



Board Work Session

Mill Creek MetroParks Wildlife Management

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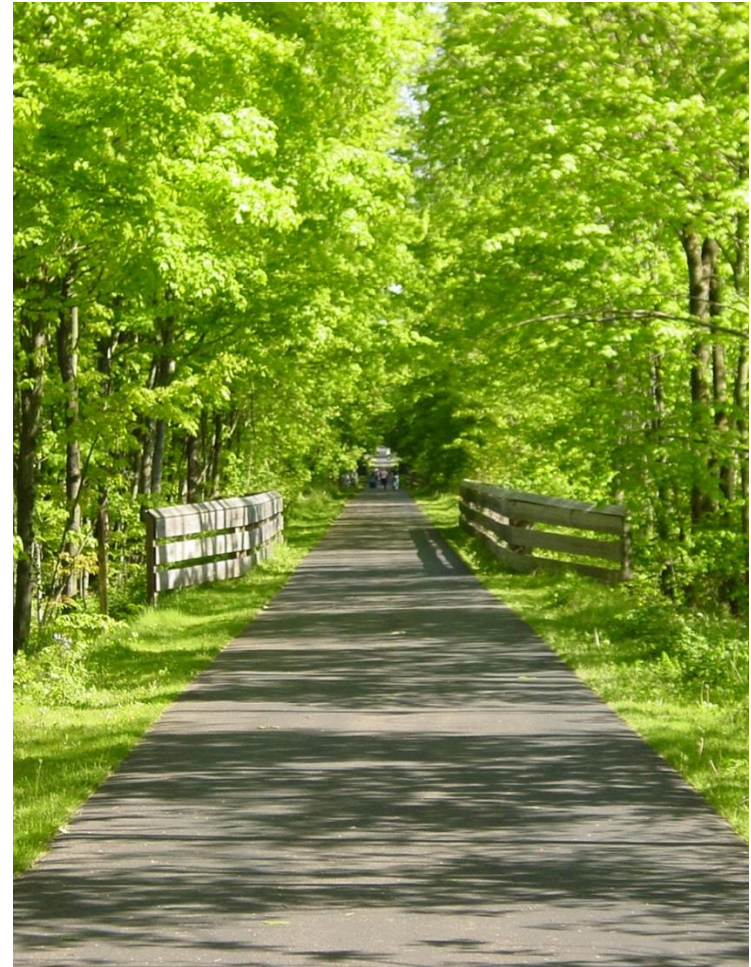
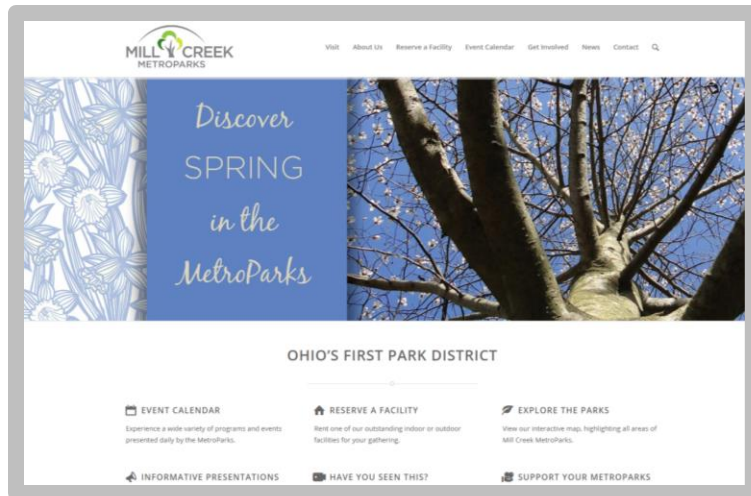
Last Edited: 4.10.17

- **MCMP Overview**
 - MetroParks' Mission
 - Strategic Master Plan
- **Ecosystems**
- **Current Practices**
 - Management Principles
 - Management Activities
 - Nuisance Species Control
 - Invasive Species Control
 - Laws, Rules & Regulations
 - Habitat Protection
 - Funding for Projects
- **Proactive Management**
- **Partners and Sources of Information**



The mission of Mill Creek MetroParks is to provide park, recreational, and open space facilities of regional significance.

Mission Statement is located on the MetroParks' website at: www.millcreekmetroparks.org



Mission Statement

In fulfilling the MetroParks' mission, our objectives are:

- To be responsive to community needs
Studies and surveys direct the MetroParks to preserve appropriate natural and cultural areas, make improvements to MetroParks facilities, develop additional recreational opportunities, and continue to strengthen activity and public information programing
- To be environmentally sound
Stewardship strategies will be dictated by the intrinsic nature of the land.
- To be adaptable
The only certainty in our world is that change is occurring at an increasing rate. To respond, the MetroParks must maintain strong public information and involvement programs and form new kinds of creative liaisons to meet changing needs.
- To be economically feasible
The MetroParks has finite resources that are not guaranteed in perpetuity. It must constantly work to broaden its base, especially through new partnerships. Revenue generating programs and facilities must be a key element in the overall funding picture.



These objectives directly apply to wildlife management principles and strategies.

Natural Resources: GOAL

“Enhance Mill Creek MetroParks’ management of natural resources through improved access of developed trails, opening new parks in underserved areas of the County, and incorporation of a natural resources management plan.”

Strategic Master Plan is located on the MetroParks website at: www.millcreekmetroparks.org



Natural Resources: OBJECTIVES

- Develop a natural resource plan to advocate for an ecosystem approach to natural resource management as part of a regional “green” strategy.
- Determine areas that need to be enhanced and establish an approach to improve the quality of the resource and the funding needed to make the improvements.
- Determine areas of Mahoning County that are underserved by the MetroParks and the types of open space amenities in the area.
- Create a trail assessment plan that prioritizes improvements.
- Expand natural resources education.
- Develop a MetroParks-wide sustainability plan to expand our leadership role in the community.

Mill Creek MetroParks is:

...comprised of diverse ecosystems.

ecosystem

noun 1. (ecology) a system involving the interactions between a community of living organisms in a particular area and its nonliving environment



MetroParks Properties/Facilities

Existing ecosystems in Mill Creek MetroParks are:

*Natural, Developed, Managed, Created, Restored, Enhanced, Maintained, Manipulated, Rehabilitated, Treated, Reclaimed, Preserved, Protected, High Quality, Low Quality, Accessible, Pristine, Damaged, Altered, Man-Made, Native, Planted, and...**DIVERSE!***

- 5000+ acres of managed parkland
- A formal gardens
- Active recreation areas (playgrounds, ballfields, etc.)
- Aquatic areas (streams, ponds, lakes, etc.)
- Riparian areas
- Headwaters
- Three (3) golf courses
- A working farm
- Forests
- Wetlands
- Floodplains
- Meadows
- Transportation corridors
- ...and many more!



Management of MetroParks ecosystems includes the following:



MetroParks Facilities

Management Principles

- Ecosystem / Facility-driven
- Long term management / Greatest good
- Encourage biodiversity
- Implement BEST management practices (BMPs)
- Monitor and address invasive and nuisance species
- Wildlife population, sociological diversity, distribution
- Protect existing natural resources
- Use native plants / Encourage native fauna
- Minimize impacts on land / Protect infrastructure
- Minimize future maintenance
- Keep safety of park patrons at forefront
- Provide opportunities for education and interpretation
- Solicit input from partners and experts
- Create functional spaces for flora, fauna, and park patrons
- Fiscal responsibility
- Fix the disturbance...source of the problem (watershed approach)
- Determine best use of time and resources
 - In-house? Volunteers? Contract job? Level of commitment? Cost? Funding Availability?
 - Reevaluate methods if application doesn't work



Management Activities

Implementation

- Based upon inventory & analysis
- Proactive strategies, actions, and best management practices
- Address nuisance and invasive species
- Monitoring processes and track results
- Population counts (infrared survey, by hand, etc.)
- Enforcement of Rules & Regulations including “No Feeding” (geese, deer, fish)
- Harassment
- Lethal means (last resort)

Examples

- Naturalize areas or mow/maintain areas
- Actively plant areas with native species (create habitat)
- Protect newly planted vegetation (investment)
- Use predator decoys
- Repair structures / fix problems
- Plant species undesirable to deer

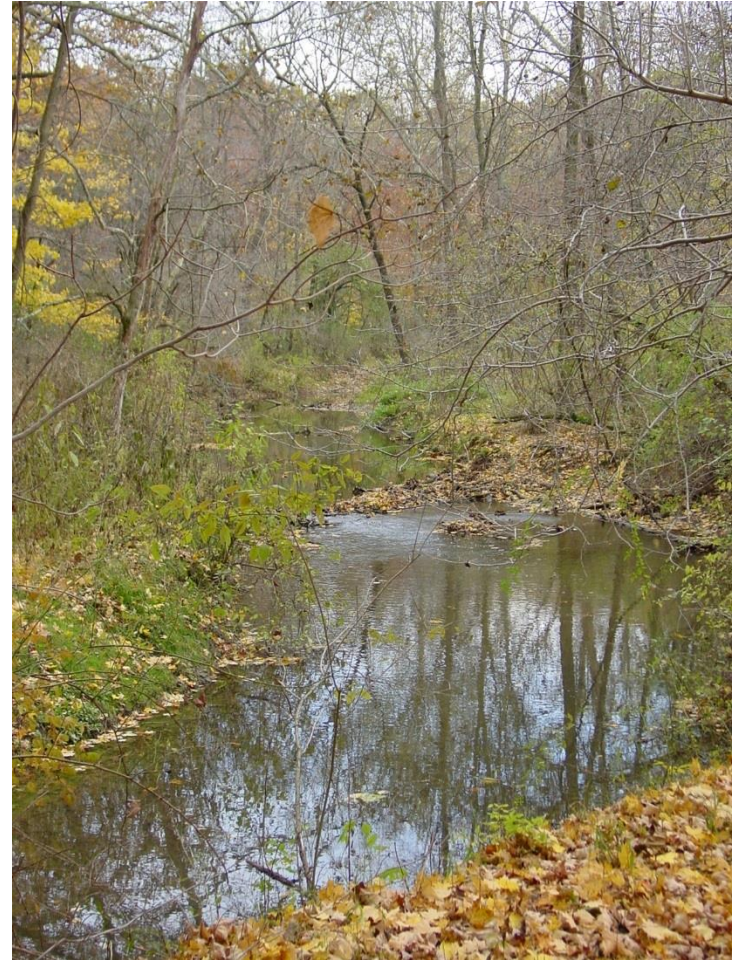


Nuisance Species Principles

Many species live in the urban habitat available in parks, undeveloped parcels of land and vacant lots, along stream and river corridors and in our backyards. Their presence provides for recreational and educational viewing opportunities, where people and wildlife can peacefully coexist in most situations. However, there are times when conflicts arise. (ODNR Division of Wildlife)

Inventory and Analysis

- Identify Problems
 - Population, impacts to vegetation, excessive feces, crop loss, water quality/health, aggressiveness, property damage, nesting location, traffic hazard
- Habitat Type
- Existing Conditions
- Harassment / Abatement Tactics
 - Noise (pyrotechnics, gun) visual devices (mylar, laser), chemical repellents, chasing, barriers, dogs, harassment, permits (egg addling, hunting, roundup)



Nuisance Species Practices

Prevention

- Reduce the likelihood of wildlife becoming a nuisance
- Do not feed wildlife
- Don't let food accumulate (under feeders, trash receptacles, dumpsters, picnic sites)
- Proper structure maintenance (fences, chimney vents, seal holes, repair broken members, etc.)

Control

- Address infrastructure needs or add netting, wire
- Reduce perch sites
- Use noise (radio, chimes, firecrackers) or visual stimuli (flags, reflective tape, lights, balloons, predator decoys)
- Electric fence
- Proper storage of trash (cans)
- Live trapping and relocation (when available)
- Harassment
- Permitting
- Plant appropriate species in appropriate locations



Invasive Species Control

Invasive Species in Ohio

- Invasive species are defined by the National Invasive Species Council as species that are “both non-native (or alien) to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm, or harm to human health.”
- About 5,000 species of plants, animals, and microbes are recognized in the United States as invasive.

Invasive Terrestrial Plants

- Approximately one-fourth of the plant species known to occur in Ohio originate from other parts of the world
- Of the more than 700 non-native plants in Ohio, fewer than 100 are known to be problems in natural areas
- However, those that are invasive can cause extensive economic damage and do immeasurable harm to our natural resources and the natural heritage of our state

Invasive Terrestrial Wildlife

- No significant issues in this area

Invasive Insects & Diseases

- Insects, fungus, and other tiny organisms can cause a great deal of damage to plant, forest, and wildlife health
- Emerald Ash Borer

Aquatic Invasive Species

- No waterway is immune to the negative impacts of aquatic invasive plant and animal species living in and degrading the quality of our waterways and changing the dynamics of underwater habitats

Invasive Species Control

Targeted invasive plant species:

- autumn-olive, bush honeysuckle, purple loosestrife, garlic mustard, multi-flora rose, glossy buckthorn, Japanese knotweed, privet, narrow-leaf cattail, reed canary grass, common reed grass, etc.

Manual and chemical techniques

- cut, trim, mow, dig, burn, bag/landfill, spray, etc.

Herbicide application

- Right equipment, application method, mix (chemical, surfactant, dye, concentration), timing, coverage

Targeted invasive animal species:

- Varies by location (ecosystem-driven approach)
- Identify problem (health and safety, infrastructure, environment, population/sociological diversity)
- Address utilizing best management practices
- Prioritize small populations – preventions
- Tackle large populations – commit multiple years



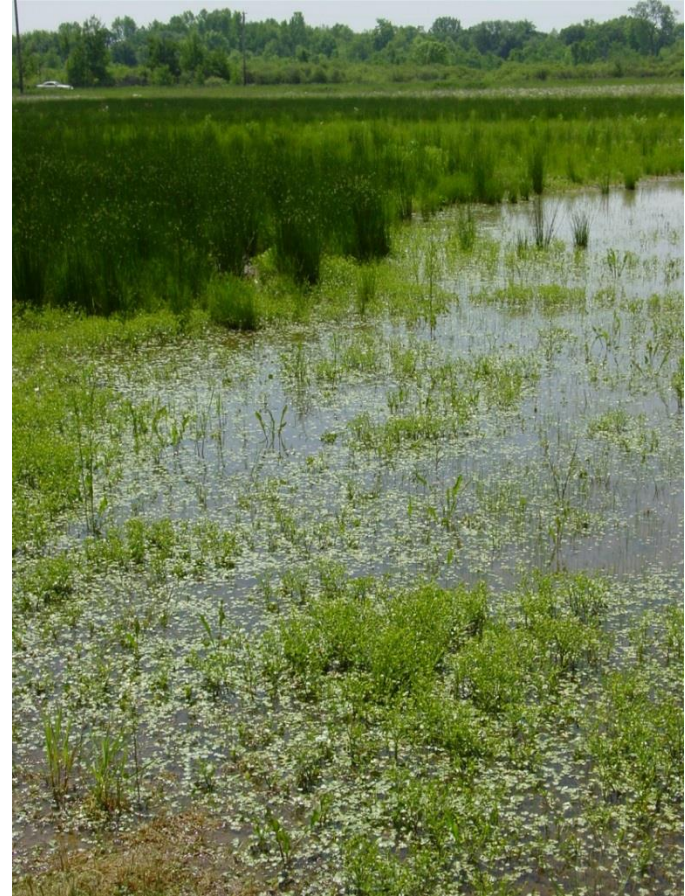
Laws, Rules & Regulations

- MCMP Rules & Regulations prohibit touching/molesting animals, feeding of animals, introducing animals, removal of plants
- All wildlife control measures implemented by the MetroParks follow local, state and federal ordinances, rules and regulations
- Calls are made regularly to appropriate agencies including ODNR District Wildlife Office, County Wildlife Office, nuisance trappers, Dog Warden, etc.
- It is illegal to live trap and relocate raccoons, skunks, muskrats, and opossums in Ohio.
- Canada geese are protected under both the Federal Migratory Bird Treaty Act and Ohio state law.



Protection

- PRESERVATION through:
 - Acquisition
 - Conservation easement
 - Deed restrictions / environmental covenants
 - Partnerships (AWARE, SWCD, etc.)
- RESTORATION and CREATION through:
 - Grant projects
 - Public mitigation
 - Private mitigation
 - Changes in ecosystem management
- Target Areas include:
 - High quality habitat
 - Sensitive areas
 - Diverse habitat
 - Riparian areas
 - Properties adjacent to existing MetroParks land
 - Connectivity of greenspace and corridors
 - Expansion of protection (buffer) over areas
 - Creation of access and interpretation
 - Areas of regional significance



Management Practices

Funding

- GRANTS

- Clean Ohio Conservation Fund
- Water Resource Restoration Sponsor Program
- Land & Water Conservation Fund
- Clean Water Section 319 Grant
- Surface Water Improvement Fund
- ...and many more!

- PARTNERSHIPS

- Public mitigation projects
- Private mitigation projects
- Soil & Water Conservation District
- Western Reserve Land Conservancy
- Mill Creek MetroParks Foundation
- State and Federal Agencies including ODOT, OEPA, ODNR, OPWC, FHWA
- Private contributions (donor program)



Prominent Mgmt. Activities

Use of native plant species

- Good for wildlife, such as birds and butterflies
- Costs less and saves time due to lower maintenance requirements
- Saves water because natives are best suited for Ohio climate
- No need for fertilizers or pesticides
- Native plants control erosion and filter stormwater

Problems of invasive plant species

- Displace or crowd native plant species
- Impact wildlife which rely on native plant communities for food, shelter and breeding habitat
- Form monoculture plant communities which reduces biological diversity

Control of invasive plant species

- Requires significant expenditure of funds and staff time to control or eradicate invasive species
- Management of invasive species is conducted to maintain natural woodlands, wetlands, prairies, meadows, ponds and lakes
- Most invasive plants are difficult to control and require the use of manual and chemical techniques.
- It is best to implement proactive measures and control invasive species before they dominate an area, when populations are small



Proactive Management

Application of Best Management Practices

- Preservation practices
 - Mill Creek Preserve Category 3 Forested Wetlands (101 acres)
 - Mill Creek Wildlife Sanctuary (264 acres)
 - Mill Creek MetroParks Farm (78 acres)
 - Sawmill Creek Preserve (154 acres)
 - Sebring Woods (39 acres)
 - Egypt Swamp Preserve (76 acres)
- Habitat creation and restoration
 - Mill Creek Preserve Wetlands (50 acres)
 - Mill Creek Preserve Prairie (87 acres)
 - Mill Creek Preserve
- Restoration of stream corridors
 - Calvary Run
 - Two (2) tributaries to Indian Run
- Installation of nesting boxes
 - Songbird, Bluebird, Wood Duck, Owl, Purple Martin, Chimney Swift, Bat
- Pollinator Gardens (5)
- Monarch Waystations (10)
- Phenology Garden
- Rain Garden
- Biofiltration Gardens (4)

- Deed Restrictions and Environmental Covenants
- Demonstration Projects
 - Lily Pond
 - Lanterman's Mill Parking Lot
 - Newport Wetlands
 - MetroParks Farm
- Proper use of equipment and chemicals
- Interpretive Education Signs
- Do Not Feed Campaign
- Proactive removal of Ash Trees
- Treatment of Lily Pond
- Adjustment of water levels at the Sanctuary
- Volunteer Support
 - Bluebird box monitoring
 - Nest box construction (eagle scouts)
 - Clean up events

Partners and Sources of Information

Solicit input from partners and experts:

- Industry consultants/experts
 - EnviroScience
 - Davey Resource Group
 - EnviroTech
 - Ohio Prairie Nursery
 - AquaDoc
 - Multi-Disciplinary Consulting Firms
- Cleveland Museum of Natural History
- Ohio Department of Natural Resources
- United States Department of Agriculture
- Health & Planning Departments
- Ohio State University Extension Office
- Audubon Society
- Environmental Protection Agency
- AWARE
- Western Reserve Land Conservancy
- Garden clubs
- Wildlife Committee

Credits:

Ohio Department of Natural Resources
Great Lakes Phragmites Collaborative



Partnerships

Questions or Comments?



EXPLORE. EXPERIENCE. ENJOY.

millcreekmetroparks.org

