

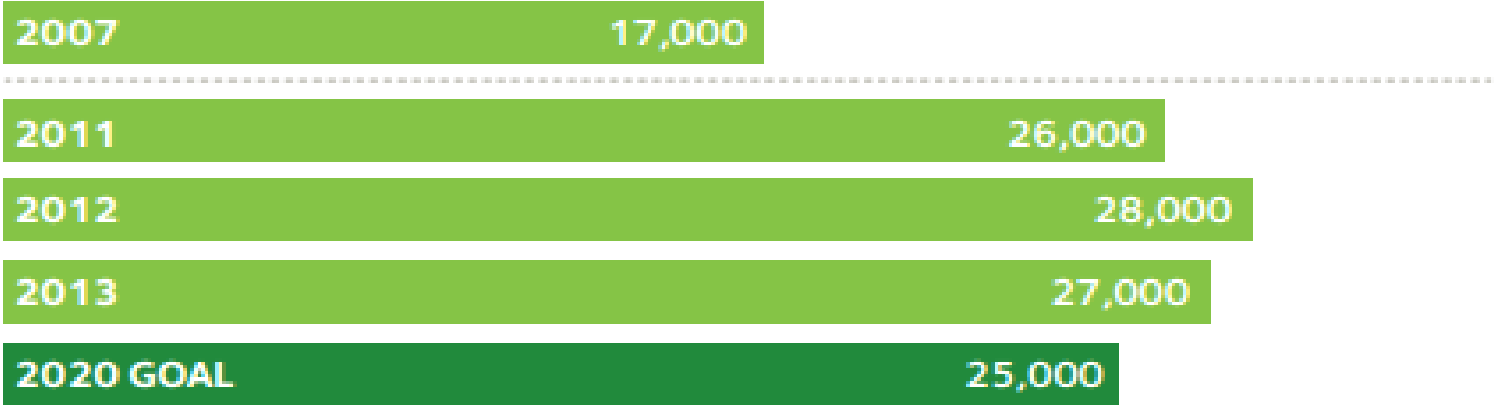


**WM provides 27,000 acres  
of wildlife habitat at over 130 sites  
throughout the USA.**

## NUMBER OF WILDLIFE HABITAT PROGRAMS



## NUMBER OF ACRES PROTECTED





# Certification Recognition



The screenshot shows the Wildlife Habitat Council website. The header features the Wildlife Habitat Council logo (a green bar with icons of a bird, tree, factory, animal, and deer) and the text "Wildlife Habitat Council Conservation Projects". Navigation links include "Log out", "My Account", and "Help". A secondary navigation bar contains "VIEW PROJECTS", "MY REGISTRY", "BLOG", "ABOUT", and "CONTACT". A search bar is located on the left. A sidebar on the left lists search options: "Browse by Maps", "Browse by Keywords", "Quick Searches", "Advanced Search", "Add a Project" (highlighted in green), "View My Registry", and "Support the Registry". Below this, "Quick Searches" are listed with links to "Wildlife at Work" and "Corporate Lands for Learning". "View WHC Projects by State:" lists links for Alabama, Alaska, Arizona, Arkansas, and California. The main content area features a large photo of a bird on a branch, with the caption "Photo courtesy of Occidental Petroleum Corporation". Below the photo is a "Welcome to the Wildlife Habitat Council" section, followed by "Recently Added Projects in Wildlife Habitat Council" listing "Waste Management of New York, LLC - Varick 1 Transfer Station" (added Dec 17, 2013), "Tunnel City" (added Dec 13, 2013), and "Toyota Motor Manufacturing, Indiana - TMMI" (added Dec 13, 2013). To the right is a map of the United States with project locations marked by green pins, titled "Wildlife Habitat Council United States Statistics" with a "view map" link. The footer includes the Wildlife Habitat Council logo and the text "Last Updated Fri, Dec 20, 2013".

Wildlife Habitat Council  
Conservation Projects

Log out My Account Help

powered by  
The Conservation Registry

SEARCH

VIEW PROJECTS MY REGISTRY BLOG ABOUT CONTACT

• Browse by Maps  
• Browse by Keywords  
• Quick Searches  
• Advanced Search  
• Add a Project  
• View My Registry  
• Support the Registry

**Quick Searches**  
See specific searches of Wildlife Habitat Council projects.  
**View WHC projects by certification program:**  
→ [Wildlife at Work](#)  
→ [Corporate Lands for Learning](#)  
**View WHC Projects by State:**  
→ [Alabama](#)  
→ [Alaska](#)  
→ [Arizona](#)  
→ [Arkansas](#)  
→ [California](#)

**Welcome to the Wildlife Habitat Council**

**Recently Added Projects in Wildlife Habitat Council**  
[Waste Management of New York, LLC - Varick 1 Transfer Station](#)  
Added: Tue, Dec. 17, 2013  
[Tunnel City](#)  
Added: Fri, Dec. 13, 2013  
[Toyota Motor Manufacturing, Indiana - TMMI](#)  
Added: Fri, Dec. 13, 2013

Photo courtesy of Occidental Petroleum Corporation

Wildlife Habitat Council  
United States Statistics

Last Updated Fri, Dec 20, 2013

<http://wildlifehc.conservaionregistry.org/>



# WHC Education Department



**Thelma Redick**

**Director, Conservation Education & Outreach**

[treddick@wildlifehc.org](mailto:treddick@wildlifehc.org)

412-264-3611



**Robert Campbell**

**Education Specialist**

[rcampbell@wildlifehc.org](mailto:rcampbell@wildlifehc.org)

301-588-8994 x122



**Rebecca Culler**

**Education Specialist**

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301-588-8994 x121



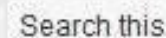
**Jeff Popp**

**Land Restoration Manger**

[jpopp@wildlifehc.org](mailto:jpopp@wildlifehc.org)

301-588-8994 x123





## Certification

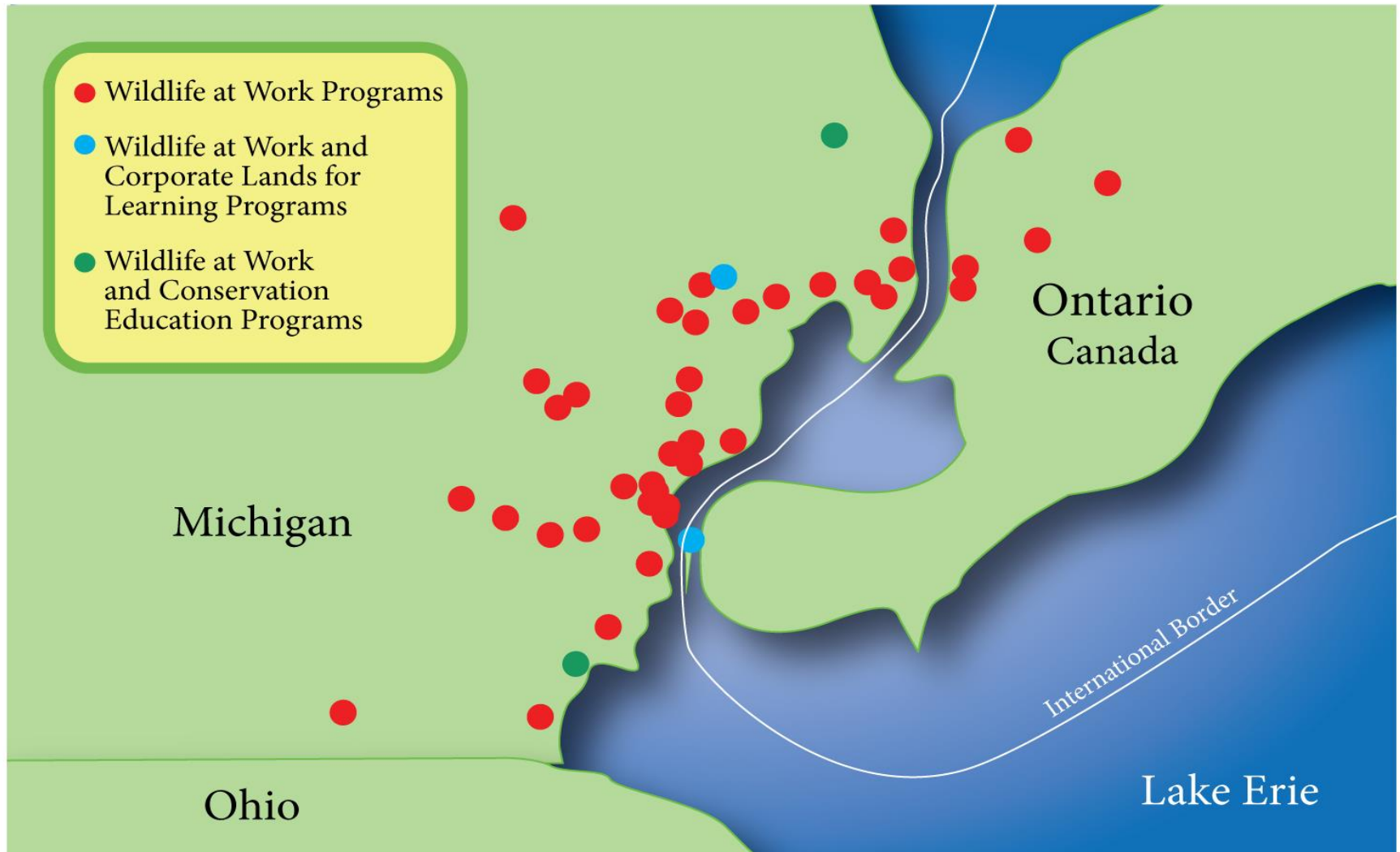
**Explore WHC Certified Programs on the Conservation Registry**

The Wildlife Habitat Council (WHC) promotes and certifies habitat conservation and management on working lands through partnerships and education.

## The Night I Saw an Eastern Tiger Salamander

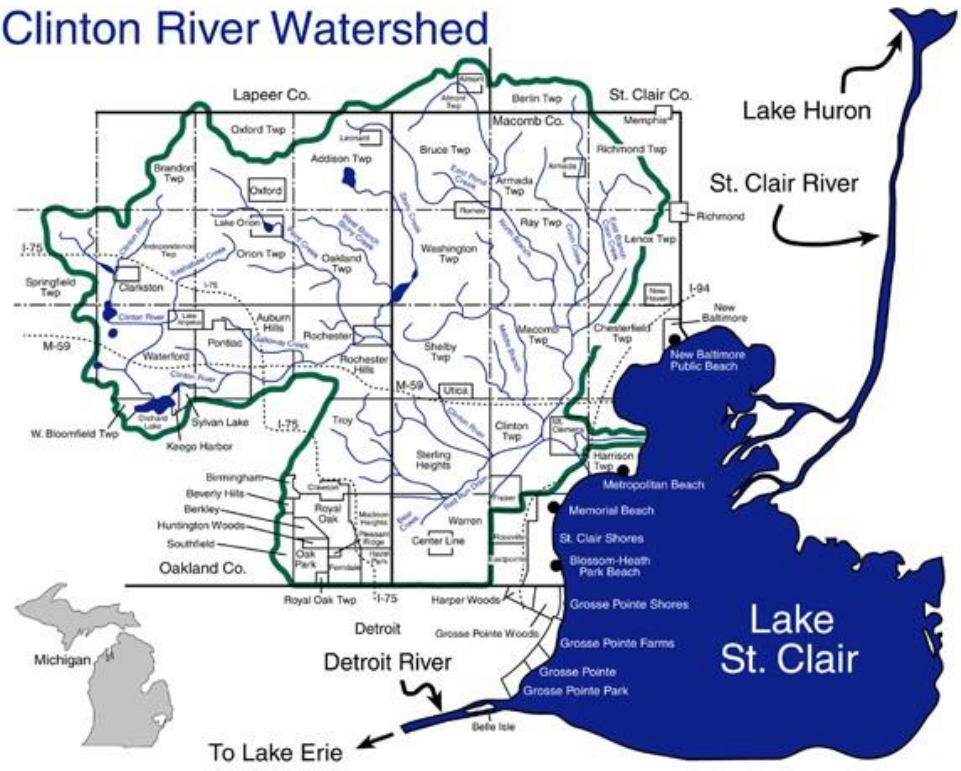


# WHC & businesses committed to habitat restoration





# Clinton River Watershed



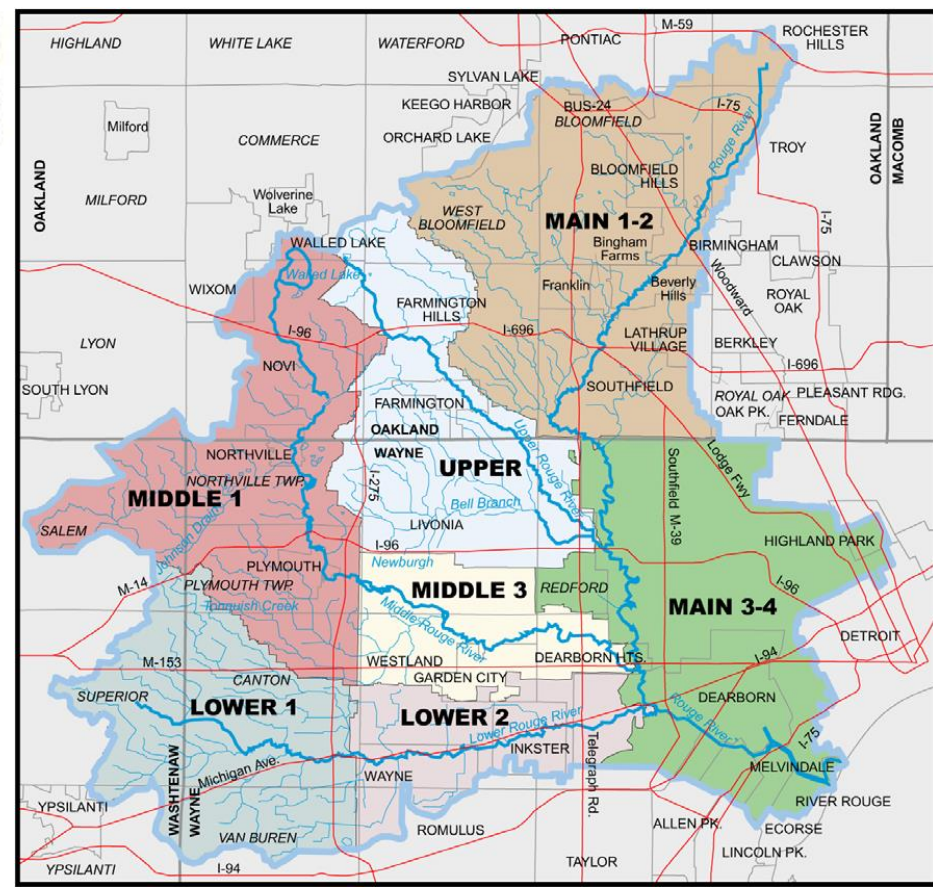
No matter where we live

We all live in a watershed

Clinton River Watershed – above, Shiawassee to the NW, Huron to the SW

OAKLAND COUNTY

Rouge River Watershed - right



# **Post 2012 Observations & Activities**



Early Spring 2012 / Post WHC Recertification - Hawk nest visible from Giddings Rd.





# 2012 Spring Forest Inventory

**Ruth Vrbensky** – local naturalist visited Eagle Valley to identify native species in the woodlots to the west in the area pending new cell develop.

WM harvested  
native plants in  
2013 & 2014

- Oakland  
Wildflower  
Farm
- Natural  
Community  
Services







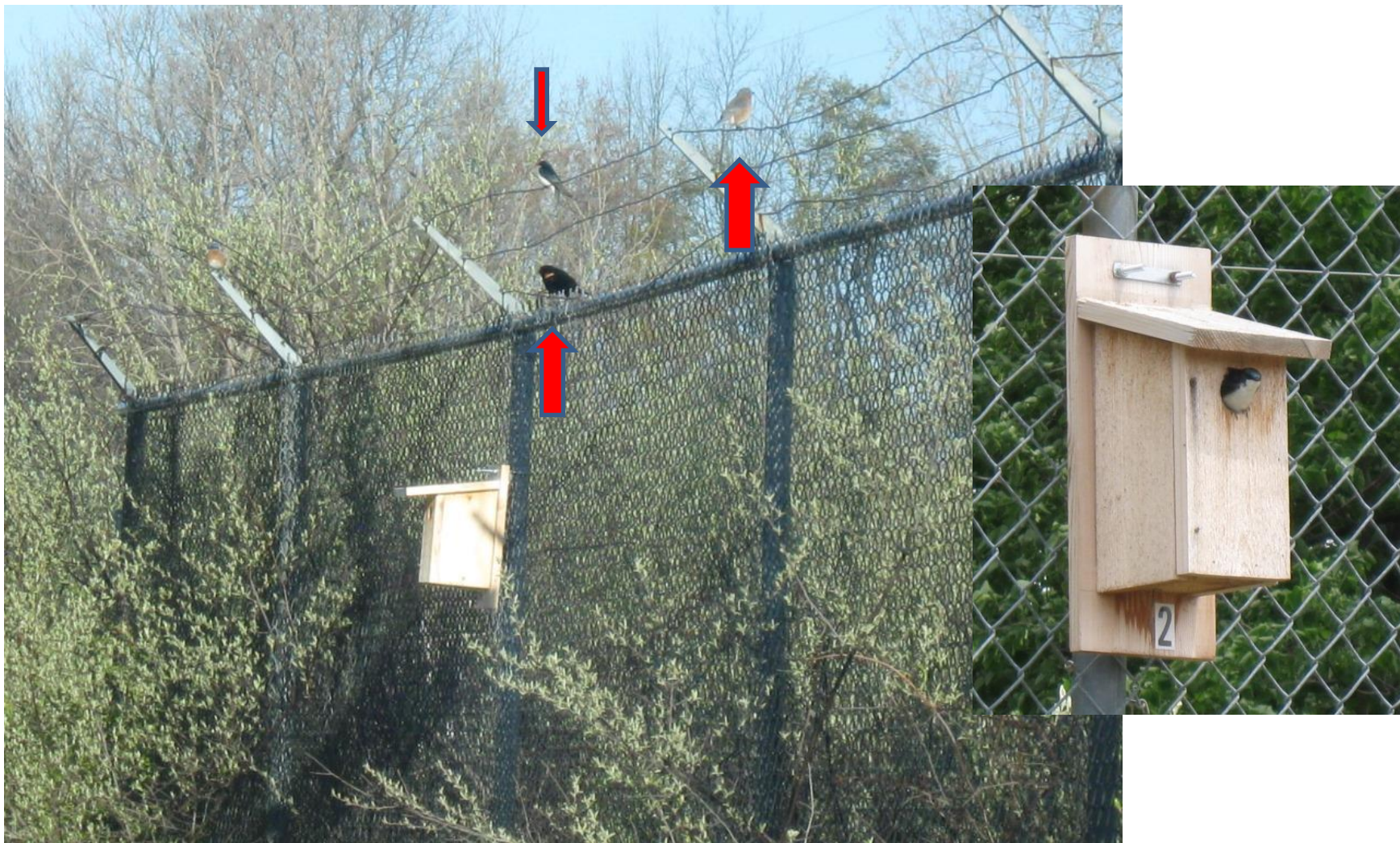






**2012** May (post certification) lots of Blue Bird sightings – now - very few

**Blue Bird, Tree Swallow & Red Wing Black Bird** – deciding who was first to spot the new blue bird house...the Tree Swallow won...back to back placement is recommended and these houses will be relocated off the fence and back to back.





First Spring sighting of the Eastern King Bird







Belted King Fisher

Sandhill Cranes





# 2012 Wildlife Rescue Attempts

- Injured duck at Paint Creek near Orion Art Center
- Barn Swallow





# Fall 2012 Species Inventory

Photo used to confirm species identification

Unsure why deceased but found coyote foot prints along shoreline, mother possibly deceased and baby was abandoned?





# Fall 2012 Species Inventory



Dead Turtle Crime Scene



















2012 Waldon Middle School Teacher Dan Hunter  
& students constructed an Owl House for WM.

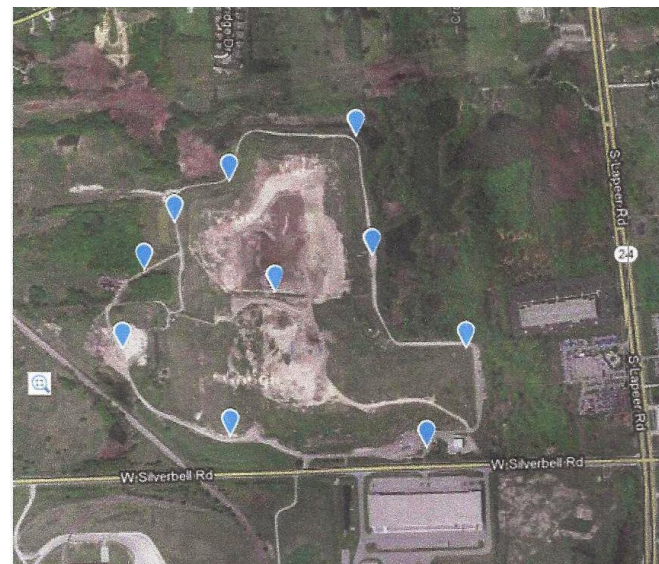
## Owl House Installation







9 year old  
Alexa  
Dinnewith  
Plotting EV  
bird observations  
in the Cornell  
Ornithology Lab  
Data Base



**Sent:** Friday, January 04, 2013 9:53 AM

**To:** Klein, Kathleen

**Subject:** Re: Complete Instructions and Observation Journal...

Thanks Kathy! The data entry has begun :) Alexa actually remembered most of what we did yesterday. The triangles help a lot. We did the first few entries together, but she's really got it down and is already almost halfway through the list.

She's also copy and pasting the observations from the spreadsheet into the comments section so that will give some added information. She may need a few clarifications, like one entry says yellow finch- she wants to know whether you meant goldfinch. After she's through the list we can send those to you. Also, when she's done putting in all in, we'll double check the info. I think she'll have it done this morning!

Lauren



# **2013**

## **Observations & Activities**



MARCH 2013 - Chemical mapping being used to determine migratory patterns and how the disease is being transmitted.

7 species of bats were determined to be affected by 2013.

The little brown bat is changing its social behavior – up to 75% of them are roosting singly now rather than in social enclaves.



GRAY BATS COURTESY U.S. FISH AND WILDLIFE SERVICE

## Fighting the Fungus

In the race to save bats affected by the deadly white-nose syndrome, scientists from Michigan Technological University are using chemical “fingerprinting” to identify where bats hung out the previous summer.

Testing hair collected during hibernation, the researchers can match it to the hydrogen fingerprint of the geographic area where each bat grew the hair. The aim is to figure out the bats’ movements, which hibernation sites are connected, and how disease could be transmitted—and ultimately managed—among locations.

It’s not a moment too soon. The U.S. Fish and Wildlife Service recently confirmed white-nose syndrome now afflicts the federally listed endangered gray bats in Tennessee—upping the count to seven species.

One hopeful note: The gregarious little brown bat, which prefers to roost in dense clusters, is changing its social behavior in response to the disease, according to University of California-Santa Cruz scientists. “We now see up to 75 percent of them roosting singly,” says Kate Langwig, lead author of the paper. “This study gives us an indication of which species face the highest likelihood of extinction, so we can focus management efforts and resources on protecting those species.”

**3.3° F**

Degrees that the average  
July temperature in the  
Lower 48 was above the



## **2013 Spring**

Ruth Vrbensky  
harvested  
native plantings



## **2013 Fall**

NCS - John DeLisle  
did our Fall Inventory



# SNAPPING TURTLES MATING IN WEST SEDIMENTATION POND



<https://www.youtube.com/watch?v=TaDjnp0ohY>

<https://www.youtube.com/watch?v=-isWwOwOtTs>



# 2013

**Failed pollinator garden -**  
Removed due to unintended  
groundhog habitat.





# Successful Pollinator Garden





**Blue Bird House # 1 by Shop –**

**Determined through internet investigation to be house sparrow eggs**





## Blue Bird House # 3







**Unknown egg**





# 2013 Butterfly Observations & activities



Baltimore Checker Spot



# European Skipper





# 2013 - DRAGON ON THE LAKE

## GM & WM Wildlife Warriors Dragon Boat Team





## 2013 Fall

Ditch maintenance  
and subsequent  
phragmites removal





## 2013 Fall – Crime Scene Investigation





# 2013 Bat House Project

Eric Bishop Troop Leader  
Romeo/Oakland Twp  
Pack 259 Den 7



The waste helps per one million

PACK 259  
DEN 7  
WOLF DEN 02/2013

Did you know?:

- \* This bat house will hold up to 100 bats?!
- \* There are 9 species of bats in Michigan (all micro bats)
- \* All Mich. bats feed exclusively on insects.
- \* Bats use echo-location to find food.
- \* This bat house is black because it helps absorb heat from the sun to keep bats warm in the winter
- \* Ten (10) years of research led to the design (shape) of this bat house
- \* The average body length of a bat is 4.5 (inches) (tall) with a wing-span of 13 (inches)

Den 7 = Braedon Bishop  
Derrian Kumpf  
Matthew Kennedy  
Bradley Teeple

13"





# MOST INTERESTING DISCOVERY OF 2013

- All the **European Starlings** in North America descended from 100 birds set loose in New York's Central Park in the early 1890s.
- Because of their recent arrival in North America, all of our starlings are closely related. Genetically, individuals from Virginia are nearly indistinguishable from starlings sampled in California, 3,000 miles away. Such little genetic variation often spells trouble for rare species, but seems to offer no ill effects to starlings so far.
- Starlings are great vocal mimics: individuals can learn the calls of up to 20 different species. Birds whose songs Starlings often copy include the Eastern Wood-Pewee, Killdeer, meadowlarks, Northern Bobwhite, Wood Thrush, Red-tailed Hawk, American Robin, Northern Flicker, and many others.
- Starlings are strong fliers that can get up to speeds of 48 mph.
- The oldest recorded wild European Starling was 15 years 9 months old.



# **2014 Observations & Activities**



# WM invited to be 2014 Honorary Chair of the Trail Water Land Alliance

TWLA is an informational gathering of government, non-profits and businesses working towards green space preservation and development and water recreation in Oakland County







Barred owl - Luna



Red-tailed hawk – Ruby



Turkey vulture – Eva

### **Eva saves Ruby by Susan Stamy**

I like to get my education birds out of their enclosures for a walk, leashed on my arm or tethered to their weathering perch. This gives them a change of scenery, something different than being in their enclosures all day and I know they enjoy being out. The only one that is not tethered is Eva, our turkey vulture because she is completely non-flighted due to her injury. I sit her on her perch and she is free to find treasures in the tall grass, though I never take my eyes off of her because she has been known to be naughty.

When the birds are out with me, I always watch them carefully because they can warn me if something is wrong. Their eyesight is much keener than mine.

One late summer afternoon I had Luna our barred owl, Ruby the red-tailed hawk and Eva out weathering. (Weathering in rehabilitation means to take the bird out into the open for sunlight and exercise. It is enrichment – a change in environment.) Luna was on her perch right in front of me, Ruby was perched about 30 feet away and Eva had decided to perch herself on the back seat of the golf cart which was about 10 feet away from Ruby. Luna started doing her head swing, alerting me that she saw something in the woods. I looked in that direction but for the life of me I could not see what she was looking at. Then Eva started to flap her wings and stomp her foot. This is a red flag Eva only does when something is very wrong.

I got up and headed towards Eva not seeing anything. Even when I was standing right in front of her I saw nothing. I glanced over at Ruby who is now only about 6 feet away and my heart stopped. Less than 4 feet away from Ruby was a coyote ready to pounce on her! My presence didn't even make the coyote move. I ran straight towards the coyote and chased it well past the 100 foot enclosure. I don't even like to think what would have happened if Eva had not alerted like she did. One thing for sure, Ruby would no longer be with us if it had not been for Eva.

Yes, Eva was rewarded with her favorite treat, beef heart, for several days after!

# Coyote Sighting at Eagle Valley





# Wildflowers planted By Waste Management







April 10, 2014

[www.batconservation.org](http://www.batconservation.org)

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## White-nose Syndrome Found in Michigan

Today the Michigan Department of Natural Resources announced that the DNR survey team has discovered the presence of the fungus *Pseudogymnoascus destructans* and White-nose Syndrome in Michigan. Officials have confirmed the diagnosis in Little brown bats sampled at sites in Alpena, Dickinson and Mackinac Counties. Read the DNR press release [here](#).

White-nose Syndrome has been spreading west since it was first documented in New York in 2006. Since that time, more than 5.7 million bats have been killed by this disease. Michigan now joins 26 states and 5 Canadian provinces that have identified White-nose Syndrome in their area.





# Michigan Department of Natural Resources

## White-nose syndrome confirmed in bats in Michigan

Contact: Dan O'Brien, 517-336-5035 or [Ed Golder](#), 517-284-5815  
Agency: Natural Resources

April 10, 2014

The Michigan Department of Natural Resources (DNR) and a consortium of partners announced today that the fungus known to cause significant rates of illness and death in North American bats has been detected for the first time within the state's borders. White-nose syndrome (WNS) has been found in three Michigan counties: Alpena, Dickinson and Mackinac.

"These are the first confirmed WNS cases in Michigan. Even though we've known this disease was coming, it is a disappointing day," said Dr. Dan O'Brien, DNR wildlife veterinarian. "We will now shift gears and try to stop the spread of this serious disease."

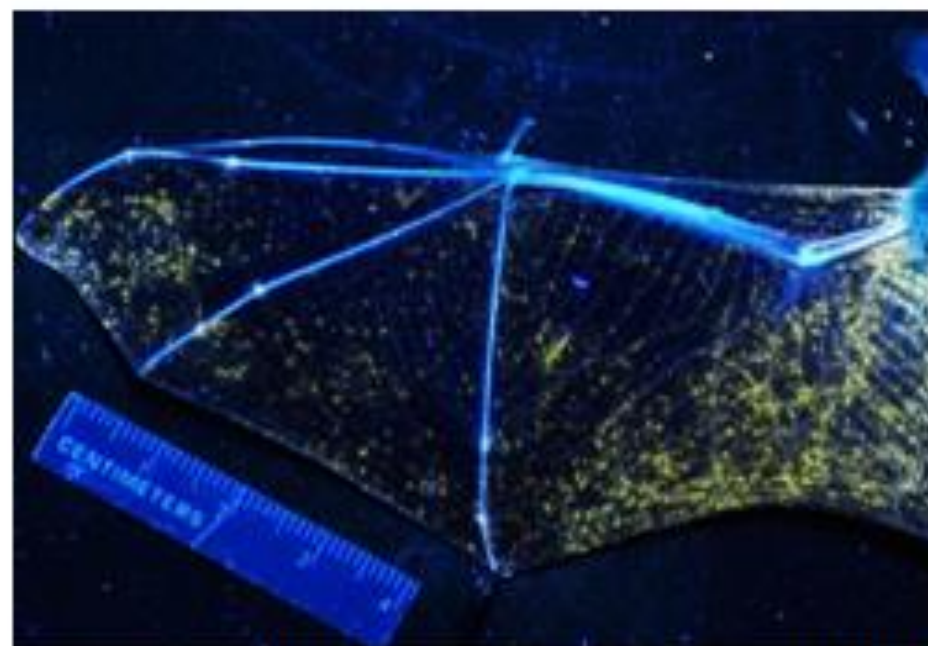


Photo Courtesy of Marvin Moriarty/USFWS

Five little brown bats (*Myotis lucifugus*) showing disease characteristics were collected in February and March during routine WNS surveillance by Dr. Allen Kurta and Steve Smith, researchers from Eastern Michigan University. White-nose syndrome was diagnosed by Michigan State University's Diagnostic Center for Population and Animal Health (DCPAH), in cooperation with the DNR Wildlife Disease Laboratory.

## How does white-nose syndrome kill bats?

Jan 05, 2015



[Enlarge](#)

Long-wave ultraviolet (UV) and white-light illumination of lesions associated with white-nose syndrome. Wing from dead eastern pipistrelle (*Pipistrellus subflavus*) lit from above with hand-held 51 LED 385-nm UV flashlight shows points of orange-yellow fluorescence. Credit: U.S. Geological Survey

For the first time, scientists have developed a detailed explanation of how white-nose syndrome (WNS) is killing millions of bats in North America, according to a new study by the U.S. Geological Survey and the University of Wisconsin. The scientists created a model for how the disease progresses from initial infection to death in bats during hibernation.

"This model is exciting for us, because we now have a framework for understanding how the [disease](#) functions within a bat," said University of Wisconsin and USGS National Wildlife Health Center scientist Michelle [Vargas](#), the lead author of the study. "The mechanisms detailed in this model will be critical for properly timed and effective disease mitigation strategies."



# 2014



## **WILDLIFE HABITAT PARTNERSHIP WASTE MANAGEMENT AND THE ORION CENTER**



**Lisa Sokol**

Community Programs Director Orion  
Township



**Kathleen Klein**

Community Relations Representative  
Waste Management

# Meet the staff at the Orion Center







1335 Joslyn Rd, Orion Township, MI 4836

# ORION CENTER WILDLIFE HABIT PROGRAM

CLARKSTON RD.

Elkhorn Lake

Orion Charter Township

Tommys Lake

Round Lake

Lake Sixteen

POLLY ANN TRAIL

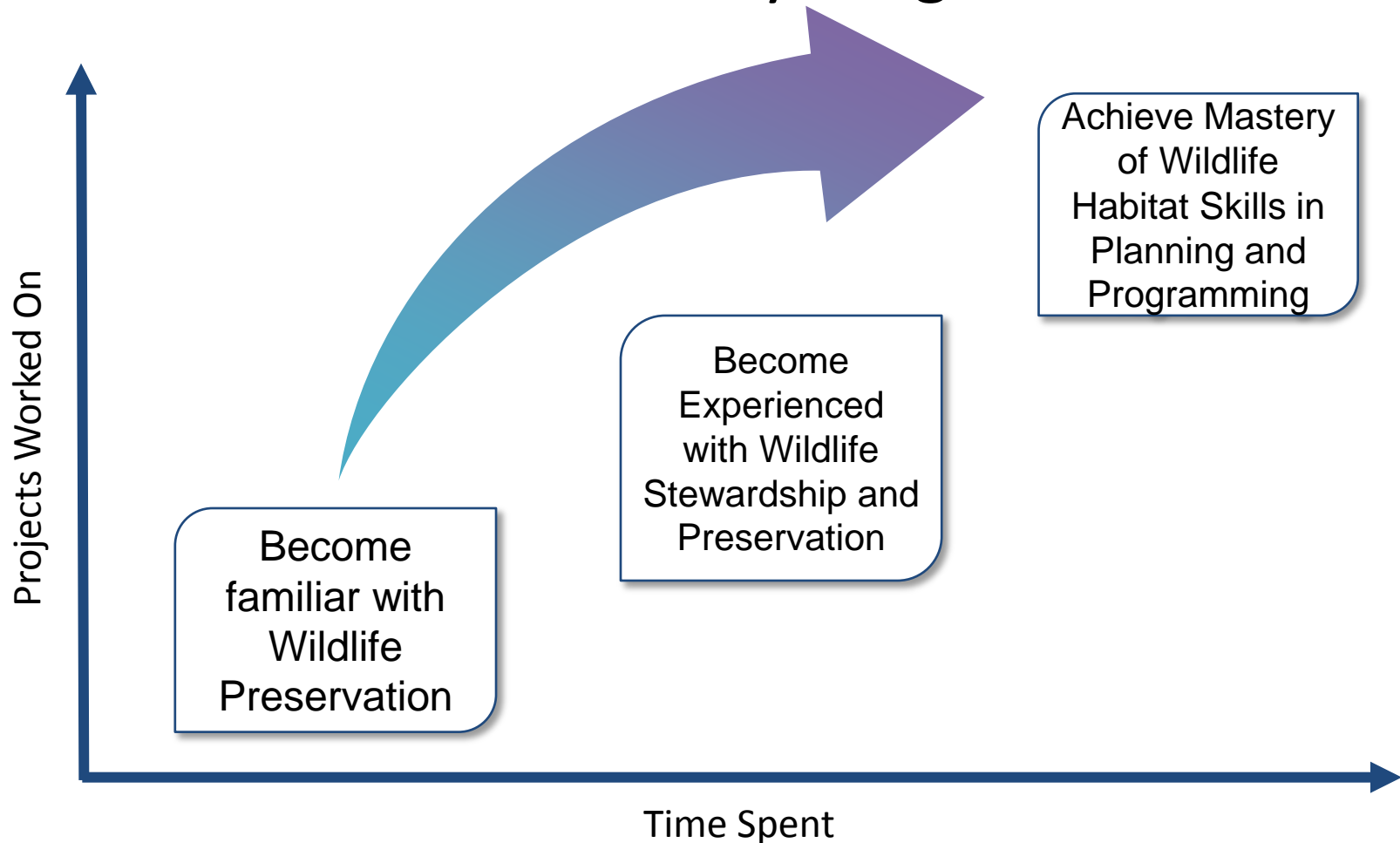
Mill Lake

Voorheis Lake

WALDON RD

Wildwood Pavilion

# Working Toward Wildlife Habitat Mastery and Inclusion of Skills in Systemic Manner in Parks and Community Programs







# Wildlife Habitat Team at Orion Center

## IDENTIFIED PROJECTS & PROGRAMS for 2014-2015

- Habitat Installations (Wood Duck, Blue Bird, Owl, Bat)
- Pollinator Gardens- Butterflies, Bees, and Hummingbirds
- Wildlife Observations/Journaling for Wildlife Logs
- Feeder Watch / Nest Watch monitoring programs
- Ongoing Educational Outreach Programs (Orion Center/ONTV)
- Run Wild Event and Wildlife Fair June -2014
- Wildlife Summer Camp Program June- July 2015
- Bird Flashcards and Birding Kits for Bird Walks
- Partnerships with Schools and Webber Nature Center
- Community Classes on Building Owl, Bat and Bird Houses



# Orion Center Friends & Partners

- Orion Senior Advisory Council
- Parks and Recreation Advisory Council
- Friends of Orion Center Seniors
- Waldon Middle School
- Orion Oaks Elementary School
- Webber Nature Center
- Buildings and Grounds Dept.
- Community Programs Dept.
- Oakland County Parks
- Nature Conservancy
- Michigan Wildlife Conservancy
- Cornell Lab of Ornithology
- Great Backyard Bird Count
- Feeder Watch
- Frog Watch
- Monarch Watch
- Michigan Audubon Society
- Wildlife Habitat Council
- North American Bluebird Society
- MSU University Extension Office Oakland County
- Michigan Wildlife Habitat Foundation
- National Wildlife Federation
- Michigan Dept. of Natural Resources
- Wild Bird Unlimited
- Merlin Bird ID App
- Polly Ann Trail
- Paint Creek Trail
- Orion Township Safety Paths
- Orion Neighborhood Television
- Clinton River Watershed Council
- Seven Ponds Nature Center
- Waste Management







## **WM IDENTIFIED PARTNERS for planned programs and projects in conjunction with the Orion Center**

- Waste Management (Sponsor)
- Orion Center Community Services/Parks & Rec Dept.
- Waldon Middle School
- Orion Oaks Elementary School
- Moose Tree Preserve
- ONTV
- Audubon Society
- Cornell Ornithology Lab
- Clinton River Watershed Council
- Oakland County Parks

## WASTE MANAGEMENT'S EAGLE VALLEY RECYCLING AND DISPOSAL FACILITY PARTNERS WITH ORION CENTER FOR WILDLIFE HABITAT PROGRAM.

(ORION, MICHIGAN) – July 31, 2014 – Waste Management Eagle Valley Recycling and Disposal Facility and the Orion Center have forged a new partnership to increase local conservation efforts. Eagle Valley, which became certified by the Wildlife Habitat Council (WHC) in 2010, developed this new partnership to grow public participation and community outreach and education around the importance of connecting with nature. The facility is part of a national program that provides habitat for animal and plant species on 28,000 acres at over 116 Waste Management sites across North America.

WHC's *Wildlife at Work* certification program provides a structure for corporate-driven cooperative efforts between management, employees and community members to create, conserve and restore wildlife habitats on corporate lands. The Eagle Valley Recycling and Disposal Facility includes 50 acres dedicated to wildlife habitat as part of the *Wildlife at Work* program. The facility has become a popular tour destination for learning about modern waste management practices and sustainability. To help students also learn about the importance of connecting with nature, the wildlife team installed blue bird, wood duck, bat and owl houses. A journal of wildlife observations is maintained by staff at the site, and bird observations are shared with the Cornell Ornithology lab, to promote "citizen science".

Moving the program from Eagle Valley RDF to the Orion Center allows both Waste Management and the Orion Center to engage more community members in hands-on environmental education. Waste Management helped fund the installation of pollinator gardens at the Orion Center and will participate in habitat installations. Waldon Middle School Teacher, Dan Hunter and his students, helped construct some of the habitats and will conduct future habitat building workshops. Waste Management and the Orion Center have also invested in wildlife guides and other useful tools that residents can utilize to identify wildlife along local nature trails.



# 2014 ORION CENTER PROGRAM OFFERINGS

## Supporting wildlife education & stewardship

### Gardening Club

The Orion Center Gardening Club will meet once a month on the 2nd and 4th Friday of the month June through September. The group will work on butterfly gardens, hummingbird gardens and pollinator gardens at the Orion Center and two raised beds of herbs and vegetables at Friendship Park at the Community Garden. Possible Garden Trips may be planned to nurseries and gardens.

Day	Date(s)	Time
F	Jun 6, 20, Jul 11, 25 Aug 8, 22, Sep 11, 25	9:00-11:00 am

Location: Orion Center  
Fee: FREE

### BIRDING AND NATURE SERIES

#### Birding and Nature Series Wint Nature Center

Take a Nature hike with the Naturalist at Wint Nature Center, Independence Oaks, and County Park, located in Clarkston. Learn about Birds in a Birds of a Feather, visit the Rubach Sensory Garden and enjoy a Brown Bag lunch at the park. Wear comfortable walking shoes and dress for the weather.

Code	Day(s)	Date(s)	Time	Age
7049.402	Tu	Jun 20	10:30 am-1:30 pm	55+

Location: Leaving the Orion Center at 10:30 am  
Fee: \$18

#### Hawk Woods Nature Center

Visit Hawk Woods Nature Center in Auburn Hills and walk the groomed nature trails and marsh board walk to view summer birds and wildlife. The nature center is located on 80 acres of woods, meadows and marsh. Wear comfortable walking shoes and dress for the weather. Meet Naturalist Mike Mansour.

Code	Day(s)	Date(s)	Time	Age
7049.401	Tu	Jul 22	10:00 am -1:30 pm	55+

Location: Leaving the Orion Center at 10:00am  
Fee: \$13

### Dinosaur Hill Nature Preserve and Rochester Hills Environmental Education Center

Visit Dinosaur Hill Nature Preserve and Rochester Environmental Education Center in Rochester and walk the nature trails and to view summer birds and wildlife. The nature preserve has a diverse wildlife habitat. The Environmental Education Center is part of the 102.5 acre Avon Nature Area in Rochester Hills. We will also visit the Clinton Watershed Council also located on the site. Wear comfortable walking shoes and dress for the weather.

Code	Day(s)	Date(s)	Time	Age
7049.403	Tu	Aug 19	10:00 am-2:00 pm	55+

Location: Leaving the Orion Center at 10:00 am  
Fee: \$15

### Seven Ponds Nature Center

Join us for an Autumn Birding and Fall Color Walk at Seven Ponds in Dryden. The Naturalist will discuss fall-birds, autumn wildlife and we will take a fall nature walk on the trails of this 468 acre Audubon nature preserve. We will visit the Rookery Bookstore the Michigan Bird Display and the Herb Garden plus Bird Feeding area. Wear comfortable walking shoes and dress for the weather.

Code	Day(s)	Date(s)	Time	Age
7049.300	Tu	Sep 16	10:00 am-2:00 pm	55 +

Location: Leaving the Orion Center at 10:00 am  
Fee: \$23



# Waldon Middle School Teacher Dan Hunter

And students began building habitats for WM in 2011

He conducted a class on building Owl Houses in 2014 in conjunction with Orion Center & Waste Management

Additional classes will be scheduled for 2015





# **Orion Center Pollinator Garden**

**Installed by  
community volunteers**

**Partial funding  
provided by WM**



# Purple Martin, Bat, & Wood Duck Houses and Plantings donated by WM to Orion Center



All habitats installed by Orion Staff. Purple Martin House cantilever-ed to help maintain it.





Single Chamber Bat House  
donated by WM



GM Chevy Volt Casing  
Multi-chamber Bat House



# Chevy Volt Battery Bat House Instructions



We can work to enlist GM in hosting a bat building workshop if there is an interest.



One of two wood duck houses donated by WM installed at southeast area of Orion Center on the edge of the wetlands.



**Installed  
on edge  
of  
wetland**



**Bioswale maintenance** – weeding the bioswale at the curb allows for a manicured look while allowing the bioswale to serve its intended purpose.

BEFORE weeding



AFTER weeding





**Bioswales** are [landscape](#) elements designed to remove [silt](#) and [pollution](#) from [surface runoff](#) water. They consist of a [swaled](#) drainage course with gently sloped sides (less than six percent) and filled with [vegetation](#), [compost](#) and/or [riprap](#).<sup>[1]:19</sup> The water's flow path, along with the wide and shallow ditch, is designed to maximize the time water spends in the [swale](#), which aids the trapping of pollutants and silt. Depending upon the geometry of land available, a bioswale may have a meandering or almost straight channel alignment. Biological factors also contribute to the breakdown of certain pollutants.<sup>[2]</sup> A common application is around [parking lots](#), where substantial [automotive](#) pollution is collected by the paving and then flushed by rain. The bioswale, or other type of [biofilter](#), wraps around the parking lot and treats the runoff before releasing it to the [watershed](#) or [storm sewer](#).

### Public Education Signage



Simple signage - in high traffic areas



Educational signage

# Educational Materials available at the Orion Center



**Learning Lyrics** – The fastest way to learn bird songs....



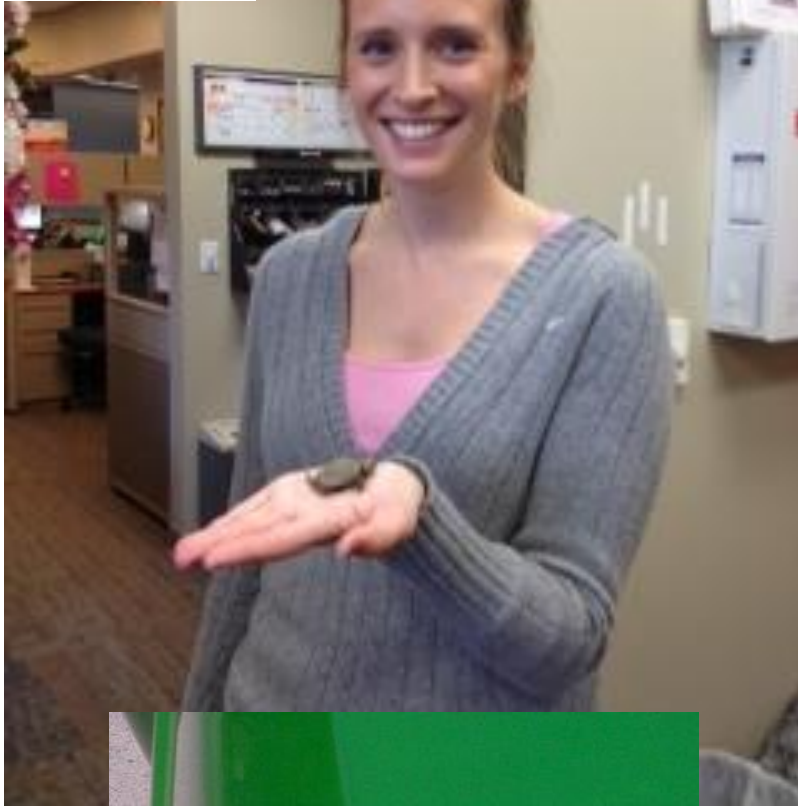
Educational promotes stewardship.











**Encouraging employee and community engagement!**



# Eagle Valley Scalehouse plantings



# 2014 Interesting Visitors & Observations

Sandhill Cranes - summer 2014



Juvenile Bald Eagle – Late summer/fall Nov 2014







2014 Mourning Cloak Butterfly



## A butterfly's tale ...

In the hot summer month of August, 2014, Waste Management's Eagle Valley Gas Tech, Adam Stough encountered a Viceroy butterfly while doing his landfill gas monitoring at the site. The butterfly landed on him while he was reading a gas well and it wouldn't fly away. Adam discovered it had a tiny white spider on its back that must have been paralyzing it. He removed the spider and took the butterfly to the Eagle Valley scale house where WJM's scalehouse attendant Christine Stanczak observed it could walk all around but was unable to fly. Christine took the butterfly home where her young daughters Natalie - 8 and Emily - 4 looked on-line for how to care for a butterfly. They learned that butterflies have tongues to eat with and prepared sugar water for it to eat. Shortly after feeding it, the butterfly regained its strength and was able to fly away.





**How do you tell a Viceroy from a Monarch butterfly** when they look so much alike? It's all in the details...they are very similar with a few differences in wing patterns. It's why nature can be such a great teaching tool for critical thinking and attention to detail.



## **Monarch**

*Danaus plexippus*



## **Viceroy**

*Limenitis archippus*

**Q. Where do viceroy butterflies spend the winter?**

A. Unlike monarchs, viceroys do not migrate. They spend the winter rolled up in a leaf of their host plant (willow or poplar). The larvae look like bird droppings--so who would bother them?!

Q. At what stage of their life cycle do they overwinter--as an egg, larva or adult?

A. Viceroys overwinter as 1st or 2nd instar larvae.

Q. When are viceroys FIRST seen in the spring where you live?

A. The answer to this question obviously depends where you live, however, you won't see an adult viceroy until: Willow/poplar leaves emerge and are available as food for the larvae.

The larvae develop through the remaining instars (approx. 5 days) and the chrysalis stage (at least 10 days).

In Ontario and Minnesota, for example, entomologists say adult viceroys don't usually appear until June. However, this year could be much earlier due to early leaf-out.



**Monarch**

*Danaus plexippus*



**Viceroy**

*Limenitis archippus*



# Siting new locations for Wood Duck Houses



Relocated  
February 2015



# *2014 Christmas Bird Count*



*Oakland County, Michigan*

*Oakland Audubon Society  
Oakland County Parks*

0:04 / 8:50

## 2014 Christmas Bird Count - Oakland County, Michigan



Silent Light Nature Photography



Subscribe

2

131 views

<https://www.youtube.com/watch?v=x6Z91cc7iC8&feature=youtu.be>



# **2015 Observations & Activities**

# 2015 Habitat Monitoring & Installing new Wood Duck House





New location up  
this hill



Existing Location



**And placing two houses back to back.**



# Unidentified hawk observation in Downtown Detroit



SHARP-SHINNED HAWK BY BETH HAMEL  
[HTTPS://WWW.FLICKR.COM/PHOTOS/HAWKPERSON/SETS](https://www.flickr.com/photos/hawkperson/sets)

## Sharp-shinned Hawk (*Accipiter striatus*) and Cooper's Hawk (*Accipiter cooperii*) *Raiders of the Backyard Bird Feeder*

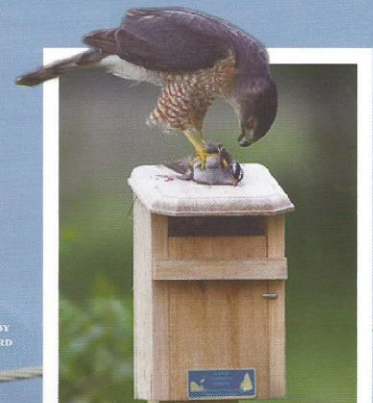
These two accipiters are built for speed and maneuverability, with short wings and long tails for slaloming among trees at top speed. But sometimes they zero in on the flocks of little birds that congregate at bird feeders. If a Cooper's or a sharpie visits your feeder, you may only see a sudden gray streak and songbirds scattering for cover. But if they perch nearby, either to consume their meal or wait for the birds to return, you may get a chance for a good look. Differentiating between the two can be confusing, but sharpies tend to be smaller overall with a smaller round head and thinner legs. Cooper's Hawks are about the size of a crow with a flatter head and thick legs. Get more tips on IDing these hawks at [www.bit.ly/coopersvssharpie](http://www.bit.ly/coopersvssharpie).

COOPER'S HAWK BY  
STEPHEN J. POLLARD

ROUGH-LEGGED HAWK  
BY BRIAN SULLIVAN

## RAPTORS O

WITH THE LEAVES OFF THE TREES AND A BARREN LANDSCAPE, WINTER IS A TIME WHEN RAPTORS BECOME EASIER TO SEE. AND WITH FEWER DAYLIGHT HOURS AND LOWER PREY ABUNDANCE, HAWKS AND FALCONS ARE OUT HUNTING MORE INTENSIVELY. WHERE YOU SEE A RAPTOR—IN A TREE, ATOP A POLE—GIVES YOU A GOOD FIRST CLUE TO ITS IDENTITY. AND DON'T FORGET TO BROADEN YOUR SELECTION SET OF POSSIBLE SPECIES TO INCLUDE THOSE RAPTORS THAT HAVE SHIFTED THEIR RANGES SOUTH FOR THE WINTER.







Turkey vulture – Eva

### **Eva's friends**

We (actually Eva, the turkey vulture) had a summer visitor this past year. Clare, the wild turkey vulture would come to have lunch with Eva. Because Eva is non-flightless, she is allowed to roam around the Center when Susan is working in the area. One day when Eva was “out” the wild vultures decided to visit. Susan kept watch to keep Eva safe. The wild vultures continued to visit so Susan put food out for them. The next thing, Eva and a wild vulture were sharing a meal. Watching this interaction was really special and such enrichment for Eva! We look forward to the turkey vultures’ return this Spring.



Clare, the wild turkey vulture



**Mature  
Bald Eagle**



**Hawk**







WHAT: Wildlife Management Team Meeting for the  
WHC/Wildlife at Work Program established at Eagle Valley

WHEN: March 11<sup>th</sup> at 6:00 p.m.

WHERE: Orion Center in Orion Township, 1335 Joslyn Rd.



WHO SHOULD COME: Wildlife Management Team Members &  
Community Info Meeting Members

DINNER: provided by Waste Management  
Eagle Valley Recycling & Disposal Facility

RSVP's will be requested as we get closer to the date.

Have a great winter!



## EAGLE VALLEY ON-GOING PROJECT PLAN FOR WHC PROGRAM

### Existing Projects 2011/2012

1. Add additional Wood Duck Boxes
2. Add additional Bat Boxes
3. Continuous improvement to Pollinator Garden
4. Amend Conservation Easement around Basin C so it is easier to perform inventories
5. Maintain existing and expand further on Public Education Opportunities
6. Expand community participation opportunities in WHC Program (i.e., species inventories, nature observations, educational efforts, etc.)

Some projects  
still pending

Others implemented  
that weren't  
originally planned –  
i.e. Orion Center

### New Projects 2011/2012

1. Add Blue Bird Boxes
2. Add Owl Box
3. Flower Box at Scalehouse to attract hummingbirds
4. Consider Installing interpretive signage
5. Add additional acreage to WHC program

Some failures

### New Projects 2013/2014

1. Gas Well Raptor Perchs
2. Apply for Corporate Lands for Learning (CLL) program
3. Review invasive species plan
4. Assess Phragmites
5. Work to sustainably harvest any lumber and native plantings in area of site to be developed
- 6.

All present  
opportunities for  
engagement

### New Projects 2015 - 2018

1. Plant wildflower/prairie/ native grasses on north and east side of landfill cover
2. Cooperative Weed Management in finished areas of the landfill - north and east slopes
3. Bioswale and other interpretative signage at Orion Center
4. Camp Agawam Activities
5. Partner with Orion Oaks
6. Owl House
7. Salamander Species Inventory

**All activities will be planned in conjunction with site development activities.**