# Vegetation Management Report

Jon Behrman



#### Overview

- Vegetation Management Crew
  - 1.5 Full Time Staff fully licensed Pesticide Applicators
  - 5 Seasonal Registered Technicians
  - Primary focus is promoting biodiversity through native plants
- Responsibilities
  - Manage vegetation on over 2,000 acres of City Properties
  - Maintain and install native plantings
  - Monitor and assess sites for ecological sustainability
  - Train and work with volunteers to remove invasive species



## **Invasive Species**

#### **Invasive Species Definition**

- Methods of Control
  - Mechanical
  - Cultural
  - Biological
  - Chemical
  - EDUCATION









## Asian Bush Honeysuckle

Lonicera maackii

- Areas of Most Concern
  - Upper Cascades Park
  - Griffy Lake Nature Preserve
  - Ferguson Dog Park
  - Bloomington Rail Trail, B-Line Trail
  - City Wide





30 + Acres treated Treatment- Herbicide (cut stump, foliar)

# AmeriCorps Oak 2 Crew

 Removed 10 heavily infested acres of Asian Bush Honeysuckle in Upper Cascades Park





#### Garlic Mustard

Alliaria petiolata

#### Areas of Main Concern

- Leonard Springs Nature Park
- Griffy Lake Nature Preserve
- Wapehani Mountain Bike Park
- Winslow Woods Park
- Goat Farm/Olcott Park



## Japanese Stiltgrass

Microstegium vimineum

- Areas of Main Concern
  - Griffy Lake Nature Preserve
  - Leonard Springs Nature Park
  - Olcott Park
  - Goat Farm
  - Winslow Woods Park
  - RCA Park





Over 206 Acres Treated

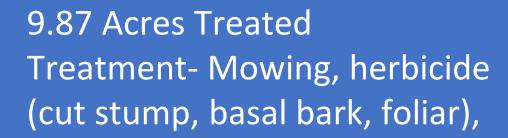
Treatment- Hand Pulling, Herbicide

# Other Woody Invasives: Callery Pear, Multiflora Rose, Tree of Heaven

- Areas of Main Concern
  - Olcott Park
  - Goat Farm
  - Bryan Park









#### Native Plant Installations

#### 4,858 Native Plants Installed

- Showers Building
- Courthouse Square
- Mills Pool
- Rose Hill Cemetery
- Goat Farm Spring
- Griffy Lake Shoreline

#### Wapehani Dam Salvage

- Allison Jukebox
- Miller-Showers Park





## **Native Tree Planting**

- Over 3,000 DNR Saplings planted
  - Trees donated by Eco Logic, LLC
  - Soil stabilization
  - Mast Production/wildlife value
  - Carbon sequestration
  - Oaks, Hickories, Walnut, Cherry
- Locations
  - Southeast Park
  - Griffy Lake Nature Preserve
  - Rev. Ernest Butler Park





## Management Plans Completed by Eco Logic, LLC



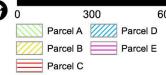
#### **Browns Woods**

- Heavily infested with Asian Bush Honeysuckle
  - Low biodiversity in herb layer
- Storm water
- Deer Browse

#### **Browns Woods Restoration Parcels**





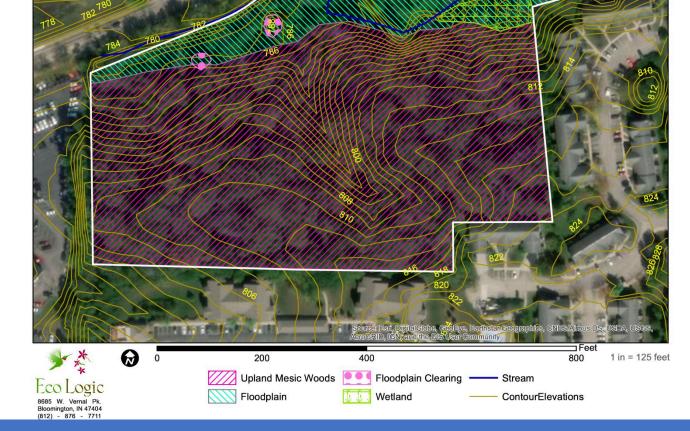


1 in = 250 feet 1.200

#### Latimer Woods

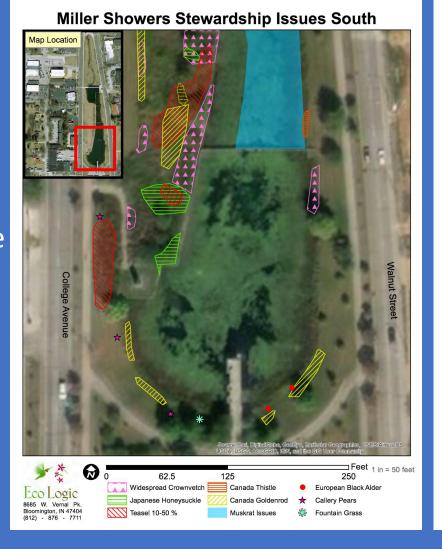
- Flashy Storm water
- Edge Issues
  - Increased trash, invasive species
- Invasives
  - Asian Bush Honeysuckle
  - **Oriental Bittersweet**
  - Lesser Celandine
  - Purple Wintercreeper
    - Volunteer Opportunities

# Latimer Woods Native Plant Communities and Physical Features



#### Miller-Showers Park

- Invasive Species
  - Crown Vetch
  - Common Teasel
  - Callery Pear
  - Bush Honeysuckle
- Sedimentation
- Algae





## Projects



## Bloomington Rail Trail

- FECON
- Asian Bush Honeysuckle
- Purple Wintercreeper Vine
- Oriental Bittersweet Vine







### **Prairie Restoration**

- Locations
  - Olcott Park
  - Goat Farm



- Invasives:
  - Canada Goldenrod
  - Canada Thistle
  - Woody Invasives



## **Griffy Shoreline Stabilization**

- Goals
  - Reduce Sedimentation
  - Reduce Nutrient Loading
  - Provide Pollinator Habitat
  - Trash Buffer
  - Aesthetic



## Outreach

- Volunteers 800 hours!
- Education
- Preventative rather than Reactive



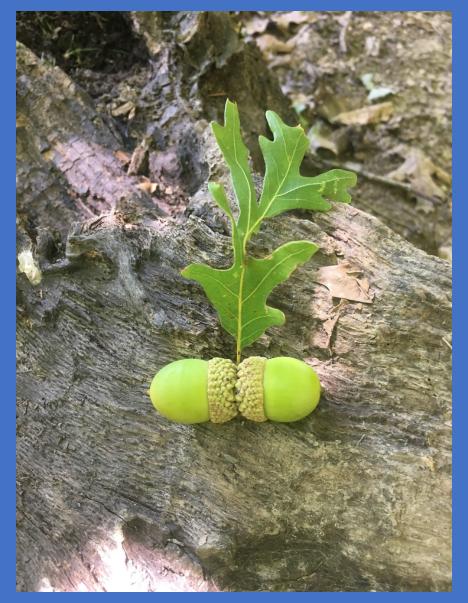




## Next Steps for 2019







## Griffy Ecological Assessment

- Addressing Climate Change
- Ecosystem Resiliency
- Flagship species such as blueberries
- Nuts and bolts management plan



## Griffy and Fire

- Historical ManagementStyle
- Promotes forest health
  - Oak/Hickory Regeneration
  - Native Blueberry and Huckleberry Production



# 1st Saturdays Field Days

- First Saturday of the month
   March November
- In partnership with MC-IRIS
- Education and volunteerism focused on preserving biodiversity



#### Miller-Showers Installation

- 4,179 Native Perennials
- Focused on improving "curb appeal"







