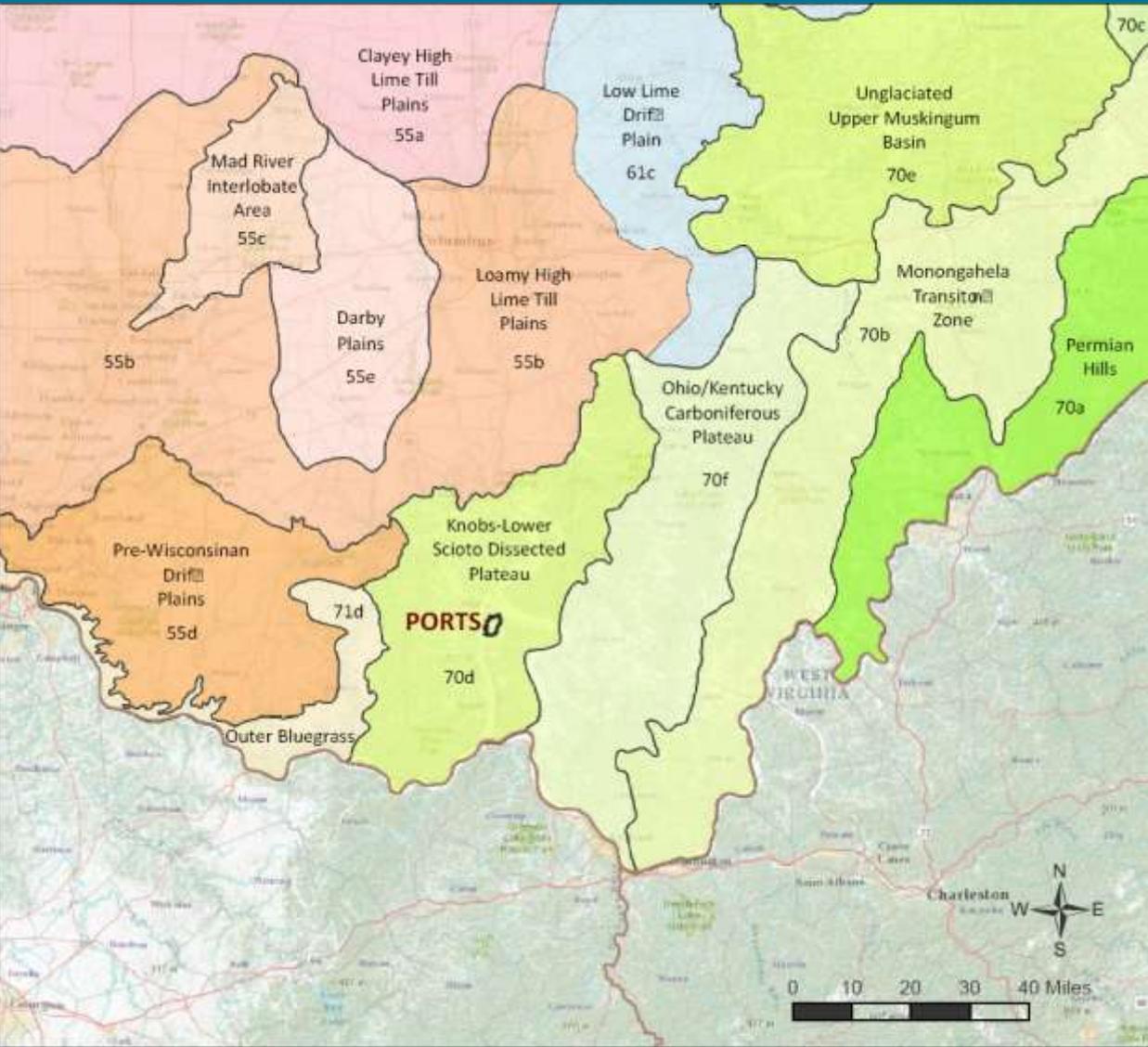


# Habitat Characterization Study Area

PORTS Lands: 3777 Acres  
Within Perimeter Road: 1293 Acres  
Study Area: 5247 Acres



# Ecoregion Characteristics

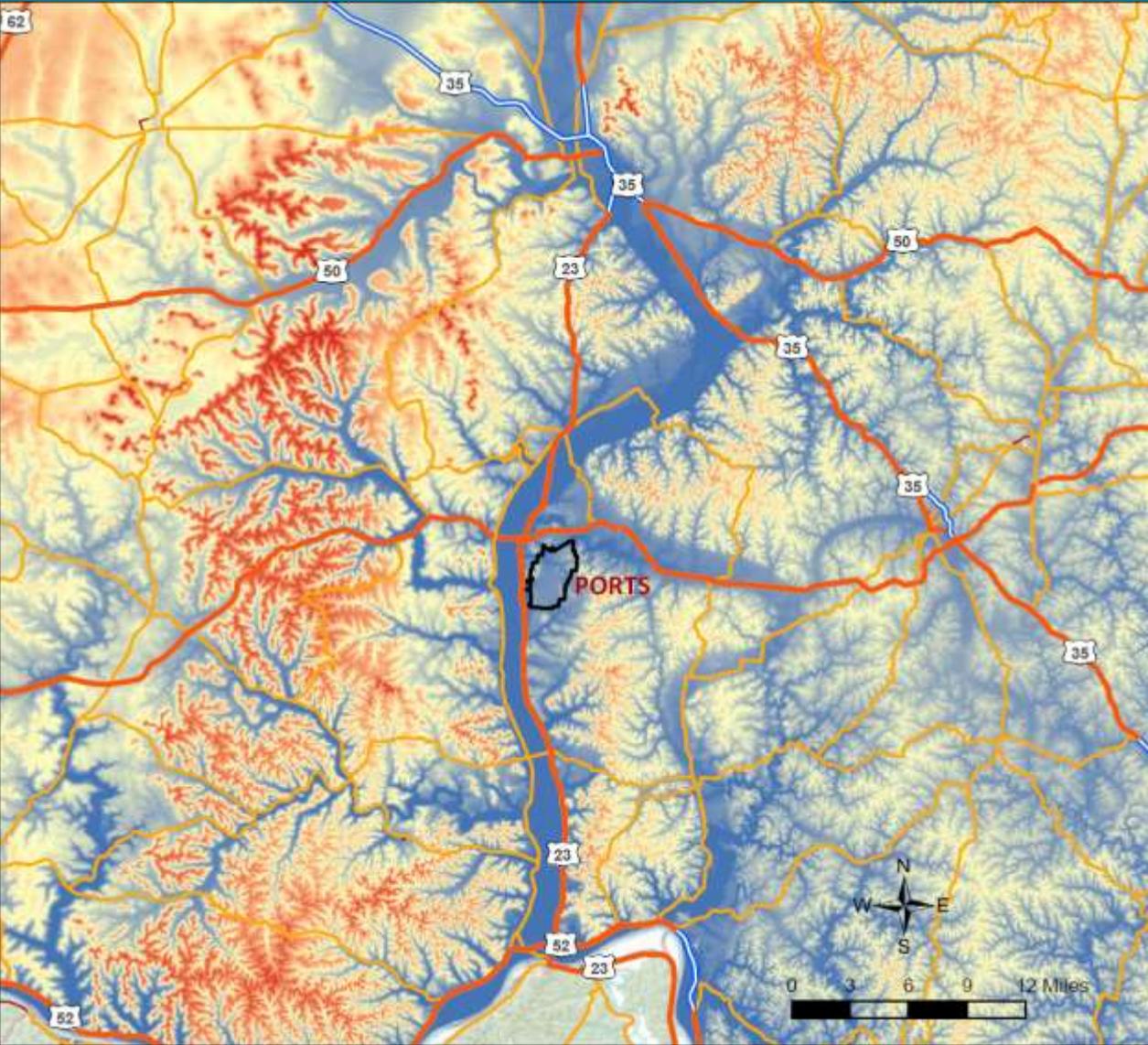


USEPA, 2011

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# Regional Elevation Characteristics

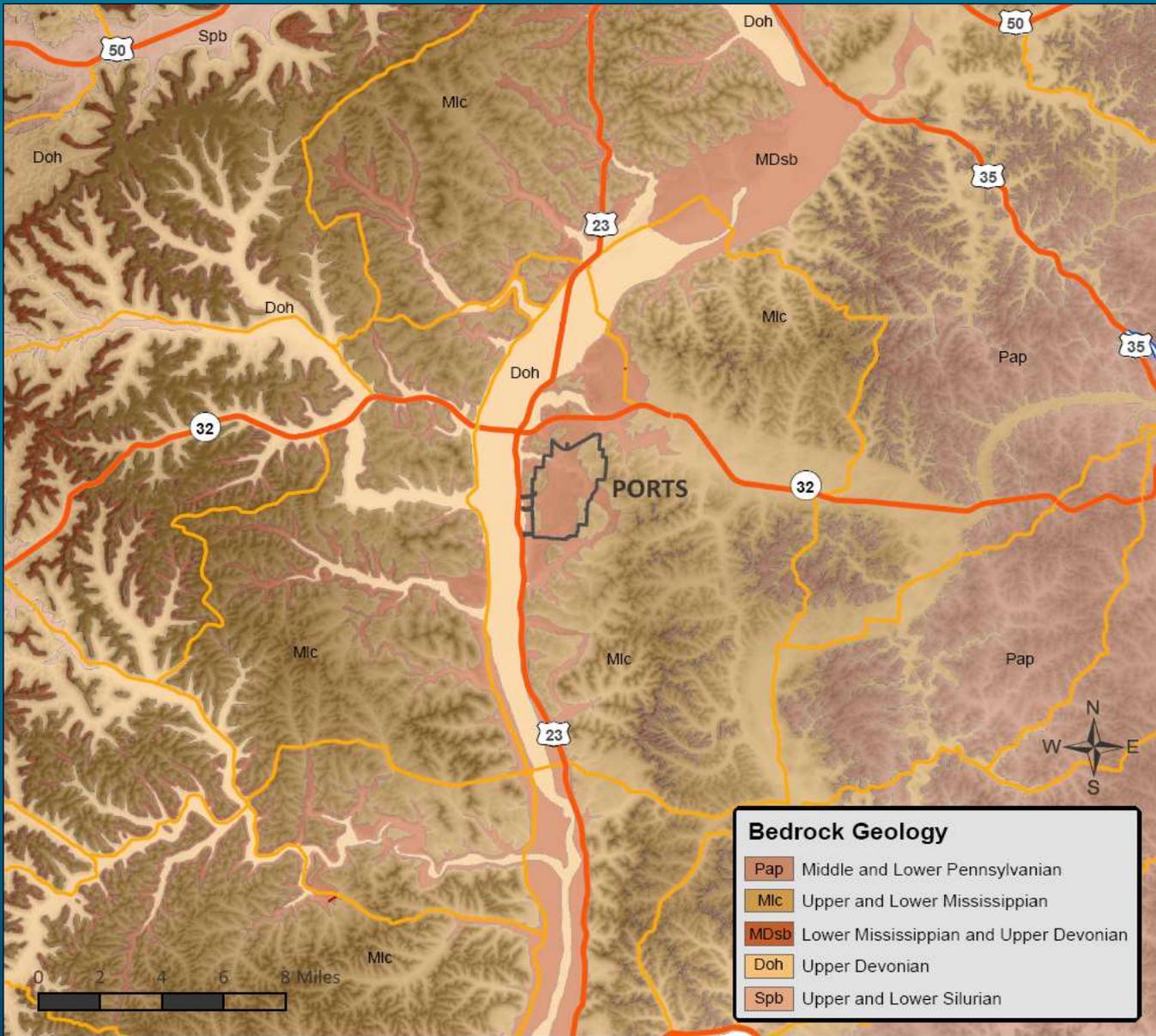


OSIP, 2007

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# Dominant Bedrock Geology

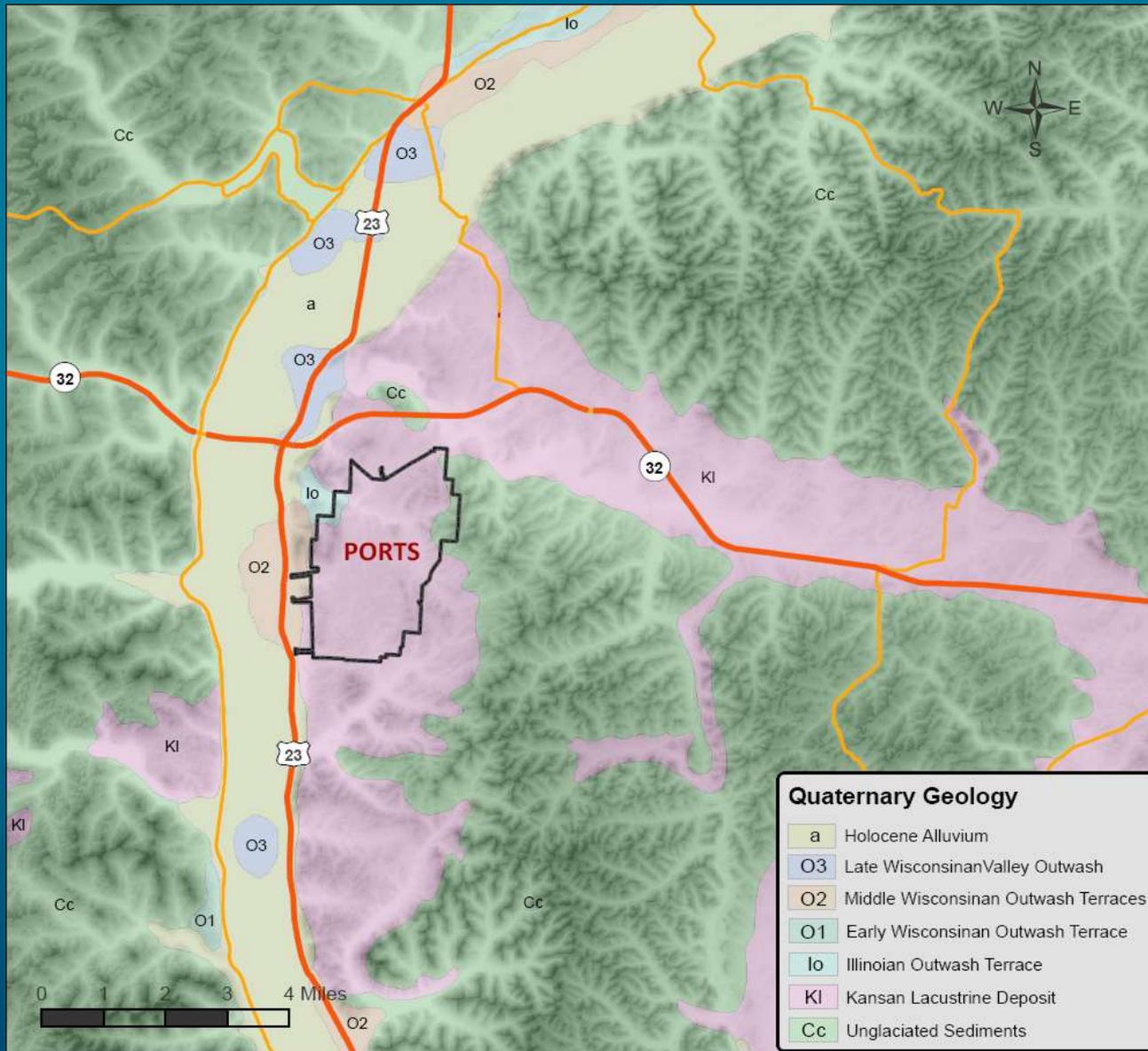


Slucher, 2006

# PORTS FUTURE



# Dominant Surface Geology

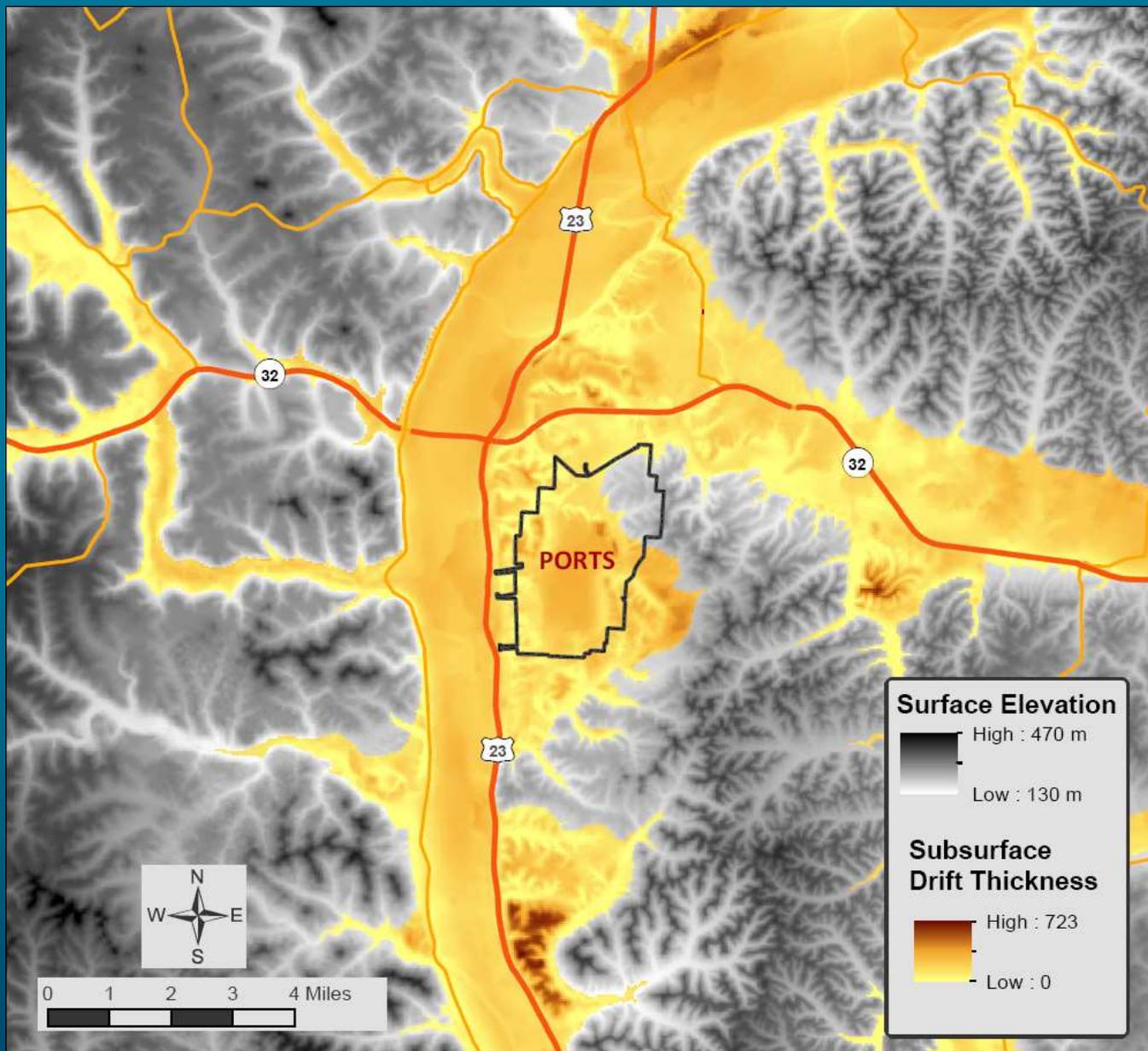


Powers, 2004

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# Regional Subsurface Characteristics



Pavey, 1999

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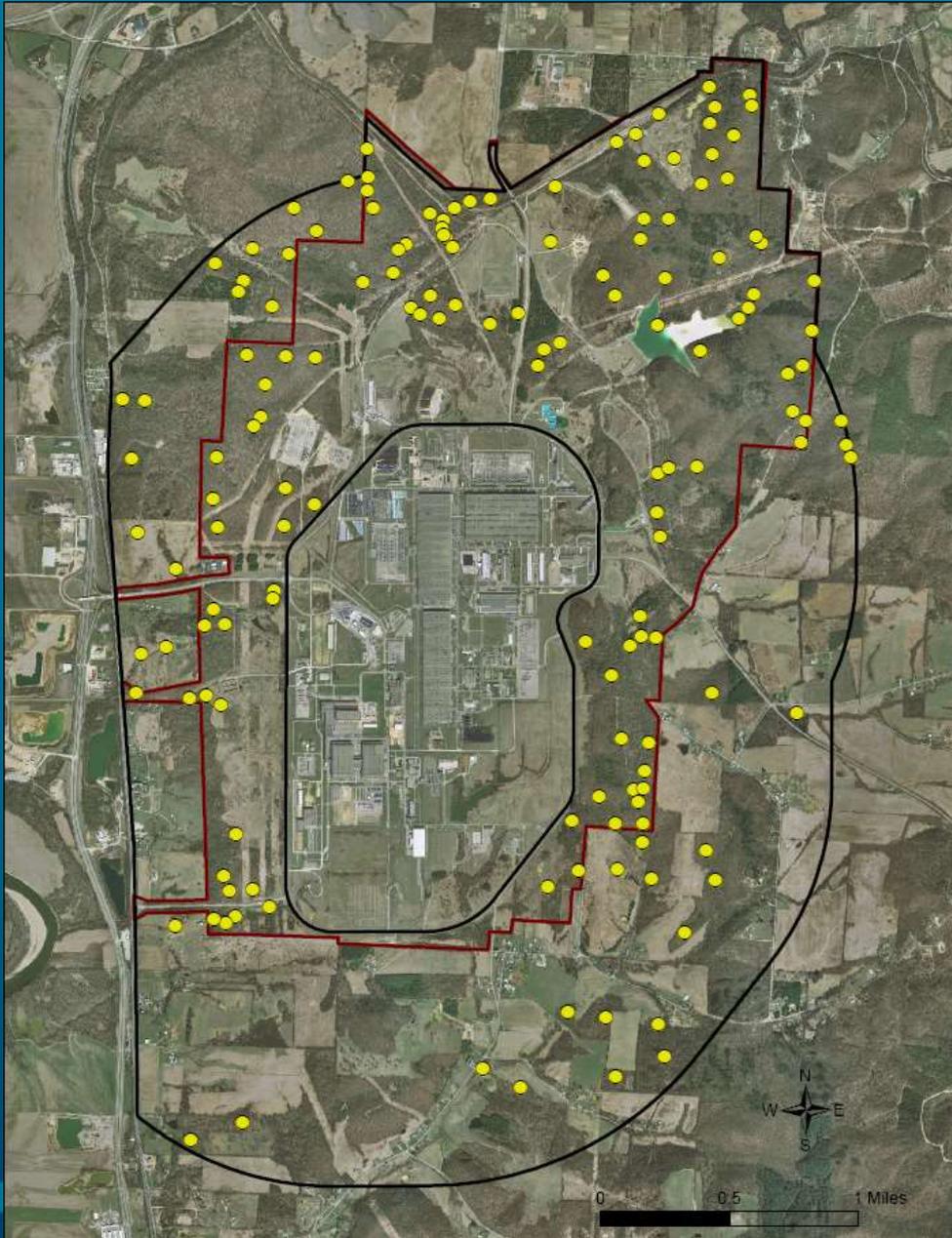


# Terrestrial Habitat Characterization

- What is Habitat?
  - Physical Environment
  - Biotic Resources
- Ecological Setting
  - Patchwork Mosaic
  - Ecosystem Services and Functionality
- Disturbance Legacy
- Climatic Climax Vegetation

# Quantitative Field Sampling

- 152 Habitat plots
- 594 Vegetation survey points



- 361 Woody vegetation samples collected
- 360 Field location points identified for:
  - Unique plants
  - Wildlife signs and sightings
  - Field-truthing map locations



# Forested Habitat



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# Palustrine Habitat



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# Successional Habitats



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# Upland Habitats



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# Riparian and Lowland Habitats



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# Managed Habitats/Features



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# Plant Species

- Nearly 600 vascular plant species field identified during this study
- Several are listed on State RTE list, but none from the Federal list were discovered
- Species List is the basis for habitat valuations, polygon classification, comparisons, wildlife habitat modeling and land planning recommendations



# Species List

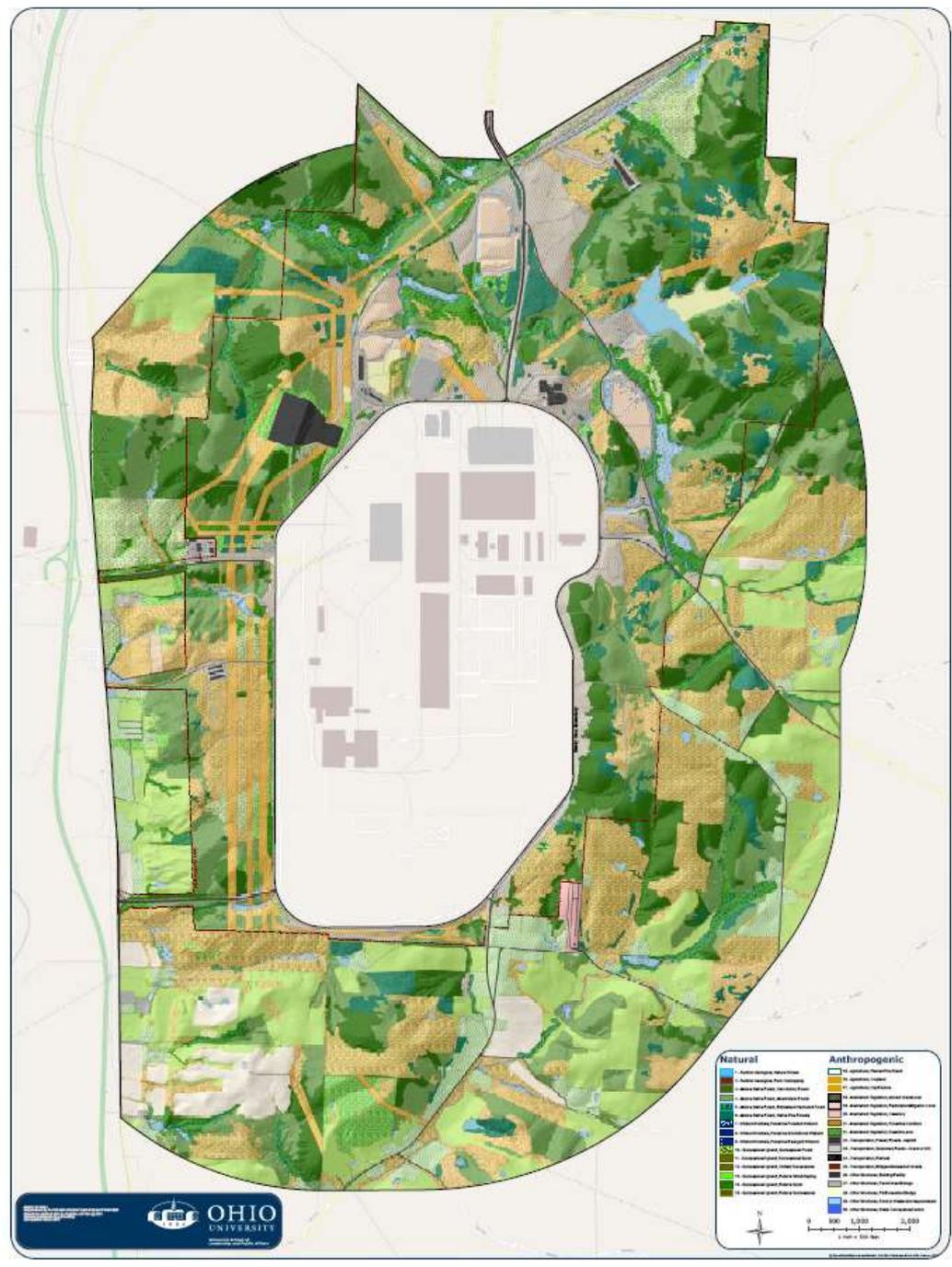
	A	B	C	D	E	F	G	H	I	J	K	L
1	Date	Sample #	Taxon	Author	Common Name	Synonymy	Family	CODE	Nativity	Tolerance	Wetland Indicator	C of C
2	6/7/11	207E	<i>Achillea millefolium</i>	L.	Common Yarrow		Asteraceae	ACMI2	native	tolerant	FACU	1
3	6/5/11	RLW1	<i>Acer negundo</i>	L.	Boxelder		Aceraceae	ACNE2	native	midrange	FAC+	3
4	9/27/11	331A	<i>Actaea pachypoda</i>	Elliot	White Baneberry		Ranunculaceae	ACPA	native	sensitive	UPL	7
5	5/13/11	274B	<i>Acer rubrum</i>	L.	Red Maple		Aceraceae	ACRU	native	tolerant	FAC	2
6	9/29/11	350A	<i>Acer saccharinum</i>	L.	Silver Maple		Aceraceae	ACSA2	native	midrange	FACW	3
7	5/13/11	274A	<i>Acer saccharum</i>	Marsh.	Sugar Maple		Aceraceae	ACSA3	native	midrange	FACU-	5
8	7/15/11	279A	<i>Acalypha virginica</i>	L.	Virginia Threeseed Mercury		Euphorbiaceae	ACVI	native	tolerant	FACU-	0
9	6/17/11	210A	<i>Aesculus glabra</i>	Willd.	Ohio Buckeye		Hippocastanaceae	AEGL	native	sensitive	FACU+	6
10	5/25/11	207C	<i>Ageratina altissima</i>	(L.) King & H. R.	White Snakeroot	Eupatorium rugos	Asteraceae	AGAL5	native	midrange	FACU	3
11	8/19/11	RLW_Field	<i>Agrostis gigantea</i>	L.	Redtop-grass	Agrostis alba	Poaceae	AGGI2	adventive	tolerant	FACW	0
12	6/5/11	RLW2	<i>Agrostis hyemalis</i>	(Walter) Britto	Winter Bentgrass		Poaceae	AGHY	native	midrange	FAC	3
13	9/9/11	RWL	<i>Agalinis linifolia</i>	Nutt.	Flaxleaf False foxglove		Scrophulariaceae	AGLI2				
14	9/27/11	GDC	<i>Agastache nepetoides</i>	(L.) Kuntze	Yellow Giant Hyssop		Lamiaceae	AGNE2	native	midrange	FACU	4
15	8/26/11	220A	<i>Agimonia parviflora</i>	Aiton	Harvestlice		Rosaceae	AGPA6	native	tolerant	FAC	2
16	6/15/11	230A	<i>Agrostis perennans</i>	(Walter) Tuck.	Autumn Bentgrass		Poaceae	AGPE	native	midrange	FACU	4
17	9/13/11		<i>Agalinis purpurea</i>	(L.) Pennell	Purple False Foxglove	Gerardia purpure	Scrophulariaceae	AGPU5	native	sensitive	FACW-	6
18	9/15/11	213A	<i>Agrimonia rostellata</i>	Wallr.	Beaked Agrimony		Rosaceae	AGRO3	native	midrange	FACU	5
19	9/29/11	GDC	<i>Agastache scrophulariifolia</i>	(Willd.) Kuntze	Purple Giant Hyssop		Lamiaceae	AGSC	native	midrange	UPL	4
20	9/13/11	246A	<i>Agalinis tenuifolia</i>	(Vahl) Raf.	Slenderleaf False Foxg	Gerardia tenuifol	Scrophulariaceae	AGTE3	native	midrange	FAC	4
21	9/27/11	GDC	<i>Ailanthus altissima</i>	(Mill.) Swingle	Tree-of-Heaven		Simaroubaceae	AIAL	adventive	tolerant	FACU-	0
22	8/26/11	220A	<i>Alopecurus pratensis</i>	L.	Meadow Foxtail		Poaceae	ALPR3	adventive	tolerant	FACW	0
23	8/26/11	221B	<i>Alisma subcordatum</i>	Raf.	American Water Plantain		Alismataceae	ALSU	native	tolerant	OBL	2
24	5/25/11	207B	<i>Allium vineale</i>	L.	Wild Garlic		Liliaceae	ALVI	adventive	tolerant	FACU-	0
25	8/26/11	220A	<i>Ambrosia artemisiifolia</i>	L.	Annual Ragweed		Asteraceae	AMAR2	native	tolerant	FACU	0
26	5/13/11	274A	<i>Amelanchier arborea</i>	(Michx.f.) Ferr	Eastern Serviceberry		Rosaceae	AMAR3	native	midrange	FAC-	5
27	5/25/11	207B	<i>Amphicarpaea bracteata</i>	(L.) Fernald	American Hogpeanut		Fabaceae	AMBR2	native	midrange	FAC	4
28	10/5/11	349A	<i>Ampelopsis cordata</i>	Michx.	Heartleaf Peppervine		Vitaceae	AMCO2	native	sensitive	FAC+	7
29	8/10/11	251A	<i>Antennaria plantaginifolia</i>	(L.) Richardsor	Women's Tobacco		Asteraceae	ANPL	native	tolerant	UPL	1
30	6/7/11	207E	<i>Antennaria solitaria</i>	Rydb.	Singlehead Pussytoes		Asteraceae	ANSO	native	midrange	UPL	3
31	8/26/11	230B	<i>Andropogon virginicus</i>	L.	Broomsedge Bluestem		Poaceae	ANVI2	native	midrange	FACU	3
32	8/19/11	RLW_Field	<i>Apios americana</i>	Medik.	Groundnut		Fabaceae	APAM	native	midrange	FACW	3
33	6/7/11	207E	<i>Apocynum cannabinum</i>	L.	Indianhemp		Apocynaceae	APCA	native	tolerant	FACU	1
34	9/27/11	GDC	<i>Aplectrum hyemale</i>	(Muhl. Ex Willd)	Puttyroot		Orchidaceae	APHY	native	sensitive	FAC	7
35	6/5/11	RLW1	<i>Arnoglossum atriplicifolium</i>	(L.) H. Rob.	Pale Indian Plantain		Asteraceae	ARAT	native	sensitive	UPL	6
36	10/5/11	GDC	<i>Arabis canadensis</i>	L.	Sicklepod		Brassicaceae	ARCA	native	midrange	UPL	5
37	9/29/11	350A	<i>Arctium minus</i>	Bernh.	Lesser Burdock		Asteraceae	ARMI2	adventive	tolerant	FACU-	0
38	8/29/11	211B	<i>Aristolochia tomentosa</i>	Sims	Wooly Dutchman's Pipe		Aristolochiaceae	ARTO3	adventive	tolerant	FAC	0
39	6/17/11	265B	<i>Asclepias hirtella</i>	(Pennell) Woo	Green Milkweed		Asclepiadaceae	ASHI	native	sensitive	UPL	8
40	8/19/11	RLW_Field	<i>Asclepias incarnata</i>	L.	Swamp Milkweed		Asclepiadaceae	ASIN	native	midrange	OBL	4
41	9/28/11	331C	<i>Asplenium montanum</i>	Willd.	Mountain Spleenwort		Aspleniaceae	ASMO2	native	sensitive	UPL	7
42	5/13/11	None	<i>Asplenium platyneuron</i>	(L.) Britton, Ste	Ebony Spleenwort		Aspleniaceae	ASPL	native	midrange	FACU	3

# Habitat Delineation Process

- Heads Up Digitization: Bringing together the supporting GIS layers and the Field Data
- Classification of features based upon species composition and physical characteristics
- All land surfaces were considered to be some element of habitat

# Habitat Delineation Results

- 32 Cover classes identified
- 2185 Individual habitat patches mapped



# Plants of Interest



Rough Blazing Star



Pink Lady's Slipper



Adder's-Tongue  
Fern



Netted-Chain Fern



Tway-blade  
Orchid

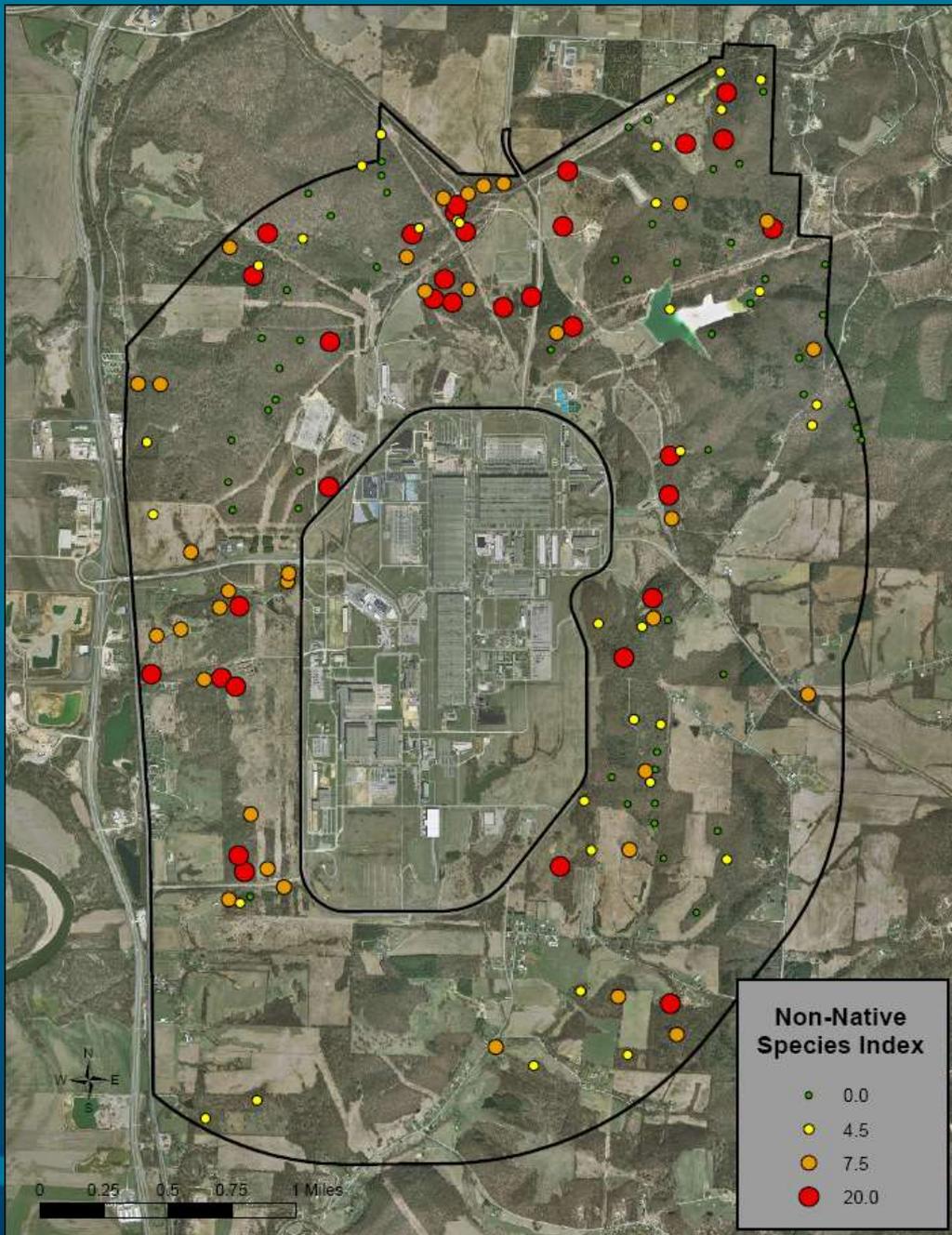


Rattlesnake  
Plantain

# Species Nativity Summary

Nativity Status	Count	Percent
Noninvasive Native	474	81%
Invasive Native	33	6%
Planted or Naturalized Hybrid	9	2%
Noninvasive Alien	7	1%
Invasive Alien	65	11%
<b>Grand Total</b>	<b>588</b>	

# Dominance by Non-native Species



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# Wildlife signs and sightings



# Insects



Spiny Oak-slug Moth



Protean Shieldback  
Katydid Nymph



Bee-mimic Robber Fly



Great Spangled Fritillary



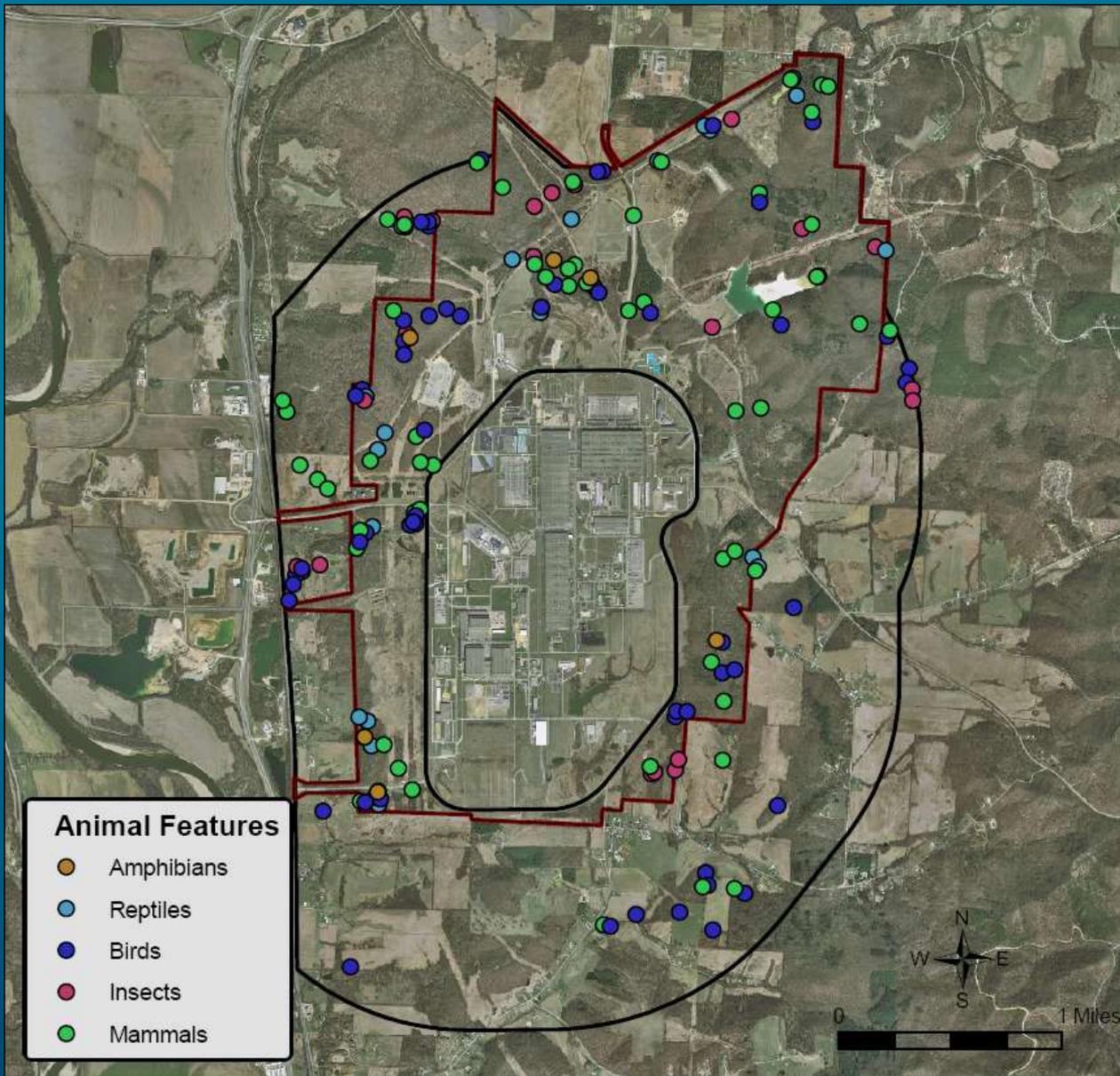
Hercules Beetle



Larger Empty Oak  
Apple Gall Wasp



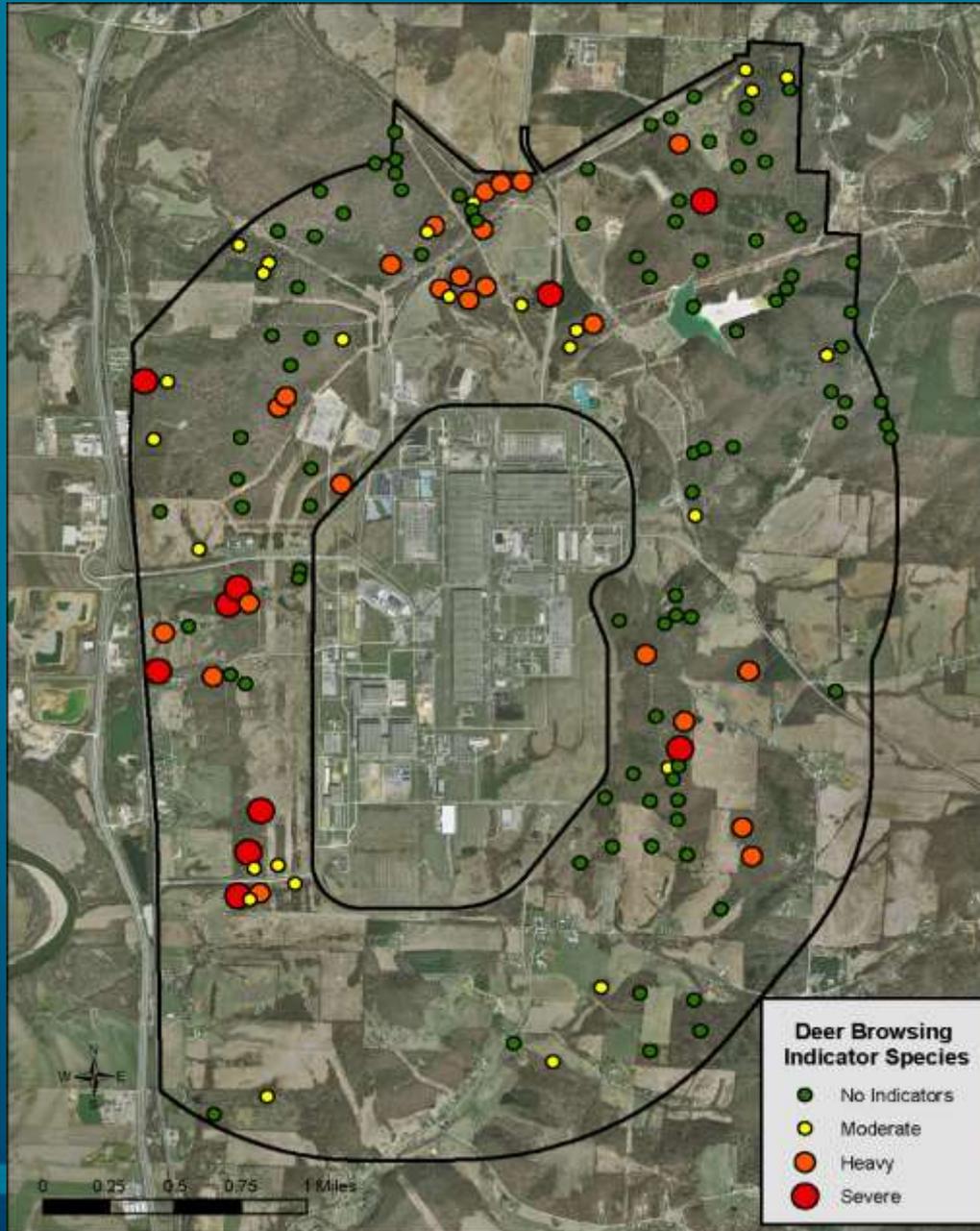
# Field Observations of Wildlife



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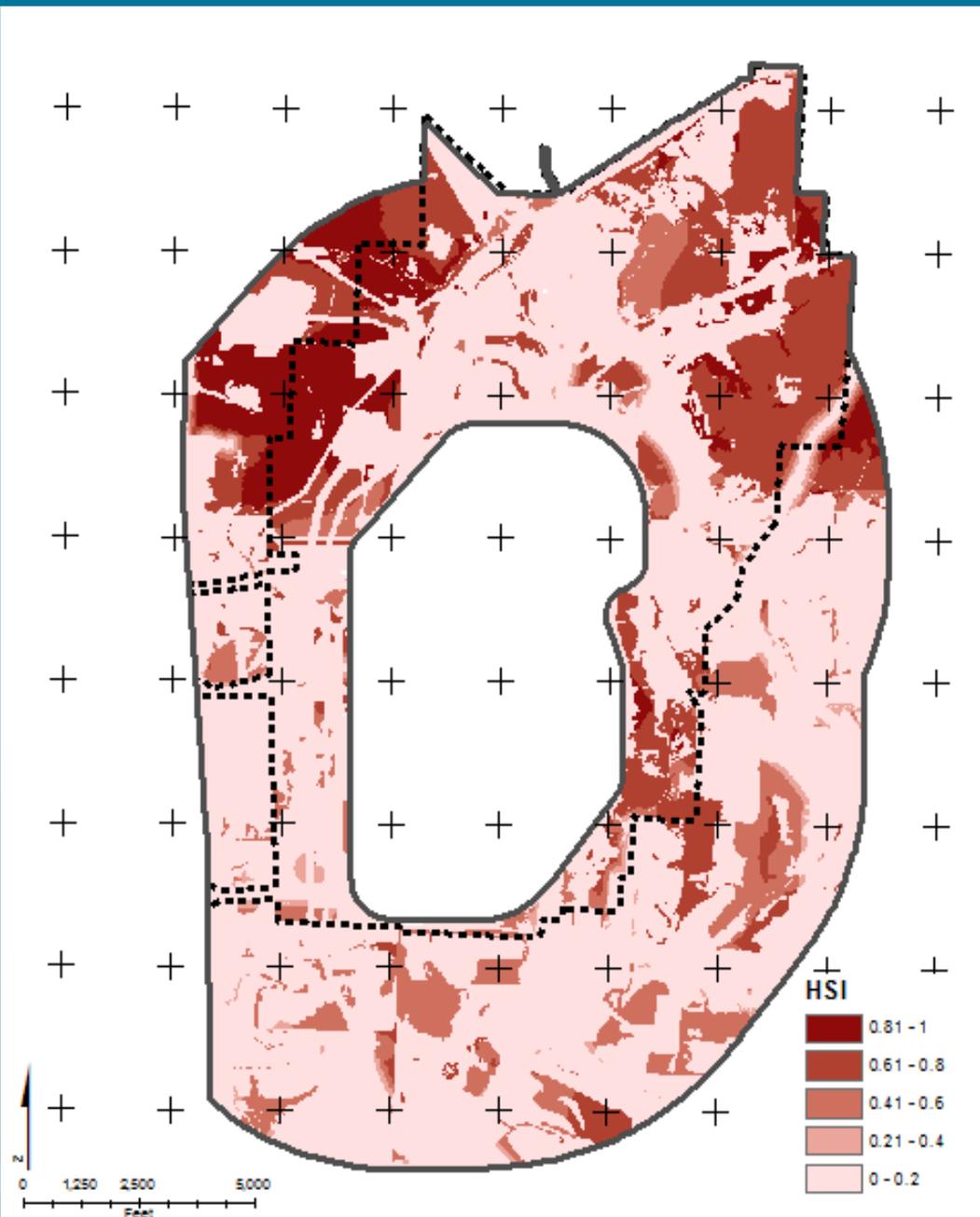
# Species-Based Evidence of Deer Browsing



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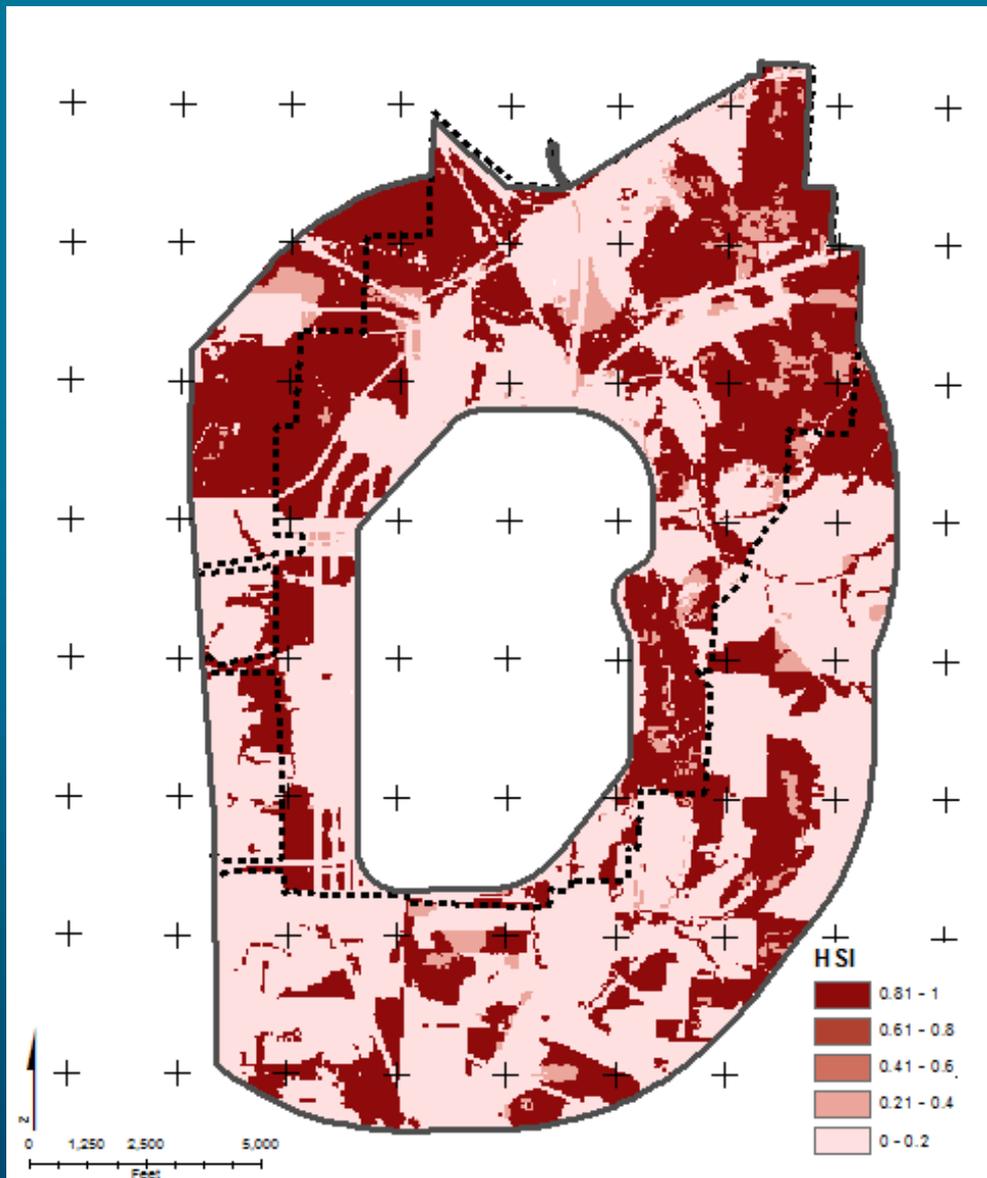
# HSI Analysis: Timber Rattlesnake *Crotalus horridus*



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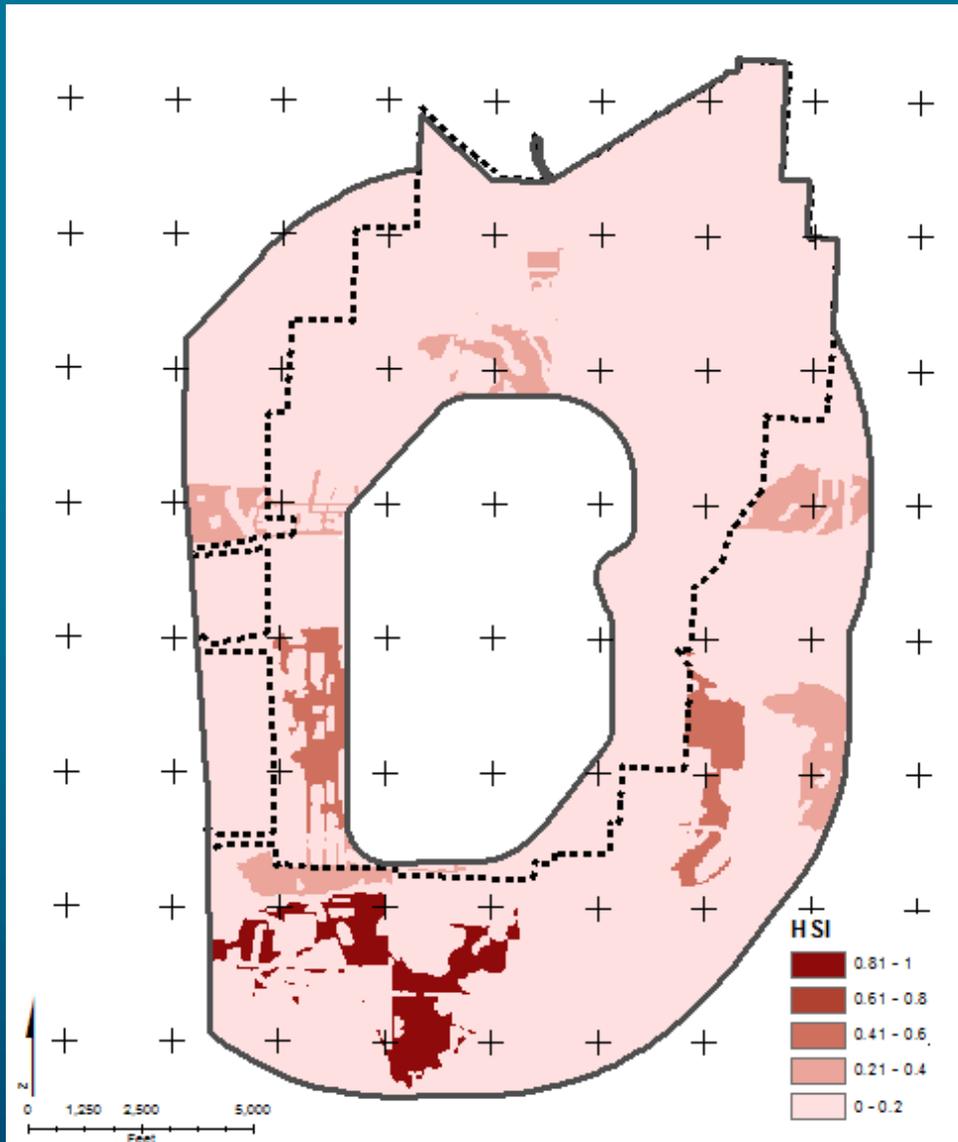
# HSI Analysis: Wood Thrush *Hylocichla mustelina*



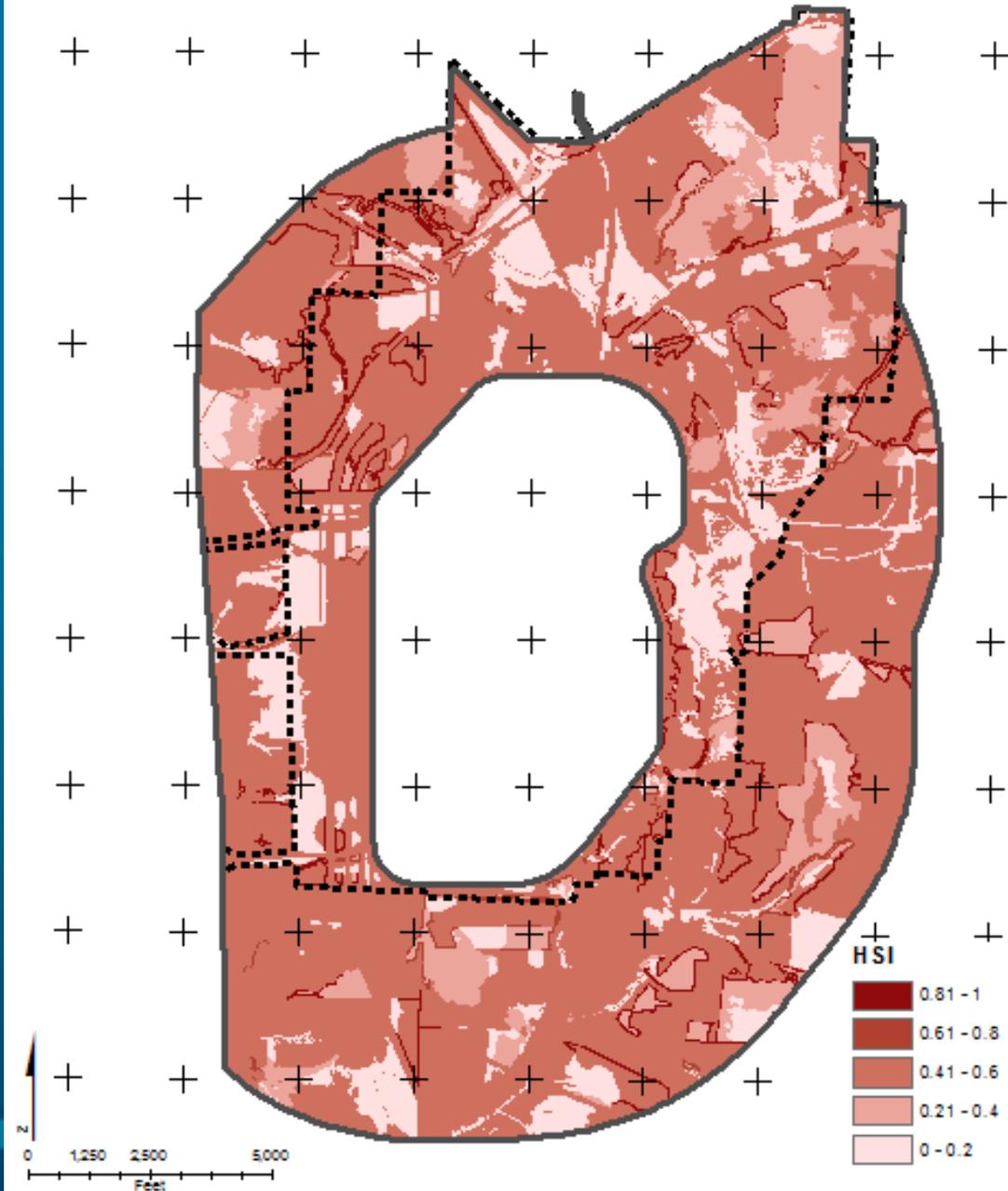
# HSI Analysis: Northern Bobwhite *Colinus virginianus*



# HSI Analysis: Henslow's Sparrow *Ammodramus henslowii*



# HSI Analysis: Indiana Bat *Myotis sodalis*



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# Evaluation of habitats affected by potential OSDC Plan in Study Area D



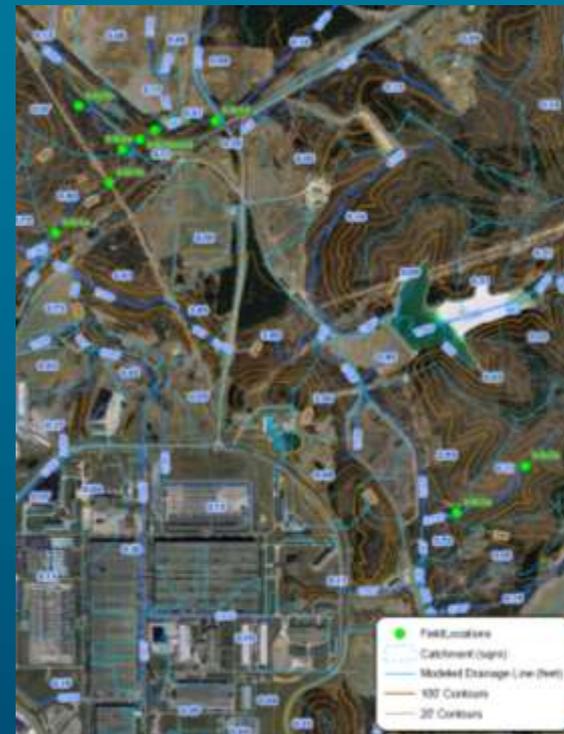
Habitat Feature	Acres
Oak-Hickory Forest	68.38
Mixed Mesic Forest	51.22
Native Pine Forest	34.35
Mowed Grass/Lawn	32.71
Ruderal Successional	18.55
Successional Scrub	16.24
Successional Forest	15.07
Oldfield - Successional	8.61
Bottomland Hardwood Forest	6.86
Ruderal-Scrub	2.24
Secondary Roads	1.60
Buildings/Facility	1.57
Ruderal Shrub-Sapling	1.23
Palustrine Shrub-Scrub Wetland	0.59
Paved Areas/Outdoor Storage	0.55
Primary Roads: Pavement Asphalt	0.47
Natural Streams	0.36
Water Conveyance/Control	0.16
Palustrine Emergent Wetland	0.03

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# Resource Inventory Data Utility

- Helpful in identifying areas for potential wetland and headwater stream mitigation projects



# Next Steps for Resource Inventory?

- Analysis of sensitive resources and wildlife habitats
- Development of conservation and management strategies
- Evaluation of potential impacts and opportunities for improving habitats as a result of site plan implementation
- Identification of interpretive and educational opportunities



# Questions?

Contact information:

Gary Conley - [conleyg@ohio.edu](mailto:conleyg@ohio.edu)

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Voinovich School of Leadership and Public Affairs,  
Ohio University

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Department of Energy Office of Environmental Management  
Portsmouth/Paducah Project Office

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