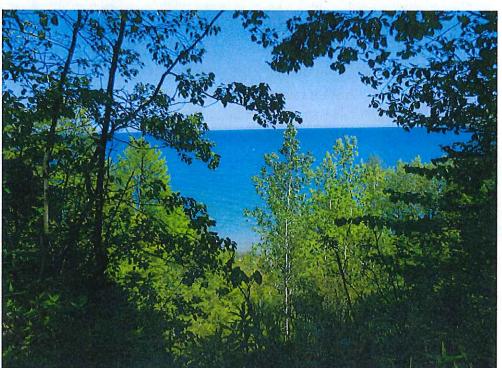




# Natural Areas 2013 Annual Report



Warnimont Park

Milwaukee County Department of Parks, Recreation and Culture

John Dargle, Director

Milwaukee County University of Wisconsin Extension Brian Russart, Natural Areas Coordinator

# Natural Areas Program Major Accomplishments 2013

- 1. Presentations at community events, workshops, schools, and conferences reached over 1,291 citizens this past year.
- 2. Through staff efforts and the substantial efforts of our partner organizations, we engaged **1,097 volunteers** who donated **15,708 hours** assisting in natural resource management projects throughout 2013.
- 3. The financial impact of our volunteers can never be overstated, because the value of their donated labor alone in 2013 amounted to a \$347,775 community investment within the Park System's natural areas.
- 4. The Natural Areas Internship Program (10 Interns in 2013) had another great year with our interns gaining important natural resource career skills while donating 1026 hours to the Natural Areas Program.
- 5. The creation of a second full-time position, Assistant Natural Areas Coordinator, assigned to the management of the Park System's natural areas.
- 6. Partnerships are essential to our success, and in 2013 staff worked with 43 partner organizations on a variety of important projects within the Park System's natural areas.
- 7. Continuation of the Natural Areas Program/Institute for Service Learning partnership with the **University of Wisconsin-Milwaukee** for a total of 4 classes and **31 students**.

# Natural Areas Program Major Accomplishments 2013

- 8. Staff, volunteers, and partner organizations undertook restoration projects that enhanced the ecology of **1,200** acres of natural areas.
- 9. Maintenance and stabilization of **13.9 miles** of the Park Department's Forked Aster Hiking Trail System.
- 10. Developed Restoration & Management Plans for natural areas within the Park System. These plans will guide our management efforts over the next 10 years. Parks completed or updated in 2013 were Cudahy Nature Preserve, Doctors, Falk, Franklin Savanna, Jacobus, and Warnimont.
- 11. Partnership Funding. We received \$161,232 in external funding from Sustain Our Great Lakes (Great Lakes Restoration Initiative), the Fund for Lake Michigan, the WI Department of Natural Resources, the US Forest Service, the Southeastern Wisconsin Invasive Species Consortium, Lake Park Friends, and the Southeast Wisconsin Chapter of Pheasants Forever.
- 12. Beginnings of a **Citizen-based science program** that provides opportunities for citizens to collect wildlife data that can be used by staff to better manage the Park System's natural areas
- 13. Start of our first ever **Aquatic Invasive Species** surveys' within the 50 lagoons and along the 10.6 miles of Lake Michigan shoreline within the Park System. Given the shear number of sites, it will take two-years to finish this project.

## 2013 Natural Areas Management Locations

## **Parks Administration**

• Pollinator Garden

#### Anderson Lake-Root River Parkway

- ♦ Aquatic Invasive Species Surveys
- ♦ Invasive Species Control

## **Back Bay**

♦ Invasive Species Control

#### **Baran Park**

♦ Invasive Species Control

#### **Bayview Park**

- ♦ Invasives Species Control
- ♦ Wayfaring Sign Installation

#### **Bender Park**

- ♦ Hiking Trail Maintenance
- ♦ Wildlife Surveys
- ♦ Invasive Species Control
- ♦ Wildlife Habitat Management
- ♦ AmeriCorps & SCA Projects

## **Big Bay**

♦ Friends of Big Bay Park—Weed-out

## **Bradford Beach**

Invasive Species Control

## Cambridge Woods

♦ MRGC-Invasives Control

## Copernicus

- ♦ SCA- Hiking Trail Re-route
- ♦ Invasive Species Control

## **Cudahy Park**

- ♦ SCA-Hiking Trail Re-route
- ♦ Invasive Species Control

## **Cudahy Natural Preserve**

- ♦ Invasive Species Control-Ken Solis
- ♦ Trail Maintenance
- ♦ Wildlife Surveys
- Restoration & Management Plan

#### Dale Creek Park

♦ Invasive Species Control

#### **Doctors Park**

- ♦ Friends of Doctor's Park- Weed-out
- ♦ Restoration & Management Plan

## Doyne Park

♦ Invasive Species Control

#### East-side Bike Trail

♦ Invasive Species Control

#### **Estabrook Park**

- ♦ Friends of Estabrook Park-Weed-out
- ♦ Eagle Scout-Railing Replacement

## Falk Park

- ♦ Wildlife Surveys
- ♦ Invasive Species Control
- ♦ Eagle Scout Project-Boardwalks and Benches
- ♦ Wildlife Habitat Management
- Restoration & Management Plan

## 2013 Natural Areas Management Locations

## Franklin Savanna

- ♦ Hiking Trail Maintenance
- ♦ Invasive Species Control-AmeriCorps
- ♦ Savanna Restoration—SEWISC
- ♦ Restoration & Management Plan
- ♦ Wildlife Surveys

#### **Gordon Park**

♦ Invasive Species Control

## **Grant Park**

- ♦ Hiking Trail Maintenance
- ♦ Friends of Grant Park-Weed-out
- ♦ Wildlife Surveys
- ♦ Rain Garden Installation-SCA
- Reforestation Project-South Milw. HS
- ♦ Invasive Species Control
- ♦ Aquatic Invasive Species Surveys

#### **Grantosa Creek**

♦ Invasive Species Control

#### **Greenfield Park**

- ♦ Hiking Trail Maintenance
- ♦ Invasive Species Control

## **Grobschmidt Park**

- ♦ Wildlife Surveys
- ♦ Invasive Species Control
- Grassland Habitat Enhancements
- ♦ Aquatic Invasive Species Surveys
- Prairie Seed Collection-Franklin HS

## **Holler Park**

- ♦ David Ciepluch-Weed-out & Native Plant Installation
- ♦ Aquatic Invasive Species Surveys

## **Hoyt Park**

♦ Hoyt Park Friends—Weed-out

#### **Humboldt Park**

♦ Aquatic Invasive Species Surveys

#### **Jackson Park**

- ♦ Hiking Trail Maintenance
- Invasive Species Control-Manitoba School
- ♦ Wildlife Surveys
- ♦ Aquatic Invasive Species Surveys

#### **Jacobus Park**

- Hiking Trail Maintenance
- ♦ Invasive Species Control
- Restoration & Management Plan
- ♦ Eagle Scout -Railing Replacement
- ♦ Wildlife Surveys

## Juneau Park

- Invasive Species Control
- USFS Pollinator Project—Native Plug Planting
- ♦ AmeriCorps & Service Learning Workdays

## Kinnickinnic River Parkway

♦ Invasive Species Control

## 2013 Natural Areas Management Locations

## Kletzsch Park

- ♦ Friends of Kletzsch Park-Weed-out
- Eagle Scout Project-Kiosk

## Kulwicki Park—Root River Parkway

- Invasive Species Control
- ♦ Natural Resource Inventories

## Lake Park

- ♦ Invasive Species Control
- ♦ SCA & Service Learning Park
- Native Plant Installation-Lake Park
   Friends

## Little Menomonee River Parkway

- ♦ Invasive Species Control
- ♦ Eagle Scouts- Kiosk & Benches

#### McGovern Park

- ♦ Invasive Species Control
- ♦ UWM-Trash Clean-up

## Menomonee River Parkway

♦ Invasive Species Control

## Milwaukee River Parkway

♦ Invasive Species Control

## **Mitchell Blvd Park**

- ♦ Story Hill Neighborhood Association Weed-out
- ♦ Native Seed Collection –UWM Service Learners

## **Noyes Park**

- ♦ Invasive Species Control
- ♦ Hiking Trail Maintenance
- ♦ Wildlife Surveys

## Oak Creek Parkway

- ♦ Natural Resource Inventories
- ♦ Invasive Species Control
- ♦ Wildlife Surveys
- ♦ Purple Loosestrife Beetle Release Site
- ♦ Aquatic Invasive Species Surveys

## **Oakwood Golf Course**

♦ Aquatic Invasive Species Surveys

## **Rawson Woods**

- Invasive Species Control
- ♦ Hiking Trail Maintenance-REAL Academy South Milwaukee HS
- ♦ Eagle Scout Kiosk

## Root River Pkwy North of I-43

- Natural Resource Inventories
- ♦ Invasive Species Control

## Root River Pkwy South of I-43

- ♦ Invasive Species Control
- ♦ Wildlife Surveys
- ♦ Natural Resource Inventories
- ♦ Aquatic Invasive Species Surveys

# Natural Areas Wildlife Surveys

## Why Do we Conduct Wildlife Surveys?

Knowing the full spectrum of species, whether flora or fauna, allows staff to manage natural areas using the best techniques, conduct restoration work at the right time, and most importantly it allows us to measure the success of our site specific restoration goals. While we do have a fairly comprehensive idea of the flora in our Park System (684 species of documented plants), our understanding of breeding and migratory wildlife populations is still evolving. Inventorying wildlife populations is a fairly new practice for the Parks Department. No internal studies had been conducted prior to three years ago so we don't have historical population data to consider which makes collecting baseline data all the more important. Observing how wildlife populations fluctuate during our restorations gives us a direct window into how successful we are in improving the ecological functions and value of our natural areas.

## What Type of Surveys are Conducted?

Staff conduct wildlife surveys for snakes, amphibians, aquatic invertebrates, breeding and migratory birds, turtles, and crayfish. We follow standardized scientific protocols when we collect data so it's comparable to other organizations collecting similar data within SE Wisconsin, because wildlife movement is based on habitat and not municipal boundaries.

## What have Our Surveys Found to Date?

Well we've only surveyed a select number of sites over the last four years and we have a great deal of work yet to do, but the early surveys by staff and volunteers are encouraging. Species groups are as follows:

- ♦ Two species of salamanders (blue-spotted & tiger)
- Six species of frogs plus one species of toad (wood, green, bull, chorus, tree, leopard, & American Toad)
- Five species of snakes (Butlers, eastern plains, & common gartersnakes; plus brown & northern red-bellied)
- ♦ Eighty-one species of potential breeding birds were documented during point count surveys. Too many to list here but you can find our lists at eBird.org
- Over 340 potential migratory bird species reported on eBird from many different individuals
- Five species of turtles (snapping, painted, Blanding's, red-eared slider, & eastern spiny softshell)
- ♦ Sixteen species of mammals, but there's likely many more. Staff haven't conducted any formal surveys for this group of wildlife yet.

# Natural Areas Education & Outreach Efforts

## **Higher Education**

University Service Learning projects require students to undertake a variety of community service activities. Natural areas projects revolve around ecological restoration and hiking trail installation. Natural Areas staff worked with 31 students this year at 6 parks. Students participated through the UW-Milwaukee's Institute for Service Learning.

## **Community Education & Outreach**

Urban natural resource management requires an engaged and educated community. It is always a priority for us to take the Natural Areas Program to the people. During 2013 staff gave 22 presentations to 1,291 citizens. Program accomplishments were also covered in various media outlets within UW-Extension. The Natural Areas Program also embraced social media this year with the creation of its own facebook page which includes many pictures of this year's activities. So check it out to be kept up to date on what's happening with our natural areas and be sure to "like" usl

## Citizen Science Program

In order to continue effectively managing the 10,000-acre Natural Areas Program, staff needs to engage all stakeholders in the stewardship process. The development of a Citizen Science (Cit-Sci) Program within the Natural Areas Program is an excellent opportunity to create collaborations between diverse groups of volunteers. The incorporation of citizen scientists into our natural resource inventories will allow for the strengthening of an already well-built partnership between the Natural Areas Program and its volunteers which will likely lead to many new partnerships. The Cit-Sci Program formally began this year with our **Backyard Biodiversity** event at Bender Park. Cit-Sci volunteers also conducted wildlife surveys at **Noyes, Grant, Jackson**, and **Wilson** parks.

# Natural Areas Internship Program

Training the next generation of natural resource managers should be one of the most important components of any natural areas program. The Natural Areas Program extended its internship opportunity to 10 university students and recent graduates this past year. Students participated from UW-Milwaukee, Milwaukee Institute of Art & Design, and Alverno College.

Interns were provided training in ecological restoration techniques which included equipment use, natural resource data collection, development of Restoration & Management Plans, creation of educational materials, GPS/GIS technology, and plant/wildlife identification skills.

In return for this learning experience, our interns (who volunteer their time) donated 1,026 hours towards helping us achieve our natural areas goals. Their efforts and personal sacrifices to further their careers and give back to the Milwaukee County community have been a daily inspiration for the rest of the staff and myself. It has been a privilege to work with each of our dedicated interns. Our interns this past year were: David Meineke, Ashley Hirsch, Erin Andrew, Rebecca Romleski, Claire Kennedy, Erika Noble, Cassie Rincon, Lea Cutsforth, Danny Stangstalien and Tina Kroening.

# Natural Areas Hiking Trail System

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While staff greatly encourages the interaction between citizens and our diverse natural areas, it is important that it is done in a sustainable manner. One of the ways the Parks Department and its partners provide this experience is through the **Forked Aster Hiking Trail System**.

Staff, working with the Student Conservation Association (SCA), AmeriCorps, Service Learners, and Eagle Scouts we were able to stabilize and enhance 13.9 miles of existing degraded hiking trails spread over 17 parks in 2013. Building on the trail improvement success of the past few years, there are now more than 42 miles of sustainable hiking trails within the Park System's natural areas for residents to enjoy.

Trail maintenance and restoration is an ongoing project and great strides were made this past year. Upon completion of our current enhancement of historic trails, the **Forked Aster Trail System** will eventually provide approximately **50 miles** of designated hiking trails to the Park System for park users to enjoy while protecting the natural resources that add to the quality of our citizens' lives.

To view and download pdf maps of Forked Aster Hiking Trail segments throughout the county visit the Park People's website at http://www.parkpeoplemke.org/hiking-trails-milwaukee-county-parks

# Natural Areas Land Management & Resource Planning Activities

Thanks to our partners, volunteers, donors, and additional staff resources from the Parks Department 2013 was another great year for restoration projects. Accomplishments included:

- Removal and control of 21 different invasive plant species at 53 parks and parkways.
- Many natural areas within the Park System have historic plant inventories conducted by the Southeastern WI Regional Planning Commission (SEWRPC). As staff go about their restoration projects they document new species when they are found. We added three new species in 2013, two rare natives (cream gentian & upland white goldenrod), and unfortunately one new invasive (common tansy).
- Monitoring wildlife populations is one of the best measures of ecological health and restoration project success. With that in mind, staff and volunteers conducted snake monitoring surveys at 3 parks, breeding bird surveys at 4 parks, turtle surveys at 4 parks, and migratory bird surveys at 4 parks.
- ♦ Staff focused on breeding salamander data gaps this year with our **ephemeral ponds inventory project.**The five year study has added **336 ephemeral wetland** locations within the Park System. Ephemeral wetlands are the main breeding and nursery areas for the majority of our native amphibians species.
- ♦ Staff and partners trained 1,097 volunteers that donated 15,708 hours to improving our natural areas.
- ♦ Staff and partners conducted ecological restoration activities that benefited 1,200 acres of natural areas.
- ♦ Staff completed or updated Restoration & Management plans for Cudahy Nature Preserve, Doctors, Falk, Franklin Savanna, Jacobus, and Warnimont parks.

# The Financial Value of the Natural Areas Program

#### **Costs & Returns**

Ecological restoration can require specialized equipment, herbicides, planting materials, educational resources, and trained staff, all of which can financially add up and prevent worthy projects from being undertaken. Fortunately, the Natural Areas staff has been able to leverage outside resources through grants and donations from partner organizations and volunteers. In 2013 the Natural Areas Program received:

\$148,666 in grants or cooperative agreements (WI DNR, GLRI, USFS, & Fund for Lake Michigan)
\$12,566 in donations of materials, equipment, cash, or staff time (Lake Park Friends, OWLT, SE WI PF)
\$347,775 in donated labor from volunteers (based on standardized rates published by the Independent Sector)
\$72,780 from the Agricultural Lease Program and the CRP program that is managed by the Natural Areas staff
\$44,400 in value to the County for assisting another County Department achieve their natural resource goals
\$139,534 from the Park Department's budget out of the County tax levy

A total value of \$765.721 towards ecological restoration and community outreach and education.

# Special Projects for 2013

- The Natural Areas Program continued its long standing partnership with AmeriCorps by hosting three very passionate and talented crews this past year. We were fortunate and excited to host crews with project partners The Nature Conservancy (TNC) and the River Revitalization Foundation (RRF) once again.
- Our partnership with the Student Conservation Association and Johnson Controls is a special project for our staff each and every year. The tireless efforts of these young men and women continues to make significant contributions to public accessibility within our natural areas (hiking trail construction) as well as improving the ecological health (invasive species removal). The opportunity to work directly with an organization so completely dedicated to the advancement and sustainability of urban youth is truly an inspiration for the Natural Areas staff. This year SCA worked at Cudahy, Copernicus, Warnimont, Greene, Root River Pkwy, and Bender.
- We can't say thank you enough to our grant funders and partners who provided the resources that allowed us to implement restoration projects and expand our natural resource surveys. The WI DNR provided funding for staff to control invasives at Grant Park and begin conducting aquatic invasive species surveys of the Park System's 50 lagoons and along 10.6 miles of shoreline. The Fund for Lake Michigan provided funding to install green infrastructure/wildlife habitat projects at Grant and Bender parks (reforestation, rain gardens, and prairie plantings). A cooperative agreement with the Alliance for the Great Lakes funded invasives species removal, prairie planting, educational workshops, and equipment to restore 200 acres within Bender, Grant, and Warnimont parks. Another important partnership with the USFS's Milwaukee Regional office paid for 45 flats of native plugs that were installed at the Juneau Park pollinator garden. For the second time in three years the Southeast Wisconsin Chapter of Pheasants Forever stepped up and provided funding for wildlife habitat conservation. This year they played an important role in a large prairie planting project at Bender Park, solidifying the park's value to grassland wildlife for many years to come.

# Natural Areas Notable Partnerships for 2013

The Park People Weed-outs

Hands down, one of our most important and sustained partnerships. Weed-outs to remove invasive species were conducted in spring and/or in fall at Big Bay, Doctors, Estabrook, Grant, Holler, Honey Creek Parkway, Hoyt, Kletzsch, Lake, Menomonee River Parkway, Mitchell Blvd, Oak Creek Parkway (Mill Pond), Sheridan, and South Shore Parks. These Weed-outs significantly improved the quality of our natural areas, and we are greatly appreciative of the Park People's consistent and tireless efforts to guide and nurture volunteers (703 in 2013) in a sense of community enrichment. Thank you Iim Goulee and John Lunz for your tireless leadership.

Ozaukee Washington Land Trust (OWLT)

The Natural Areas Program is always looking to expand partnerships with organizations that are passionate about conservation and cooperation, which made OWLT a "natural" fit. With funding from the federal GLRI program OWLT was able to send several of their dedicated staff to Milwaukee County to help control populations of the non-native Phragmites, an aggressive invasive species. In doing so OWLT staff help protect and restore 304 acres of important parkland in the Root River Parkway, and at Bender, Grant, and Warnimont parks.

## Lake Park Friends

The Lake Parks Friends once again stepped up and showed their conservation leadership by funding a Natural Areas internship position in 2013. This has been an excellent partnership that has allowed us to jointly achieve our natural areas goals for Lake Park. Staff worked on invasive species removal, native plantings, and design assistance for the new native trees and shrubs planted at Lake Park this past fall. A special thank you to the Lake Park Friends **Nature Committee** for their efforts to build and nurture this continuing partnership.

**Eagle Scouts Projects** 

Experiencing conservation at a young age often solidifies an individual's natural resource perspectives for life. This year scouts built hiking trail boardwalks, puncheons, trailhead kiosks, Leopold benches, and installed trail-side railings. Our sincerest thank you to the following young men and their families: Nick Meyers, Khang Vu, Dusty Hartl, James Welty, Wolf Hentzen, and Stephen Lay.

**Neighborhood Associations & Friends Groups** 

Too many outstanding partners to list in such a small space. Once again they donated their time, expertise, knowledge, and funding in order to enhance not just their local parks but also the larger Park System. At the end of the day, these parks belong to county residents, and they have shown an overwhelming desire to preserve the natural places that make our County unique.

## **Volunteers of Significance 2013**

- Gilbert Walter- Gil is so passionate about natural areas that he donates a great deal of his time between two parks (Estabrook and Lake parks). He's always leading the charge to plant native plants and remove invasives.
- ♦ Harold Schmidt- Harold has spent more hours removing buckthorn from Estabrook Park than probably anyone else. When he's not tackling invasives he using his diverse trail construction skills to enhance hiking trails at Estabrook and mountain bike trails in other parts of the Park System.
- ♦ John Mulhern-John certainly is a tireless invasive species warrior at Kletzsch Park and an inspiration to all our staff. If he's not working on invasives he always seems to find other projects to dive into including setting up some great Eagle Scout projects at Kletzsch Park.
- ♦ Richard Stevens Rich has gone above and beyond by motivating his neighbors to remove invasives from the Honey Creek Parkway. In addition Rich has paid for and installed numerous native trees/shrubs where the invasives were removed.

All of these gentlemen have been long-term volunteers and each has given a significant amount of their time and passion in order to protect and preserve important natural places that we can all experience and enjoy. Excellent job guys and keep up the great work!

# The Path Ahead and the Trail Left Behind

One of my great passions in life is hiking. I've been all around the country walking along ridge tops with views that cross not just miles but eons. I've wandered into quiet valleys that have caused time to slow and my soul to linger. My eyes have gazed upon waterfalls tumbling into streams filled with moss covered boulders, deserts painted by wind and cactus interrupted by towering buttes, and giant conifers perched on stony cliffs with mist cascading off their lichen covered branches. My training as a land manager allows me to see the sometimes subtle and sometimes not, hand of man across these landscapes even in places that would be considered the most pristine. I see the same hand as I look upon the natural places that my staff and I manage in our Park System.

When I hike my mind tends to wander more so than the trail, and I wonder what the Park System's natural areas will look like a 100 years from now. It is an extraordinary responsibility to be a steward of a public resource. It can be heavy and uplifting in the same breath. Small, seemingly simple decisions can be the initial drops of water that lead to a raging river somewhere far beyond the horizon. To fell a maple in order to release an oak, to seed a prairie where forest once swayed, to remove an invasive that's lost its way can all lead to cascading events many years from now. On a warm spring day 100 years in the future will vivid warblers still embellish the branches of a waking woods? Will frogs still sing their fervent love songs in the cool waters of ephemeral wetlands? Will morning cloaks glide through stoic tree trunks on silent wings? Most importantly, will people still walk these trails and experience vibrant natural places. We certainly hope that will be the case.

I think the role of any steward is to nurture, protect, and lead with their decisions. As we manage your natural areas and gaze at the path ahead and its limitless possibilities, we also realize what lies before us now will someday be the trail we left behind. An immense responsibility, but one we enthusiastically and thoughtfully accept. As always it was an honor to blaze the trail for you again this year. My staff and I greatly enjoyed the company of all who joined us for the "hike," however long or short it may have been. The path ahead looks very sound thanks to all of you and the sacrifices you continue to make so that our Natural Areas Program can fully realize its potential.

Before I end my yearly message, I would like to personally thank my incredibly dedicated and talented staff. They are passionate young conservationists who have made great personal sacrifices, which has allowed our Natural Areas Program to succeed. They are the foundation of the program and without them it would never have gotten as far as it has in such a short period of time. It has been my sincerest privilege to mentor and to be mentored by them. They inspire and humble me everyday.

As for the rest of you, I look forward to continuing all of our work together into 2014 and many years to come.

Sincerely,

Brian Russart Natural Areas Coordinator Milwaukee County Department of Parks, Recreation & Culture University of Wisconsin Extension



## Natural Areas Mission Statement

Blending Milwaukee County's Diverse and Unique Natural Areas With Its Culturally Rich Communities to Preserve and Nurture Its Natural Heritage for Current and Future Generations

# Natural Areas Staff 2013

Natural Areas Coordinator Brian Russart

Assistant Natural Areas Coordinator Julia Robson

Stewardship Coordinator Staycie Greefkes

Aquatic Invasive Species Coordinator Lea Cutsforth

Land Management Technician Sophia Steck