Five Rivers MetroParks
Cover Mapping
Volunteer Opportunity
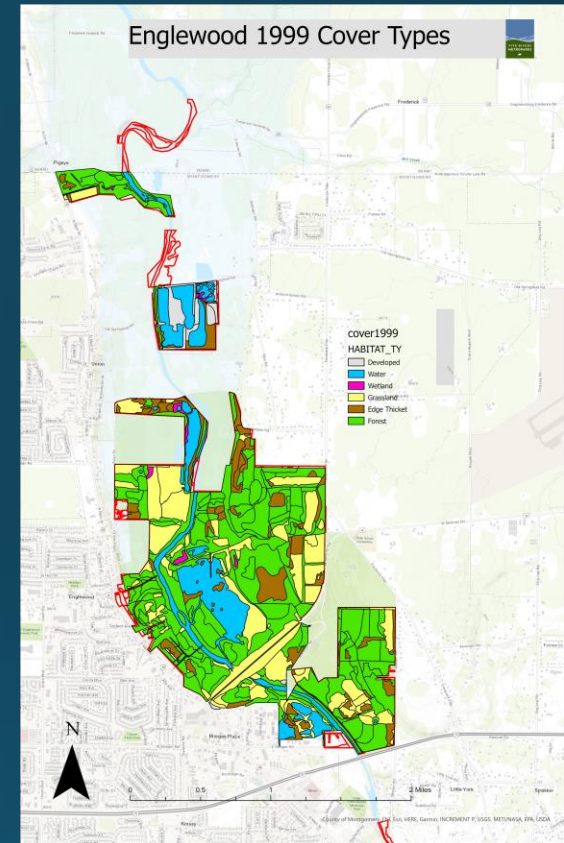
FIVE RIVERS METROPARKS

History

- Started at FRMP in 1998
- Intensive forestry assessment
- Included: size class, canopy, subcanopy, invasive species, herbaceous species, DBH, and deer signs
- Sample points every 100 m in survey units
- Recent Parks
  - Englewood – Currently
  - Carriage Hill – 2017-2018
 - Germantown – 2015 – 2017

Summary of 2023

- Cover Mapping at Englewood
- 262 sample points in 2023
- 41 days
- Started Dec. 2022 – to be finished Spring 2024
- Results in Summer 2024
- Evaluation and updated protocol
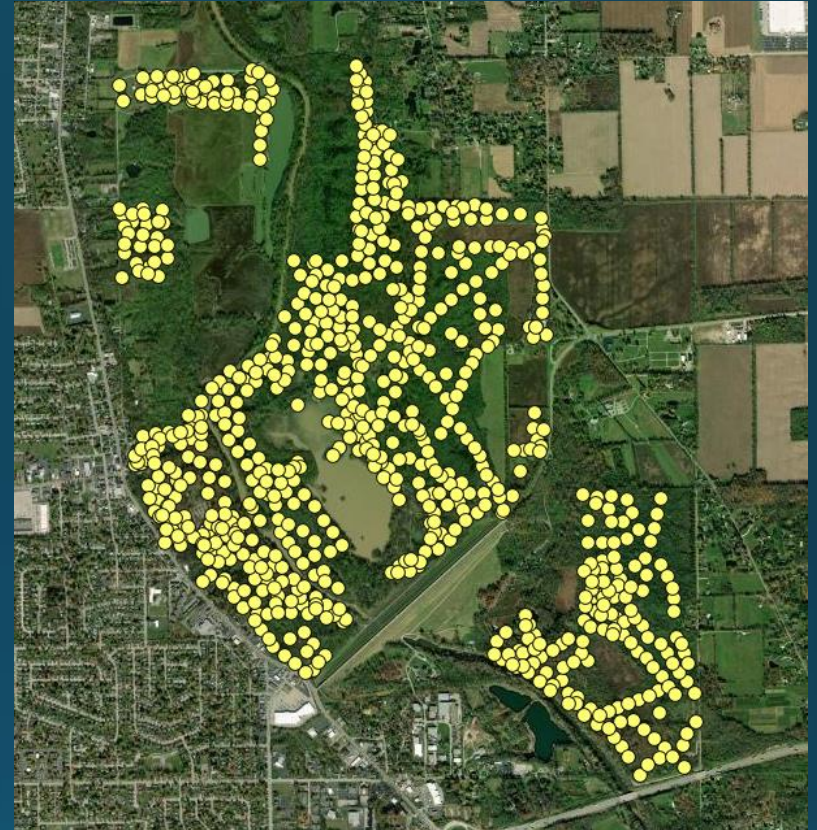
Identified Benefits

- Assists with identifying priority areas for invasive species management

- Baseline information on forest characteristics (canopy, subcanopy species, stocking rates, etc.)

- Extensive survey over large areas of land, some areas rarely visited by staff

- Knowledgeable, enthusiastic, reliable volunteers with detailed data collection

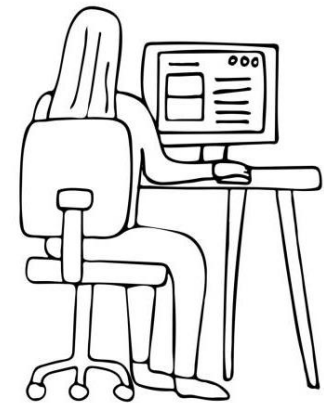# Compare honeysuckle densities over time
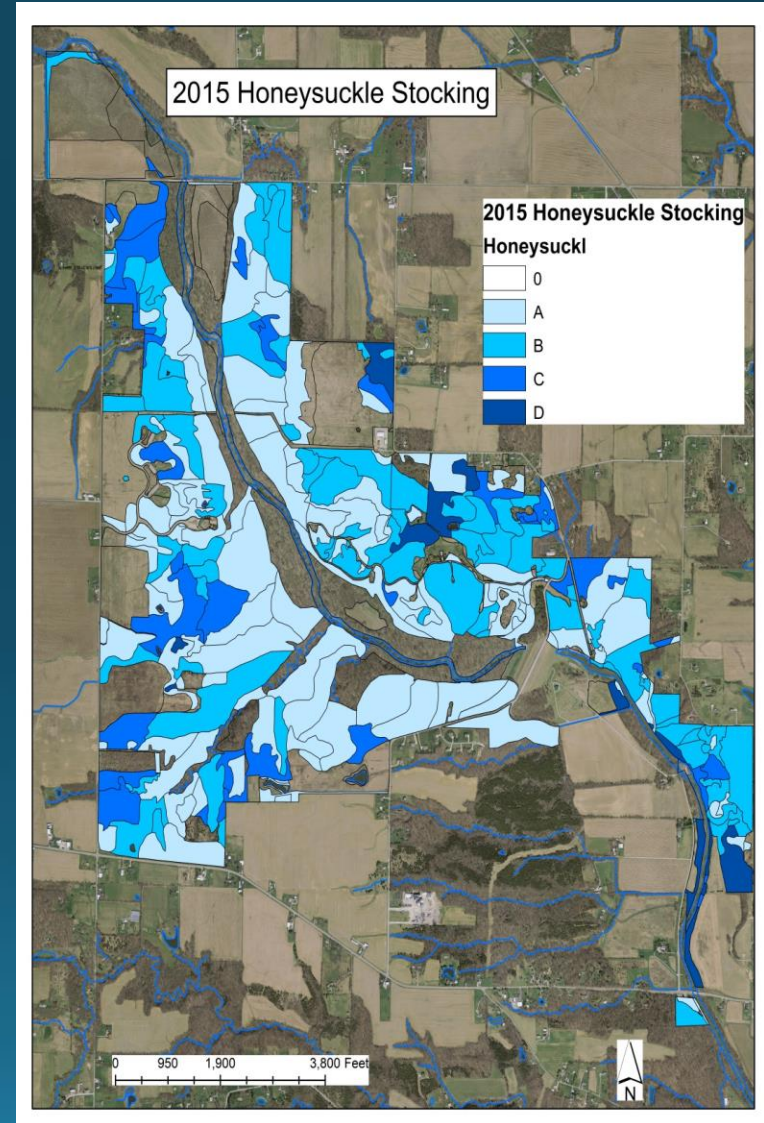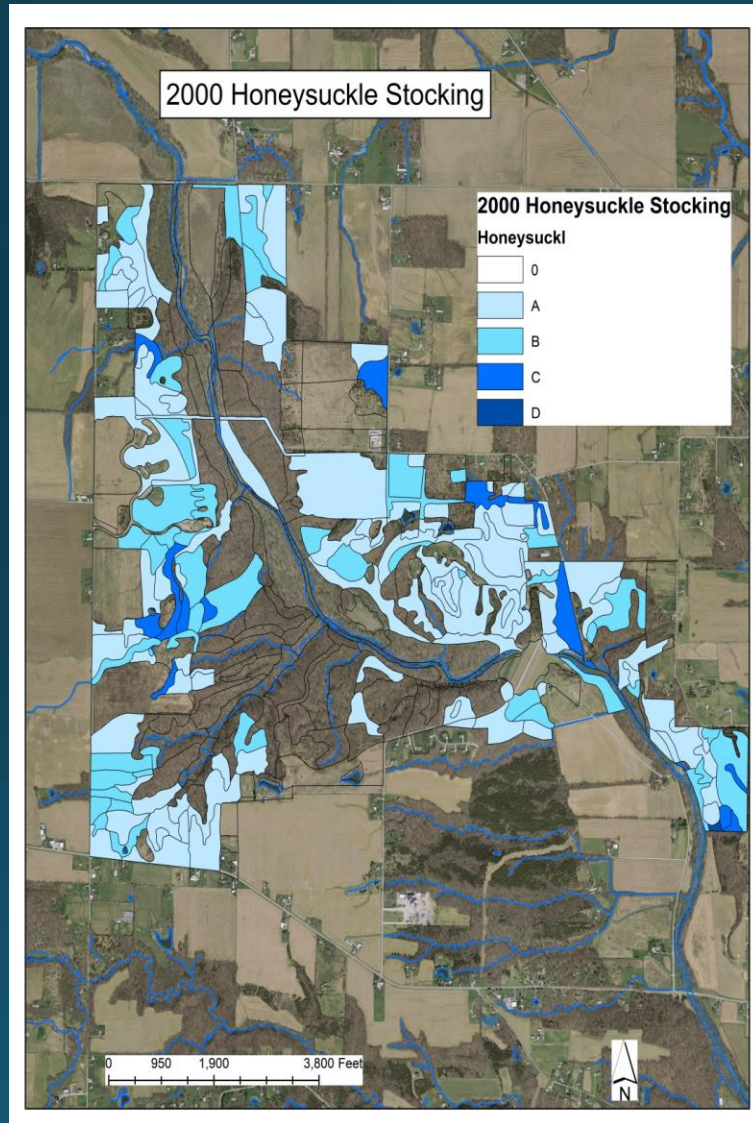
Compare forest size classes over time
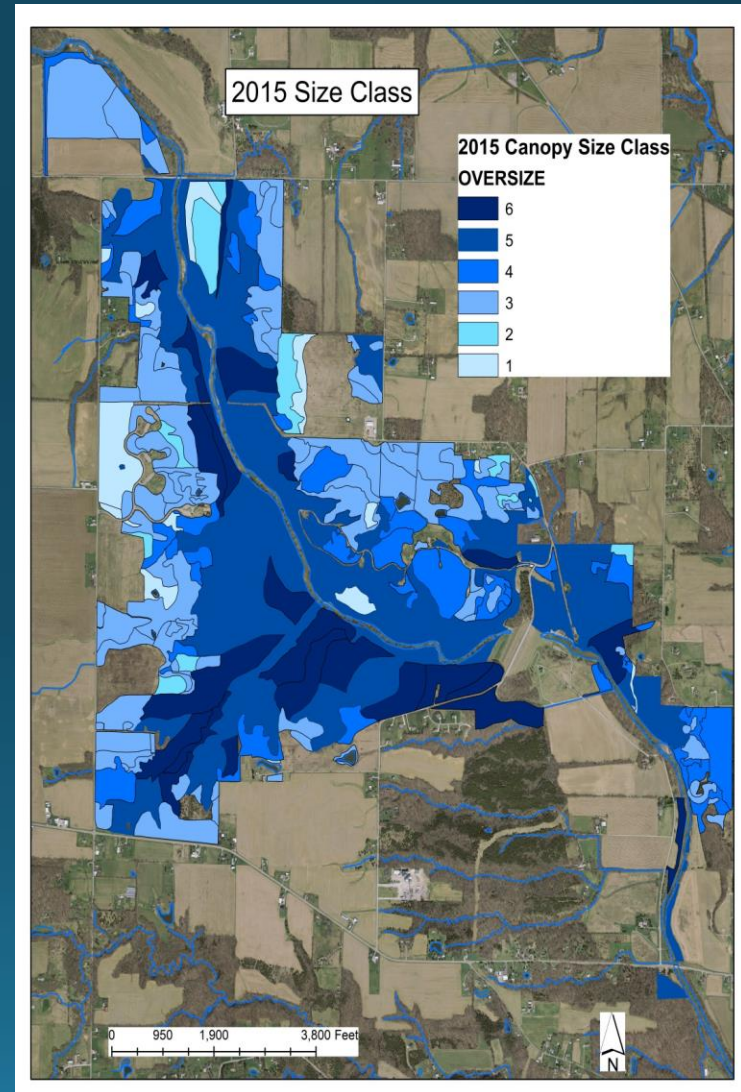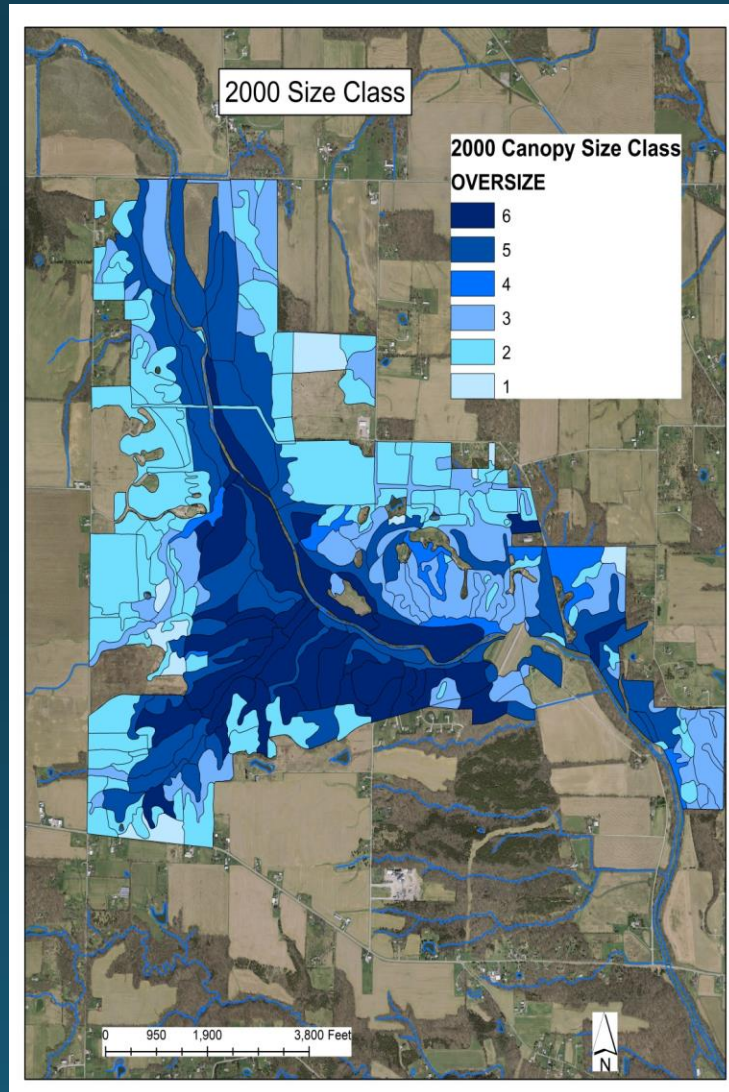
Identified Challenges

- Time needed to complete a park
- Paper data collection and analysis
- Comfort level with plant ID
- Limitations with current data being collected and used for establishing action plans
- Sampling units were based on old aerial maps

Changes for 2024

Rapid assessment of forested areas

• separate staff-led protocol for grassland and wetlands

Each park surveyed every 5 years

Electronic data collection – iPads/GPS

Defined survey areas

Real-time results

Enhance annual habitat action plans, better identify areas for contract work and invasive species removal

Cover Mapping - Invasive Species

- Pre-defined 0.5 acre plots
- Data collected April – September
- 13 invasive species
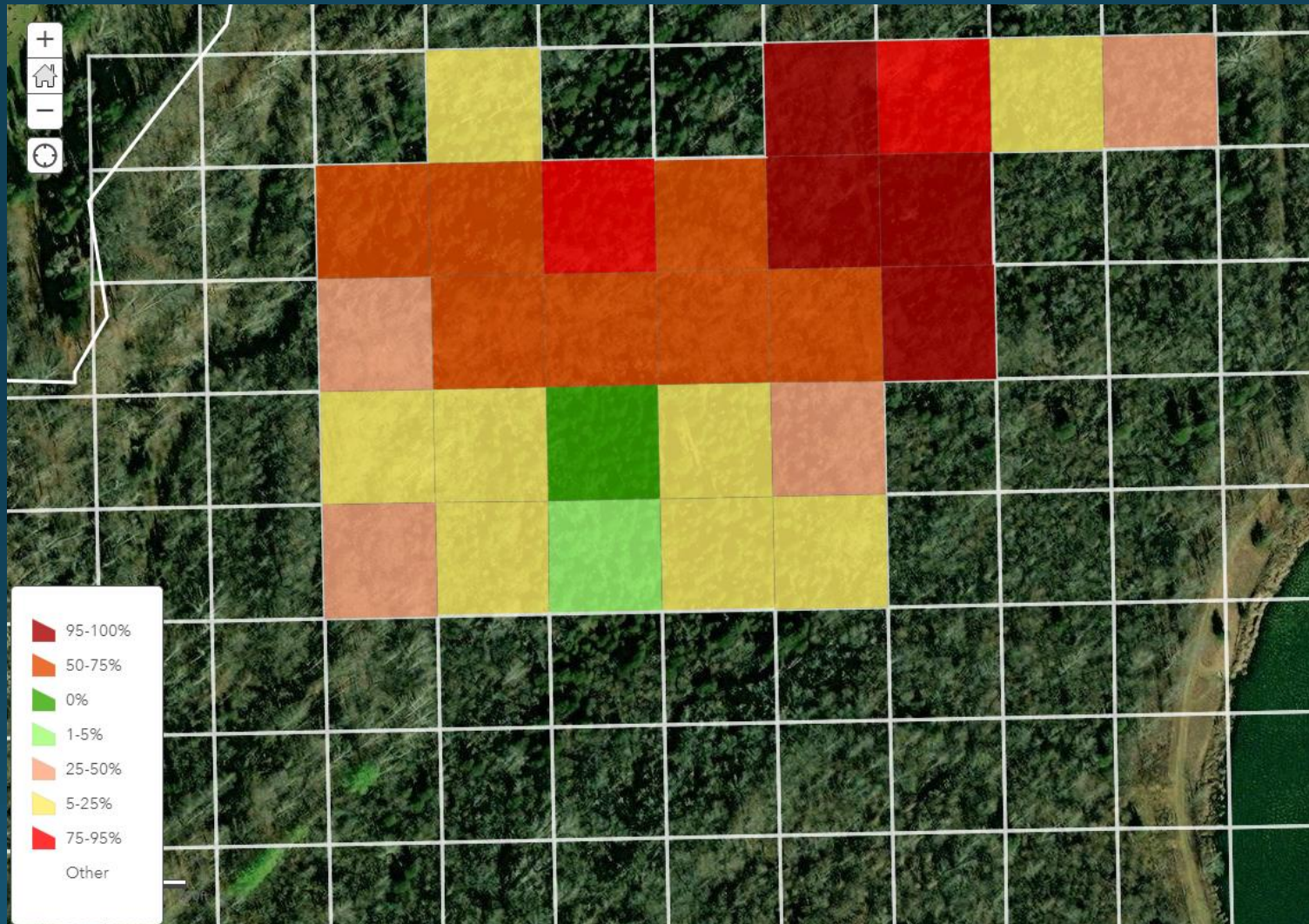- Data collection via iPad

Woody Invasive Species	None present	Seedlings < 3' tall	Saplings 3-5' tall	Saplings > 5' tall and < 4" DBH	Large shrubs or trees > 5' tall and > 4" DBH	Density
Amur Honeysuckle				X		50-75%
Autumn Olive	X					0%
Buckthorn spp.		X				25-50%
Burning Bush	X					0%
Callery Pear	X					0%
Privet			X			1-5%
Siberian Elm	X					0%
Tree of Heaven	X					0%
Other Invasive Species	None present	Sparse ground coverage <50% of area	Extensive ground coverage >50% of area	Sparse ground coverage and tree climbing	Extensive ground coverage and tree climbing	
Lesser celandine		X				
Periwinkle	X					
English ivy				X		
Oriental Bittersweet	X					
Wintercreeper	X					

Density
0%
1-5%
5-25%
25-50%
50-75%
75-95%
95-100%

# Cover Mapping – Forest Community and Successional Type

- Identify 0.5 acre plots by forest community and successional category
- Forest Community (Reference guide):
  - Oak-Hickory
  - Oak-Maple
  - Beech-Maple
  - Elm/Ash/Maple
  - Mixed Mesophytic
  - Cottonwood/Sycamore/Box Elder
  - Mixed Riparian Hardwoods
  - Pine/Spruce
  - Eastern Red Cedar
- Early Successional, Mid-Successional, Mature Woodland
- **2 volunteers – Importance of consistent classification, higher level of skill, reach out if interested.**

Easily create maps showing different densities, species, etc.

Volunteering – Cover Mapping

- 2024: Twin Creek MetroPark
- 2025: Cox Arboretum, Germantown MetroPark

- 100% Outdoors
- Often hiking off-trail
- Navigation with assistance of a GPS and compass
- Plant Identification skills
- Detailed data collection
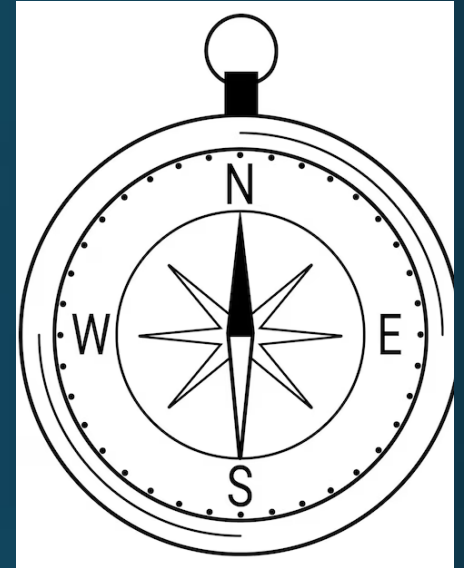
Volunteering – Cover Mapping

1. Create an account on our volunteer webpage: https://metroparks.galaxydigital.com/user/login/
2. Attend an in-person training session
   1. Saturday, April 13th or Wednesday, April 17th
3. Sign up for volunteer shifts through Get Connected

- Teams of 2-4
- Both weekday and Saturday opportunities
- Training held at Twin Creek MetroPark

Questions?

Lisa.Zoromski@metroparks.org