



Leaders in Conservation





TO EDUCATE & CONSERVE

Refuges





Employees

It's crazy to think that there are only eight full-time and one part-time United States Fish and Wildlife Service employees here year-round to manage the Ottawa National Wildlife Refuge Complex. The help of volunteers, interns, and seasonal staff is absolutely critical to conservation and habitat management efforts.



Jason Lewis, *Refuge Manager* Ron Huffman, *Refuge Biologist* Jeff Finn, *Private Lands Biologist* Justin Woldt, *Visitor Services Manager* Rebecca Lewis, *Visitor Services Specialist* Scott Bryant, *Administrative Assistant* Chuck Shier, *Maintenance Mechanic* Ramsay Houze, *Maintenance Worker* Buck Buchanan, *Laborer*

FRIENDS STAFF

Aimee Arent, *Executive Director* Elizabeth Kuenzer, *Nature Store Clerk*



Your National Wildlife Refuge

The Ottawa National Wildlife Refuge Complex consists of three National Wildlife Refuges:

Ottawa NWR:

Located between Toledo and Port Clinton, this 7,522 acre refuge is managed for waterfowl, shorebirds, neotropical migrant songbirds, and a variety of plant and animal species. The three story Visitor Center and hiking trails are located here. A number of satellite properties are also part of this refuge.

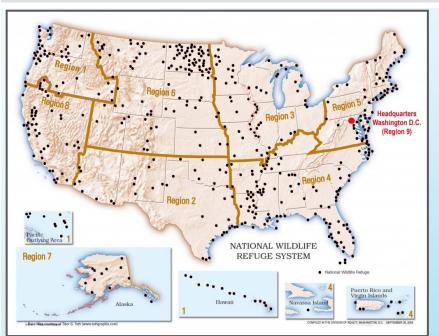
Cedar Point NWR:

Cedar Point NWR's 2,616 acres comprise the largest contiguous marsh on Lake Erie (US). Aside from a designated fishing and kayaking area, access is by guided tour or permit only.

West Sister Island NWR:

This 82 acre island is situated in Lake Erie, about 9 miles from shore. It is the largest Great Blue Heron and Great Egret rookery in the U.S. Great Lakes. Access is by permit only.

Part of a Larger System



Ottawa National Wildlife Refuge is part of a much larger National Wildlife Refuge System. Known as one of America's greatest conservation success stories, the system has protected and restored habitats for hundreds of species including fish, plants, animals, and migratory birds.

Ottawa National Wildlife Refuge is part of Region 3 of the United States Fish and Wildlife Service. Also known as the Midwest Region, Region 3 encompasses eight states and four out of five U.S. Great Lakes.

For more information about the National Wildlife Refuge System, the U.S. Fish and Wildlife Service, and conservation priorities, visit www.fws.gov.

 Ottawa National Wildlife Refuge Complex 2018
 West Sister Island NWR

 Order Point NWR
 Law Erie

 Order Point NWR
 Law Erie

 Order Point NWR
 Codar Point NWR

 Order Point NWR
 Law Erie

 Order Point NWR
 Codar Point NWR

 Order Point NWR
 Law Erie

 Order Point NWR
 Law Erie

 Order Point NWR
 Codar Point NWR

 Order Point NWR
 Law Erie

 Order Point NWR
 Codar Point NWR

 Order Point NWR
 Codar Point NWR

From the Manager's Desk



The end of a year is a time to reflect on the conservation successes of the past 12 months and to celebrate our accomplishments. What an incredible 2019 we had! Refuge staff, volunteers, Friends members and many other partners and donors all came together this year to help deliver our promise to the American people.

> Margaret Mead once said, "Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it is the only thing that ever has." These groups came together to make impactful change to support the Refuge.



Refuge Manager Jason Lewis with Secretary of the Interior, David Bernhard and Assistant Refuge Manager, Eddy Pausch.

As the Refuge Manager, I am honored to work with such an inspiring group of conservation champions who are leading the way to conserve, restore, enhance, and protect fish and wildlife and their habitats throughout the refuge. Their collective efforts were



illustrated by the many accomplishments and support of refuge programs throughout the year.

With all of our success in 2019 there was some sadness. The year saw the departure of two conservation icons: Joshua Bauer, Federal Wildlife Officer and Eddy Pausch, Deputy Manager. Joshua took a new position in Savanna, IL to be closer to his home state of Iowa. Joshua was a true leader, inspiring us all through his engaging personality and passion for the resource. Eddy spent 14 years at Ottawa delivering on his promise; his work has set the foundation for much of the work that we will support for years to come.

I deeply appreciate the dedication and hard work of the Refuge staff, volunteers, Friends group, and everyone else who supported the refuge in 2019. I am so proud of what we have accomplished this year and I am equally excited about the outlook for 2020.



Department of the Interior Secretary David Bernhardt for the announcement of the new hunting and fishing rule which opened 1.4 million acres to hunters and anglers cross the United States.

HOSTED



Letter from the President





So many amazing things have happened in the last year and it is all because of the members and supporters of the Friends of Ottawa National Wildlife Refuge.

With the help of an amazing group of volunteers, our organization has worked to purchase two new properties for the refuge and helped open recreational access at many other properties. The work on the Wildlife Drive and Visitor Center Fishing Access are a testament to the passion people have for this beautiful national wildlife refuge complex. It has been my privilege and honor to serve as President for the past two years and to represent and guide this talented group of board members.

I am excited to see what the future holds for the refuge and I look forward to continuing to serve as the Vice President. As I turn the reins over to our new President, Pete Schwager, I look forward to continued success. We as board members merely guide the group, but our members, supporters and volunteers are the force that keeps us moving forward!



A Message from Incoming President, Pete Schwager

I personally invite you and your family to come out and enjoy all that the refuge has to offer. From the Wildlife Drive and many hiking trails to our outstanding Visitor Center, we have many opportunities to share your love of nature throughout the year.

We hope to see you at our special events throughout the year including:

- Spring Migration
- West Sister Island Sunset Cruise
- Discover Ottawa 5K
- Cars for Critters
- Howl-o-ween
- Holiday Open House

Please keep in touch by visiting our website <u>www.friendsofottawanwr.org</u>, and following us on Facebook and Instagram.

The best part of the refuge is the peacefulness that comes from nature herself. Enjoy Ottawa in 2020 – you will not regret it.



Dr. Jenni Biegala

2019 Friends Board President



2019 BOARD MEMBERS

Dr. Jenni Biegala, *President* Bill Baker, *Vice President* Shirley Haar, *Secretary* Ronald Overmyer, *Treasurer* Nancy Dunlap Jake Worthington Melanie Bowen-Greenwald Andrew Rospert Carol Fingerhut Mary Willoughby Kris Johnston Jim Krieger Kendra Foust

From the Refuge Admin My name is Scott Bryan NWR family, taking over





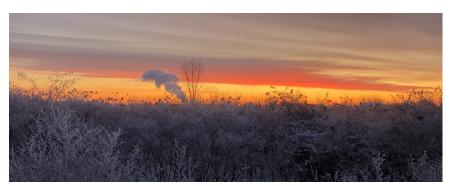
My name is Scott Bryant, and I am the newest addition to the Ottawa NWR family, taking over the job of Administrative Officer. My role is to balance the budget, process payroll, order supplies, keep the lights on, and anything else the refuge manager needs me to do.

"The bulk of our appropriated funds are used for routine day to day operations, not leaving much to use for extras. Without the support of our Friends group, we would be able to perform only minimal essential work to complete the mission."

<image>

Here is the breakdown of the expenditures for 2019:

- Maintenance: \$135,000, including repairs for structures, vehicles, and equipment
- Supplies: \$88,000, including office and field supplies, visitor/ volunteer services supplies for all programs
- **Fixed Expenses:** \$68,000, including phones, water, propane, trash removal, etc.
- Fuel: \$27,000 to fuel vehicles and equipment for all programs

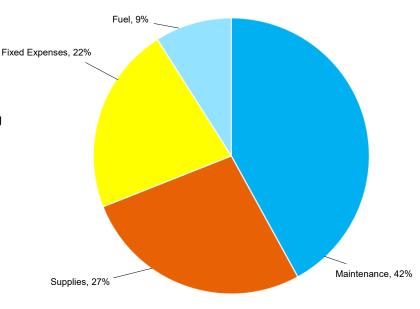




Scott Bryant Administrative Assistant The Ottawa National Wildlife Refuge Complex had an operating budget of \$318,000 for 2019.

Without the generous donations that we receive from the Friends group, and the work performed by countless volunteers, we wouldn't be able to accomplish our mission! By working together, we have successfully installed ADA accessible fishing platforms, made improvements to our wildlife drive, repaired our boardwalk, added water recreation access, as well as installed interpretive signage, and increased trail maintenance at some of our satellite properties. All of these tasks are completed with the help of our Friends group and volunteers, working side by side with refuge staff.

Thank you all for your support of Ottawa National Wildlife Refuge!



Friends Financials



2019 Revenue & Expenditures

Government funding does not cover all that is necessary to manage a refuge. As a result, wildlife refuges depend on "Friends" groups like Friends of Ottawa National Wildlife Refuge (FONWR) to fill in the gaps, providing financial and volunteer support. In 2019, support of Friends of Ottawa National Wildlife Refuge through all revenue streams totaled \$325,521.

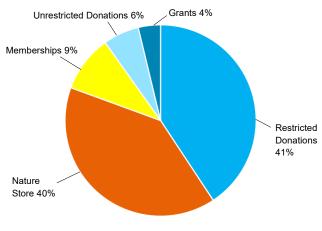
A total of nearly \$70,000 went directly to helping the Refuge Complex and community in the areas of conservation, wildlife protection, research, law enforcement, and education. Refuge support includes items such as visitor access and maintenance projects, intern stipends, and field trip transportation.

This year, the Friends were proud to purchase two parcels of land: the 40-acre Fox Unit and a .56-acre parcel that will become part of the Kontz Unit. The U.S. Fish and Wildlife Service is planning to purchase these properties from the Friends to become part of the Refuge complex. (Read on for more information about these projects and the Joan and Richard Kimple Conservation Fund for land acquisition and restoration.)



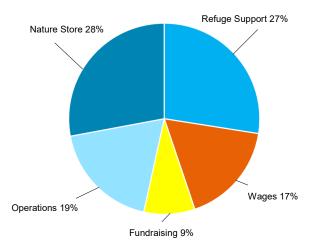


2019 FRIENDS REVENUE



\$325,521





\$250,390

2019 FRIENDS ASSETS Nature Store Inventory, 6% Land Acquisition Fund, 5% Short-Term Savings, 8% Restricted for Refuge Projects, 21% Land, 50% 40.56-acres Unrestricted Operating Fund, 10% \$475,736

The Rookery Nature Store





The Rookery Nature Store had a difficult start to 2019 with the longest government shutdown in history closing the Visitor Center from December 22, 2018 to January 25, 2019. With your help, The Rookery still reached a **new record of \$113,549 in gross revenue as of December 31**. This increase can be contributed to the record visitation throughout the year and new site-specific designs. Thank you to all of our fantastic volunteers for helping us to have such a successful year!

We hope that you will visit us soon and see all that The Rookery has to offer.

WHY DO YOU VOLUNTEER?





Dominique Bustos FWS and Friends Volunteer

"On March 5, 2019 I decided to apply to volunteer at the refuge. Looking back now I can tell you that it is on my list as one of the best decisions I made in 2019. At the time my daughter was away for her first year of college. I am a single mom with one child so I found myself with a lot of free time on my hands. It only made sense since I love animals that I find a way to volunteer my extra time with them. After a quick internet search I found the refuge. While my volunteer work focuses on the Nature Store and not directly working with animals, I still am very happy I get to engage with so many visitors and patrons of the refuge who stop in with interesting stories about wildlife. Additionally, volunteering has been a bright spot in my week because it has given me the opportunity to meet and work with some pretty amazing people who I consider friends. There are plenty of good vibes and positive things happening at the refuge and I am extremely grateful that I get to be a part of such a wonderful and welcoming group. It's impressive how hard the staff work to provide year-round family friendly events to introduce people to wildlife and help them appreciate nature. I look forward to seeing new faces, meeting new people, and continuing my volunteer time in 2020."

"I was two years post a physical injury that had me pretty much side lined from doing anything when one of the board members of Friends of ONWR approached me about an immediate need for volunteers at the Visitor Center. Timing was perfect as I was starting to itch to get back into some volunteer work. A meeting was set up to meet a few of the staff members ... this was the first time I had ever been to the refuge. Wow, I was amazed at what I had been missing! I have always had a passion for wildlife and nature, so I was "all in" from that initial meeting! After getting a better understanding of what the refuge is all about and how few employees there are to keep it running, that just solidified my desire to help out.

The staff are wonderful people and I love meeting and chatting with the various people who come in to enjoy the refuge. It makes me feel good to know that I can help the refuge employees by filling in and letting them focus on what they need to! There are so many opportunities at the refuge in which to volunteer, so I look forward to learning and continuing to help. I also look forward to being a part of the flurry during the spring bird migration which I have never witnessed!"





Linda Patterson FWS and Friends Volunteer

Land Acquisition and Restoration





THE FOX UNIT, 40-ACRES

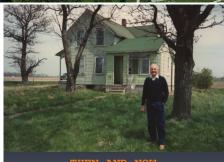


In April 2019, the Friends worked with Barbara Ann Fox and daughter Bethany (Curtis) Kalina to secure their first land purchase, the 40-acre Fox Unit located near the Ottawa NWR Visitor Center. The parcel includes an 8-acre intact Great Black Swamp woods. Restoration plans include restoring wet prairie and shrub habitat which should be excellent for birds and wildlife. The long-term plan is to open the property for public recreation including a parking area and hiking trail. The restoration work will be financed in part by the Ohio Environmental Protection Agency under provisions of the U.S. EPA Great Lakes Restoration Initiative. Restoration work is expected to be completed by December 2021.

Our family was so excited to sell our father's farm to the Ottawa National Wildlife Refuge. We were always hoping to preserve the "farm" in some way and this presented the perfect opportunity! The opportunity to leave a legacy, contribute to the Refuge, to protect wildlife and to restore the farm back to its natural state.

Bethany Kalina

Daughter of Charles and Barbara Fox



THEN AND NOW Above: The late Charles Fox with the original farmhouse. Below: Bethany, mother Barbara, and son Karl on the Fox Unit



Since 2013, the Friends group has managed a growing fund for land acquisition with the intention of working with refuge staff to identify and purchase land significant to the refuge from willing sellers. Thanks to six years of planning and securing several sizable donations from interested supporters, the Friends group has made this dream a reality.

The Joan and Richard Kimple Conservation Fund is a revolving fund that allows the Friends to assist the refuge with the purchase of land and restore existing refuge parcels from Toledo to the Sandusky Bay. Both of the properties purchased by the Friends in 2019 will be sold to the U.S. Fish and Wildlife Service once government funding is secured. The proceeds from the land sale will be used for future land purchases and additional restoration projects.

KONTZ ADDITION, 56-ACRES



The Friends purchased this parcel in October 2019. It is located next to the state fishing access on Route 2 near the Route 19 intersection. It will become part of the refuge's Kontz Unit. The purchase of this property from Michael Vickery was facilitated through a donation by Ellsworth and Jennifer Shriver in honor of Jennifer's father, Richard Kimple.

Interns: Leaders of Tomorrow



Q- Tell me about your background!

A- I am from Middleburg, Florida, which is a small town in north central Florida, and I started off going to my community college because I didn't know what I wanted to do. I worked all through community college to save money. I ended up going to the University of Florida and I graduated with my degree in natural resource conservation and I minored in wildlife ecology.

Q- What got you into conservation?

A- I grew up a small game hunter with my dad, so I love to be outside. I have a twin brother too, so naturally we hung out a lot and all the things that little boys do, I just did too. I was a girl scout for almost 11 years, and my brother was a boy scout, so I would go to girl scout meetings on Monday nights and boy scout meetings on Tuesday nights and they just included me like part of their pack. I built bird houses when they built bird houses and I went camping when they went camping.

Q- What was your internship like?

A- I coordinated the deer and waterfowl hunts which took place on the refuge and are done through a lottery drawing.

Q- How did your internship prepare you for your future?

A- It was super key that I got that internship, it changed everything for me because I went from working on private lands and not knowing anything about public lands to being fully involved with coordinating public use. I feel like I got fully immersed in being a public land owner. Whether you're a recreationist, a bird watcher, a kayaker, a hunter or fisherman, you are a public land owner. Friends of Ottawa National Wildlife Refuge supports six to ten 13-week intern stipends each year, promoting the next generation of conservationists. Interns gain a variety of skills from maintenance and biology to visitor services, all under the leadership of U.S. Fish & Wildlife Service staff.

The living stipend awarded by the Friends is often what makes it possible for interns to pursue their passion. Most interns are college students involved with Biology, Conservation, or Environmental Studies programs. Interested in supporting intern stipends and helping us in our mission to assist the next group of conservation leaders? Visit our website to learn more!

Meet Holly Walp, a U.S. Fish & Wildlife Service employee who began her career as a Friends sponsored intern.



Holly Walp

2018 Hunt Program Intern 2019 Refuge Bio-Tech

Q- What are your future plans?

A- I fell in love with Northwest Ohio and would really like to find a way to stay here. I am definitely interested in hunting and fishing, but right now I am doing invasive species work and I'm definitely interested in a little bit of everything. So my goal is to find a role that I can continue to successfully contribute to conservation in.

Q- Anything you'd like to add?

A- I wish I would have known about Fish and Wildlife and the refuge system to get involved earlier. And I know there are people like me who just have no clue that this is public land that they are the co-owners of.



Citizen Science





The highlight of this year was the successful nesting of Eastern Bluebirds at Grimm Prairie. Six eggs were laid and six birds successfully fledged the nest. While there have been a few nest attempts in the past, it is believed that this is the first confirmed, successful nest! Even though there is plenty of suitable habitat for Eastern Bluebirds at Ottawa NWR, there is usually too much competition from Tree Swallows for the available nest boxes. This year, we witnessed the Bluebirds fighting off the tree swallows AND even house sparrows! When we cleaned out the box, we discovered a house sparrow egg in the bottom! It was quite a feat for the normally passive bluebirds.



Ottawa National Wildlife Refuge has two sets of purple martin rigs, one near the Wildlife Window and the Visitor Center, and another near the Trail Head parking lot.

There were a total of 453 purple martin eggs laid this year and 367 young fledged. There were some unfortunate losses at the Trail Head rigs, most likely from snake predation. We will make some adjustments for next season.



Bluebirds



We had a good year with our nesting efforts, despite mother nature's fury. The Tree Swallow grid at Stange Prairie was under water all season. At some points, it was almost 12 inches deep! We had a total of 117 Tree Swallow eggs which resulted in 88 young successfully fledging.

—Info on bluebirds, martins and swallows submitted by Mike, Dawn, and Trevor Zook, Purple Martin Landlords

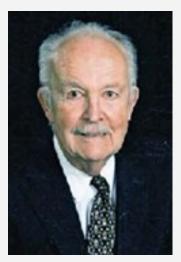
Tree Swallows



September 14, 1937 - July 31, 2019

We are so saddened by the loss of Edwin Pierce. Ed was a staple of the monthly bird survey at Ottawa National Wildlife Refuge and a supporter of Friends of Ottawa National Wildlife Refuge since the very beginning. If not for his efforts in working through the process of establishing the group as a 501c3 nonprofit, we may not exist today.

Through nature often comes the best healing. Join us for the monthly bird survey held on the first Sunday of the month to help carry on his conservation legacy.

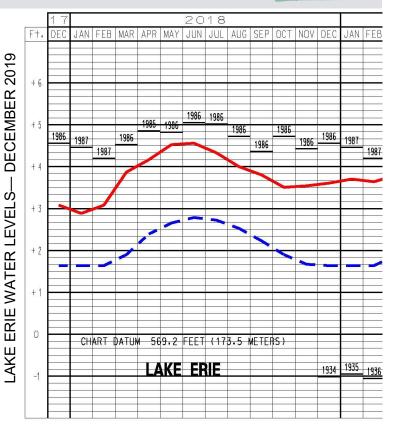


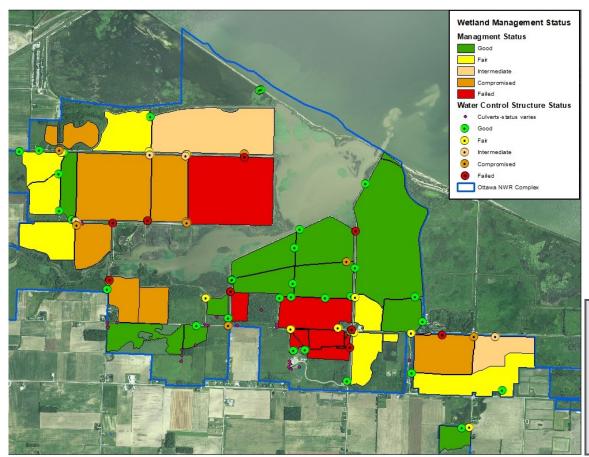
Challenges of Failing Infrastructure

Water Management

As you may know, water in the refuge marshes is managed through a series of dikes, culverts, and pumps with the ultimate goal of being able to manage water to provide habitat for Ottawa's flora and fauna. This water management was extremely challenging in 2019. Lake Erie continued the trend of an increasing lake level, and set new record highs for the five- month period from May through August. A new all-time record high for Lake Erie of 574.62' was set in June, 2.6' above the long-term average lake level for the month of June. Biology and maintenance staff spent considerable time pumping water for flood mitigation in an effort to protect critical infrastructure. In addition, we managed water levels on 3,555 acres of wetlands to provide essential habitat for migratory birds and other wildlife.

Failing water control structures and pumps have greatly impacted wetland management on the Ottawa NWR complex. Many of the original water control structures were installed in a short period of time in the 1970s and '80s, and are reaching the end of their serviceable life. Currently, five pumping stations are in critical condition and will be prioritized within our limited refuge maintenance budget for repairs over the next few years.

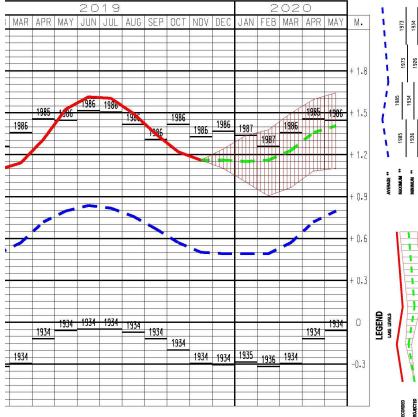




Normally these projects would be funded out of FWS deferred maintenance dollars, but with a national FWS backlog of \$1.4 billion dollars and limited budget appropriations, Ottawa NWR Complex has not received any funding for deferred maintenance projects since 2011.

This management status map depicts a ranking of wetland units from good to failed based upon water control structure condition and our capacity to achieve wildlife management objectives.

& the Impacts of Rising Water





GLRI RESTORATION PROJECTS Acres Restored					
LOCATION	wetland	Prairie	Forest	TOTAL	
weber	32.4	8.1	5	45.5	
Schiller			47.8	47.8	
Genzman	8.5	24.6		33.1	
Buehler			37.7	37.7	
FOX (FONWR)		18.7	10.8	29.5	
TOTAL	40.9	51.4	101.3	193.6	

Habitat Management and Restoration

The Ottawa Refuge Complex received special funding from the Great Lakes Restoration Initiative (GLRI) to connect wetland habitats to lake hydrology. The wet spring led to challenges, adjustments, and delays to GLRI restoration projects.

- Schiller property, Rocky Ridge Rd, Limestone, OH: the removal of the farm pond constructed in the Toussaint River floodplain was completed, along with planting of container trees in the floodplain zone. Ground cover and tree seedling planting was delayed.
- Weber property, Toussaint South Rd, Oak Harbor, OH: wetland restoration is in progress with installation of a water control structure and well this winter, along with ground cover planting.
- Ground cover and trees will be planted on the Genzman (SR 2 near Visitor Center), Buehler (near Middle Toussaint Unit on N. Toussaint South Rd), and Fox (SR 2 near Visitor Center) properties in 2020.

All five of these projects are restoring agricultural fields to native habitats. GLRI restoration projects in the planning and design phases for Navarre Marsh and Cedar Point Pool 2 will enhance wetland management, provide fish passage, and provide water quality benefits.

Special thanks to Ducks Unlimited for their continued support to implement these and many other projects.



Ron Huffman Refuge Biologist



Maintenance Updates



Chuck Shier Maintenance Mechanic



The refuge ROCKS! Maintenance staff hauled **4,084,000 lbs** of stone to protect the refuge dikes from water erosion, and make sure the trails and Wildlife Drive were safe to use.





The Ottawa National Wildlife Refuge maintenance team consists of two permanent staff, Ramsay Houze and Chuck Shier, but relies on the help of volunteers to complete the work. Two critical volunteers, Mike Bohling and Greg Sanderson assist the refuge maintenance program each week, volunteering a combined total of 539 hours in 2019!

Though 2019 started off with a month long shutdown, it's still been a great year. One would think it would be a huge thorn in the side of the maintenance operation but with the help of our volunteers and staff we got right back on track.

Some of the top priorities this year included:

- Prepare roads/trails for the crowds of the Biggest Week in American Birding
- Wrap up the HVAC renovation in the Visitor Center
- Repair and replace five water control structures and the pump structure at the Darby Unit
- Rebuild a rotted section of the Ottawa boardwalk
- Replace screw gates on our moist soil pump
- Aid other programs to complete our shared mission

The refuge maintenance staff would also like to thank everyone who helped the Friends secure over \$17,000 to purchase a new tractor for volunteers to help us maintain the trails! Volunteers are essential to this program, and the tractor will be a huge help.



Maintenance Worker Ramsay Houze, Refuge Biologist Ron Huffman, and FWS volunteer Mike Bohling work together to replace water control structures at the Darby Unit near Port Clinton, Ohio.

Invasive Species Management





GLRI STRIKE TEAM Invasive Species Accomplishments					
Treatment	2018 acres	2019 acres	Total acres		
Aerial Herbicide	537.5	200	737.5		
Ground Herbicide	92	447.5	539.5		
Prescribed Fire		124	124		
Water Management		221	221		
Mechanical		43	43		
Total Acres	629.5	1035.5	1665		

In 2018, the refuge received a Great Lakes Restoration Initiative (GLRI) grant to treat invasive plant species on federal, state, and private lands and hire an invasive species position. In 2019, a three person invasive species strike team was hired consisting of Holly Walp, Owen Segaard, and Morgan Donaldson. This incredible team far exceeded the grant target of 850 acres treated. They addressed a number of species and locations that the refuge normally does not have the capacity to treat. In addition, remaining grant

money will fund a position for follow up treatments in 2020.

TREATED: SPECIES

- - Tree-of-heaven
- Star of Bethlehem Yellow Flag Iris

Teasels

- European Frog Bit
- Flowering Rush
- Purple Loosestrife
- Japanese Stiltgrass
- Spotted Knapweed
- Phragmites
- Common Buckthorn







Strike team treatments

Poison Hemlock

Autumn Olive

Thistles

Bush Honeysuckles





The Visitor Services program at Ottawa National Wildlife Refuge strives to ensure visitors have a safe and enjoyable visit. They operate the Visitor Center, facilitate environmental education and interpretive programs, create kiosks and signs, manage the refuge website and Facebook page, oversee visitor access projects, and work with exceptional volunteers. The Visitor Services team consists of two employees, Rebecca Lewis (Visitor Services Specialist) and Justin Woldt (Visitor Services Manager), and a myriad of wonderful volunteers and interns. Their efforts lend visitors exceptional opportunities at the refuge.



Here are some of the highlights from an extraordinary 2019.

Increasing Public Access



Wildlife Drive

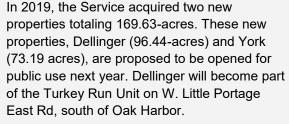


Photo: Jali Wojdyla participates in the youth deer hunt (Jason Wojdyla)

The Wildlife Drive Improvement Fund was a great success. The Friends raised 25k in six weeks to create early exits and establish pull-offs along the route. These upgrades will result in better vantage points and improved access through the refuge's iconic drive.

Photo: Wildlife Drive Kiosk shares information with visitors before they begin the route.

The Visitor Center Fishing Access project resulted in the development of three fishing decks to support family fishing. This project was made possible through grants from three local community foundations, individual donors, the Union Sportsmen's Alliance, and UAW Local 12 and USFWS volunteers.

Photo: Luke Tolliver (Erie Concrete) and Eddy Pausch (Assistant Refuge Manager) discuss plans for the Visitor Center Fishing Access.

The West Harbor Landing fishing/observation deck was completed on Catawba Island. The project included a parking area, two-panel kiosk, kayak launch, and bench seating with more public use amenities to come in 2020.

Photo: Even the youngest visitors enjoy the kayak launch at West Harbor Landing!



Ottawa National Wildlife Refuge planted 20acres of trees on the Marinewood Unit, and the area was officially opened for public use in Fall 2019. This restored golf course will be one of the next big projects. We look forward to sharing more updates as plans finalize.

Photo: Coneflowers make the retired golf course come alive at the Marinewood Unit.



Federal Acquisitions



Visitor Center Fishing Access

West Harbor Landing

Marinewood





Research Projects

1. Implementing a Great Lakes Basin-Wide Coastal Wetland Monitoring Program. *University of Windsor*

- 2. Amphibian and Reptile Survey of Ottawa and Cedar
- Point National Wildlife Refuges. *Toledo Zoo* 3. Northern Pike Research in Western Lake Frie. *E*
- 3. Northern Pike Research in Western Lake Erie. *Bowling Green State University*
- 4. Responses of Colonial Wading Bird Populations (Black -crowned night-heron) to Management within the Lake Erie Marsh Focus Area. *Ohio State University*
- 5. Point count bird surveys of Cedar Point National Wildlife Refuge. *Toledo Naturalist's Association*
- 6. Great Lakes Coastal Wetland Monitoring Program, breeding frog and bird surveys. *Central Michigan University*
- 7. Population Ecology and Habitat Relationships of Sora and Virginia Rails in Northwestern Ohio. *Ohio State University*
- 8. Common Tern nesting platform monitoring and banding. *Winous Point Marsh Conservancy*
- 9. Spring and fall songbird migration monitoring, Darby unit of Ottawa NWR.
- 10. Effects of harmful algal blooms on aquatic wildlife health (frogs and turtles). *University of Toledo*
- 11. King Rail Migration, Breeding Home Range, and Habitat Use in Lake Erie Coastal Wetlands. *Central Michigan University*
- 12. Migrational movements and habitat usage of migrant passerines in the Great Lakes Region: Ottawa National Wildlife Refuge, Ohio. *Black Swamp Bird Observatory*
- 13. Habitat usage of breeding passerines in the Great Lakes Region: Ottawa National Wildlife Refuge, Ohio. *Black Swamp Bird Observatory*
- 14. Monitoring of nutrient and turbidity during seiche events between Lake Erie and the Cedar Point wetland. *U.S. Geological Survey*
- 15. Monitoring stands of native and invasive Phragmites australis. U.S. Geological Survey
- 16. Impacts of Nutrient Loads on Invasion Potential of Butomus umbellatus (Flowering rush). *Bowling Green State University*.
- 17. Tracking down tempests: The detection and analysis of sediment deposits from storm-induced flooding along the Great Lakes' coasts. *University of Michigan-Dearborn*
- Early Detection and Rapid Response to Aquatic Invasive Plants in Ohio's Lake Erie Basin. *Cleveland Metroparks*
- 19. King rail microhabitat use and call-response rate. *Winous Point Marsh Conservancy*
- 20. Evolution of jewelweed (Impatiens capensis) to control the invasive garlic mustard (Alliaria petiolata). *University of Illinois Urbana-Champaign*



Blanding's Turtle Research at Ottawa Refuge

In 2019, the Toledo Zoo and the Ohio Biodiversity Conservation Partnership put in a total of 10,097 trap nights at 37 sites across northern Ohio, surveying for Blanding's Turtles. These efforts resulted in the capture of 190 Blanding's Turtles as well as 634 Snapping Turtles and 2,000 Painted Turtles. To the best of our knowledge, this represents the largest turtle dataset in the state.

Blanding's Turtles were observed on all the USFWS properties we surveyed and we identified a local hotspot that will be targeted for a long-term assessment. We had a fantastic first year and look forward to expanding upon this in 2020. This project is funded by the USFWS Competitive State Wildlife Grants program and also includes partnerships with the Michigan Natural Features Inventory, Purdue University – Ft. Wayne, Michigan DNR, and Ohio DOW.



We are asking the public to help us identify potential survey sites and all Blanding's Turtle sightings can be reported to:

turtles@toledozoo.org

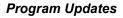
Matt Cross, Ph.D.

Conservation Biologist Toledo Zoo





Partners for Fish and Wildlife



As you may know, the Partners for Fish and Wildlife Service Program is the USFWS program that assists private landowners with habitat restoration projects. With all of the flooding and rain, we were able to complete six different projects that restored 175 acres of wetland and 42 acres of grassland. Leveraging other funding to get projects done is becoming more and more important. In 2019, we were able to use the \$22,000 of funding we received to leverage \$285,500 in other state and federal funds to help complete our projects. We are currently working on several other wetland projects that are refuge neighbors. These projects should be completed in 2020. The program is proud to have had over 1000% matching funds and in kind contributions for Partners projects in 2019.

Despite having another all-time low budget for restoration projects, we were able to partner with other agencies and organizations like Ohio Division of Wildlife, Ottawa County Soil and Water Conservation District, and Ducks Unlimited to make our funding go much further.



Special Duties

As the Private Lands Biologist, I assist with a wide array of activities both on and off refuge. I was fortunate enough to take a crew of firefighters to Alaska early this summer as a Crew Boss for Ohio Interagency Wildfire team. We were right near the Arctic Circle helping local villages protect their outlying fishing camps and cabins from nearby wildfires. It was a very rewarding trip. I was also fortunate enough to assist Agassiz Refuge

complete prescribed burns on several thousand acres in Northern Minnesota. I did a number of public presentations, one of which included a wetland restoration workshop for newer natural resource professionals.





Jeff Finn (center) pictured with partners from the U.S. Fish and Wildlife Service, Ohio Division of Wildlife, and Back to the Wild who worked together to release a rehabilitated bald eagle on Ottawa National Wildlife Refuge.

Eagle Release

This summer I was also involved with an eagle release. On July 3, 2019, partners from the U.S. Fish and Wildlife Service, Ohio Division of Wildlife, and Back to the Wild animal rehabilitation center worked together to save an eaglet.

The young eagle had been separated from its parents and due to flooding it was not possible to return the eaglet to its own nest. She was too young to be on her own so we worked together to find a solution. The eaglet was introduced to a foster nest on Ottawa National Wildlife Refuge, and accepted into the family. It's amazing what can be accomplished when partners work together for conservation.

Jeff Finn Private Lands Biologist

Thank you for your support in 2019!

Port Clinton Rotary Club Anonymous Frank & Karen Martens Vincent Brimmer Jim & Karen Spurgat David Donlev William Noice Rob & Peg Bobel Cory Marshall Lake Erie BBQ Yvonne Thoma-Patton Mark & Sandy Geudtner Jean Belle Suzan & Jim George Bob & Val Gregory Virginia Roguemore Eunice Koebel Joe & Judy LanFranchi Gene & Patty Naujock Buehler Excavating Ltd Sidney Kraizman Jesse O'Jack Disc Environmental Service Deborah Kibbel Heather Hodges Nancy Herl Fraternal Order of Eagles Lawrence & Christine Griggs Harriet Lager Todd Blumensaadt **Rick Ward** James H. Eidemiller Gregory Sage Linda & Paul Mascucit Bill & Caryn Long Ron & Jan Overmyer Adam Marks **Dennis Anderson** Fred Riley Carol Leininger Marcus Clarke Carla Borders Rebecca & James Huebler Julie Letterhos Janet Gross Dorothy Damschroeder Ray & Diane Joseph Terry & Lori Totman Sara Worley Stephanie & Craig Bevan Martha Dreier William & Suzanne Switala Angie & Bill Lorenz Mark & Michelle Bartkowiak Bill & Carla Hall Carmen Mendez Marsha Penner loe larell Michele Hendrick

WILDLIFE DRIVE FUND Debbie & John Sawvel Jan Caron Jan Dixon Linda Skryniecki Tama Schodowski Willard & Gayle Zirk Peter Lungulow Curtis & Bobby Pearson Kathryn Smith Jeannie Burnett Janice King Sue Thiel **Ronald Valentine** Tim & Lynn Schmit **Dennis Moell** Laurie Mauro Tom & Pat Koogler Tom & Nancy Dankowski Sharon & Roger Edwards Mike & Jennifer Baker Ann Bugeda Carol Thierry & Curry Godby Ken & Kathy Krepley Debra Marsh Christine Manzev Andv Benko Rosemary Ludway Pat's Mart Patty Zajac Doug & Cassandra Collar Tom & Carol Furry Dennis Jex & Anne Belovich Bill & Jo Fedor Deborah Greytak Gerald & Cheryl Whipple Paul & Carol Neidert Dave & Jody DeMeyere Paula Reich **Constance Faddis** Amy & Donald Smith Bettie Bowers **Deborah Farkas** Sue Counterman Zwierko Deb Johnson Joe & Pat Zellia Alan & Carol Norris Sue Cloak Trish McCartney Barbara Wismar Barbara Weigel Dave Hanson Linda Sloan Virginia Salander Janet Welch Ron Forster Leslie Redmon Sally Burger David Griffith Daniel & Barbara Snyder Lakecraft Corporation John & Pam Pullella **Richard Tuttle** Jim & Adelyn Nowjack

John & Eva Trimmer David Williams Sharron Ferrell Bradford Hemminger Julie Frazier Sheryl Young David & Laura Crotser Jennifer Meece Henry Fortlage Darrell Opfer Melissa Fey Rosie Faul Sharon Hamersley Kellie Kenniston Greg & Aimee Arent Debbi Klem **Rita Schneider** Patricia Brannon Bob Toney Margaret Weisz Judy Peters Liz McQuaid Laura & Luke Wark Robert Habel, Sr. Jim & Carrol Spitnale Kelly & Chris Roper Sigrid Emerling Michael House Paul Schweigert John & Jo Fink Dennis & Kathleen McDonnell Margaret Wolf Richard & Vicky Orvitz Jim & Anne Kimble Rita Eisenmann Edward Nadeau Leon Buell Mike & Carol Crone Steve Bodart Linda Oatley Rebecca DeBolt **Douglas Vogus** Rosemary Kovacs Scott & Janice Emrick Ranaye McLaughlin Barbara Berg Carol Johnson Douglas & Valerie Johnson Robert & Ruth Brown Tom & Jeanne Coy Laura Alldridge Jean O'Connell Lois & Vic Harder Sandy Burris Penny Rund Cecilia & Eric Johnson Steve & Peggy Pollick George Meyer Al & Betty Schlecht Dave Braden Marie Steinke Kim Paxton Michael Steer Julene Market Tony & Jill Adams Lois Hollingsworth

Michael McCloskey **Bernard Feiss** Huah Feiss Janice Morrow Rebecca White Dallas Vonglahn Brenda & Terry Weidner Linda Murr Mandy Woodbury Gary Carson Rebecca Lewis Timothy Hill Bill & Dorthy Baker Jake Worthington Maxwell McKee Andrew Rospert **Claire Staples** Marcia Kurtz Donna Lueke Melissa Wales Ed & Donna Peercy John Schaust Kenneth Gober Nancy Stark Daniel Countryman Andrew Slager Irvin Longenbaugh Deborah Brewer Margaret White David Coupland Joe Balderas Nina Mardi Uma Savanoor Susan Williams **Beatrice** Pastiva Jessica Franklin Bradley Coffey **Benjamin Maucere** Donna Murawski Gary & Jackie Yambert Alisa Gerbec Barv & Judith Hall Joe Faulkner Linda Dunlap Phillip Feldman Susan Kocis Daniel Madewell Cynthia Kirkbaumer Robert Coren Debra Gamble Michael Blackwell Rvan Jeske Shannon Newton Stephen Sandler Laurel Veinfortner Decker Sharon Pentz Kochmit Bill Gordon Bob & Delores Matecki Kathy Patton **GENERAL SUPPORT** Fredrick Kohlman

Burns Iron & Metal Co. Angela Cucunato Nason S. Lightman Babette Klacik

Doug Brockway Melinda & Irwin Simon Genoa Family Evecare St. Paul's Lutheran Church Jeff & Joy Roth Heather Hodges Brenda Weidner Kroger Mary Essex David Koenig Gary & Cynthia Leibold Rebecca White Croghan Colonial Bank Genoa Bank ProMedica

VC FISHING ACCESS

Toledo Community Foundation Sandusky Co. Communities Foundation Ottawa Co. Community Foundation Gary Ohm Denise Monaghan Greg Sanderson **Kiwanis Foundation** Anonymous UAW Local 12

REFUGE FLOOD FUND

Kelly & Chris Roper Matthew & Michelle Zuelke Connie Hoffmann Bill & Carla Hall Elizabeth Garney

WEST HARBOR LANDING

Catawba Island Garden Club Brian Koenig Jeanette Throne Brent Cousino Mary Vance Merry Z. MacRae Sara Worley William Noice Donna Leseman Donald Kuenzer Darrell Opfer Martha Dykes Carl & Kathy Woodward Ann Cramer Art Lutz Jenni & Bill Biegala John Hoffman

INTERN STIPENDS

Anonymous Mark Segaard

LAND ACQUSITION

Ellsworth & Jennifer Shriver

TRACTOR FUND

Frederick Agency Laura Alldridge Rosan Allen Cathy Allen **Dalton Anthony** Wanda Apgar Mary Applegate Greg & Aimee Arent Keith Avers Ernie Ayers Paul Baicich Mark & Michelle Barkowiak Nelson & Shannon Bash Barbara Berg Sheryl Bibish Jenni & Bill Biegala Mary Willoughby Marcia Black Melanie Bowen-Greenwald **Dustin Braden** Holly Brawley Jenny Brenke Lee Anne Briese Sally Brionez Harold Brown Susi Brown Lori Brumbaugh Carl Brywczynski **Richard Bucklew** Leon Buell Sally Burger Jeannie Burnett Martha & Don Burrows Barbara Buser Patty Cable Earl & Thurid Campbell Dana Campbell Vince Capozziello Jan Caron Margaret Clark Kav Clark Marcus Clarke Janis Clay Doug Collar **Brent Cousino** Raymond Deselms Jan Dixon Andrea Dlugoleski Martha Dreier Frank & Cindy Duffala Theo Dunham Nancy Dunlap Martha Dykes Joanne Eaton Charissa Ebersole Donna Ebert James Eidemiller Sigrid Emerling

Scott & Jan Emrick

Together, anything is possible.

Constance Faddis Bill & Jo Fedor Kathleen Feisley Cathy Cole & Michael Feiss Sharron Ferrell Joel Fingerhut Carol Fingerhut Joni & Dave Finley Sharon Fitzgerald John Foley Ron Forster Craig & Lisa Fritz Terry Frosch Tom & Carol Furry Harvev Gallowav Suzan & Jim George Alisa Gerbec Mark Geudtner Mary Jane Gibson Rachel Giesey Cliff Glaviano Margaret Gluntz Michael Goethe William Graf **Christine Griggs** Great Lakes Grillers Janet Gross Robert Habel Sr. **Bradford Hemminger** Patricia & Norris Hinds Patricia Holt Lee Hoover Frin Hoover Marcia Hornstein Michael House Rebecca Huebler Janet Hughes Denise lams **Richard Jarvis** Catherine Jenson Bob Johannsen **Douglas Johnson** Ray & Diane Joseph Barbara Kahler Barbara Kandel Michael Kaplan **Richard Kassouf** Esther Kehoe Pat Kellev Cynde Kelsey Jim & Anne Kimble Emily Kindle Frank Knapke Jr. Donna & Jeff Knodle Jim Kolholf Carla Konwinski Sue Kos-Mayesky Rosemary Kovacs Sidney Kraizman David Kreienkamp Ken & Kathy Krepley Donald Kuenzer Joe & Judy LanFranchi Peggy Lewis Tom & Judy Liskai Bill & Caryn Long Sue Loper Sally Lownsbery Rosemary Ludway Donna Lueke Peter Lungulow David & Rhonda Lutes Merry Z. MacRae Mark Marciniak Julene Market Bob & Delores Matecki

David & Beth Matson Marnie McAtee Trish McCartney Mike McCormac Sharon McCoy Barry McEwen Barbara McKinlev Patricia McNichols Nike Mendenhall Suzi Michaels Richard Micka Steve Miller William Montgomery Dave & Kim Myles Gene & Patty Naujock Sharon Newton William Noice Bob Ohm Jacqueline Olson Ron & Jan Overmyer **Rick Painton** David Pardy Linda Patterson Ed & Donna Peercy Sharon Pentz Kochmit Katherine Petrey Haans Petruschke Jim & Elza Phillips Jim Pitchford Cynthia Ploch Dr. Nelson Pole Steve & Peggy Pollick Robert Prough John & Pam Pullella **Richard Rawlings** Paul & Donna Rehfeldt June Reid Brad Reiser Tami & Lin Rhoads Jane Ridenour Fred Riley Adelle Rodriguez Tom & Mary Anne Romito Virginia Roguemore Carol & Dave Rowland Greg Sanderson Debora Schaefer **Rich Schutz** Pete & Jan Schwager Paul Schweigert Mark Segaard Josie Shaheen Ann Shreffler Dave Siek Joe Sjostrom Linda Skrzyniecki Amy & Donald Smith David Smith Kim & Lisa Smith Geri Smith Kathryn Smith Wendy Smith James Stamm Romaine Stawowy Marie Steinke Jack & Gail Stenger Lori Stevenson Raymond Stout Rebecca Stover Jeff Sturm Marsha Tabb Bonnie & Alex Thomas Carol Thierry & Curry Godby Jeanette Throne John Tinalev Judith Titus

William & Sue Todd Bob Toney Carla Tooman Doug & Sally Towslee Becky Traxler John & Eva Trimmer Jane Underwood Nancy Vail Bob Vincent Sandra & John Wall Gwen Wee Brenda Weidner Janet Welch Rita & Gary Wesenberg Gerald & Cheryl Whipple Sandra Winland Margaret Wolf Charles Woods Robert Young Joe & Pat Zellia Matthew & Michelle Zuelke Buehler Excavating Hartung Title Agency Marblehead Bank Tri-Moraine Audubon

IN HONOR & IN MEMORY

In Honor of Carol Yegerlehner David Miltenberger

In Honor of Cheryl Whipple Elden Apling

In Honor of Joyce Martin Patrick Martin

In Memory of Eloise Mitchell Nancy Chalmers

In Honor of Richard Kimple Ellsworth & Jennifer Shriver

In Honor of Lisa Fritz The Sherwin-Williams Foundation

In Honor of Mary Kosanka Orman & David Orman Lynne Keith

In Honor of Kris Johnston UnitedHealth Group

In Honor of Charles Bork Vivian Bork

In Honor of Rev. Bev Lewis Casey Cain

In Honor of Richard Johnson Jan Dixon Charlotte Bates Chris & John Reneger Dave & Deb Bates Duane & Terry Bates

In Honor of Rose Holva IBM Corporation

In Honor of Terry Breymaier Kim Sedlak

In Honor of Janice King Erin King



In Memory of Jean Clare Greenacre Sandra, Janice, & Lauren

In Memory of Tom Livingstone Susan Livingstone

In Memory of Amy Kobosky Rudy Kobosky

In Memory of Edwin Pierce Al & Betty Schlecht Rob & Sandy Harlan

In Memory of Margaret Segaard Mark Segaard

In Memory of Caroline Ohm Paul & Carol Wray Art Walker Donald Conte Judy Lippus Bob Ohm Ken Holcomb Linda Schmidt Amanda Wainio

In Memory of Bart Butterfield Cathy Cole & Michael Feiss

In Memory of Bill Thompson III Marilyn Hirst Shade

In Memory of Daniel Snyder Barbara Snyder

In Memory of Dhana Capozziello Vince Capozziello

<u>In Memory of Frank H.</u> <u>Baker</u> Becky Hill

In Memory of Richard Wanty David Wanty & Laura Slider

In Memory of Jack & Vernice Baker DeMita Y. Baker

In Memory of John Olson Jacqueline Olson

In Memory of Lela Antram Donna J. Edwards



In Memory of Mary J. Woods Charles Woods

In Memory of Page Stephens Penelope O'Connor

In Memory of R. Joel Lucal Mary E. Heschel

In Memory of Robert Barr & Mary Meggitt Marti Pitcher

In Memory of Robert Fay Mary Kleinhans

In Memory of Ronald Apgar Wanda Apgar

In Memory of Barb Padgett Liz McQuaid

In Memory of "Catfish" Karen Wilhelm

In Memory of Howard Hintz Loren Hintz

In Memory of Kathy Booher Holly Gates

In Memory of Louis Konrad Sandy Perry

In Memory of Melinda Melissa Pollauf

In Memory of Normal E. Gibat Kathleen Howard

In Memory of Shelley Pulliam Mike & Nancy Boyce

In Memory of Teresa L. Debbi Klem

In Memory of William Crozier Fred Schultz

In Memory of Bruce R. Bryan Lee Ann Briese



TRUMPETER CLUB

Allie Saker Jim & Diane Krieger Suzan & Jim George Margy & Scott Trumbull

SNOWY OWL CLUB Eunice Koebel

EAGLE CLUB Ruth Ann & Daniel Fraser

OSPREY CLUB Anonymous





As you have read throughout this report, 2019 was quite a year for the Refuge and the Friends. For me, one of the most meaningful moments of the year occurred in early August.

I was in Oak Harbor with my father for a kayak excursion on the Portage River. Most of the town was just waking up when we arrived. It was not long after dawn when we started to unload gear, but there were already two boys there waiting by the water with their fishing poles. They were very polite and moved their bike and wagon aside as we launched our boats. They told us that they were waiting for some friends to come with bait and that they were excited to catch fish.

We paddled all morning taking in the tranquility of the river. Herons, eagles, and deer watched us as we explored. On our way back around lunchtime, we heard excited shouts come from the launch. I almost wondered if one of them had fallen in! But when we neared the launch, we found four young fellows fishing happily. The youngest boy noticed our arrival first and told the others to clear a path for us. They showed us their catch for the day - including a whopper of a catfish which I'm sure was the cause for commotion that we heard earlier in the day.

I was awestruck by this group of youngsters. In a world of technology and endless distractions these fellows were up at first light to fish. They were polite and courteous. They were poking sticks in the rocks and getting their feet wet. They were enjoying everything August is supposed to represent to a kid enjoying their last taste of summer freedom.

And then I realized that this is what our nonprofit represents to me: hope for the future of wildlife and habitat conservation.

Friends, thank you all for your support of everything that we do to protect Ottawa National Wildlife Refuge. Without your help we wouldn't be able to bring bus loads of kids on field trips to the refuge or provide intern stipends to support staff and refuge projects. We wouldn't be able to build access points or provide free bait and poles for kids to learn to fish. Without you we wouldn't be able to support habitat restoration projects and enhance the wetlands to support water quality in Lake Erie. You are helping to make the world a better place every time you support your refuge.

To all of you who have raised your children in nature - thank you for creating outdoor enthusiasts for life. After all, kids don't remember their best day of television, but the fight that catfish must have put up will stay fresh in their minds for years to come.





Pelicans in Ohio?

Over the past five years, American white pelicans have become a frequent sight in the Ottawa NWR marshes. In 2019, pelicans were spotted on the refuge well into the fall. And what's more interesting - they are breeding in Lake Erie!

Historically, white pelicans nest in North and South Dakota, Alberta, Saskatchewan and Manitoba, but new research has shown that they are spreading eastward.



The first documented nest in Lake Erie was in 2016 on Big Chicken Island and Middle



Sister Island in Canadian waters. It is the first known nesting for the species in the lower Great Lakes. We invite you to keep an eye to the sky when visiting Ottawa NWR. Look for the tell-tale black wing-tips on large white



birds as they fly.

COVER PHOTO

Special thanks to wildlife photographer, Timothy Chio for providing the cover photo for this report showcasing white pelicans at Ottawa National Wildlife Refuge.

.....

Annual Report Sponsors

A.

The 2019 Annual Report was funded by like-minded people passionate about nature and wildlife. These conservationists from near and far are working to spread awareness of the refuge.

Range map provided by Birds of North America

Aimee & Greg Arent Graytown, Ohio

Beck Suppliers, Inc Fremont, Ohio

> Ken Close Toledo, Ohio

Mike & Tammy Cohee Sunbury, Ohio

Nancy & John Herl Port Clinton, Ohio

Judy & Tim McKenna Port Clinton, Ohio Nancy Lutz Nebgen Rhinelander, Wisconsin

Linda Lutz Patterson Port Clinton, Ohio

> Kelly Schiewe Sandusky, Ohio

Cindy & Bill Thirion Warren, Ohio

> Margie V. Toledo, Ohio



"Breakfast" by Kenneth McFarlan Ottawa National Wildlife Refuge Photography Contest: 2019 Best of Show

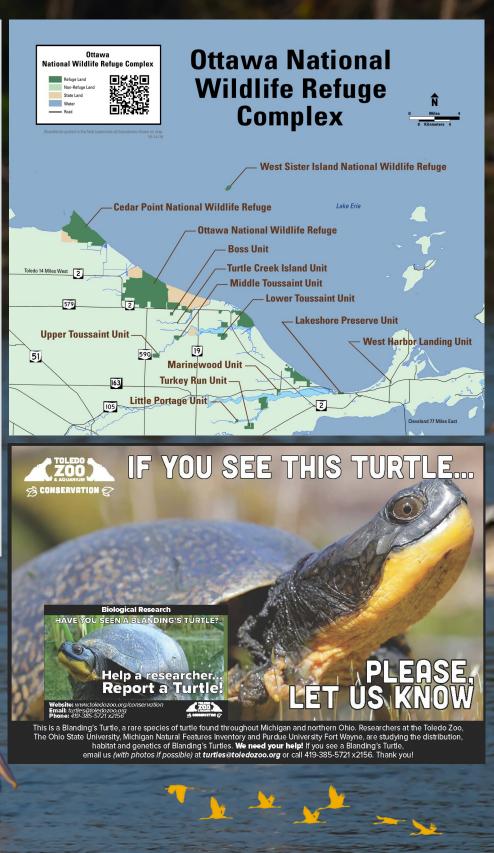


Founded in 1975, the Refuge Association's mission is to conserve America's wildlife heritage for future generations through strategic programs that protect and enhance the National Wildlife Refuge System and the landscapes beyond its boundaries.

The Refuge Association works to build a strong constituency for wildlife, gives wildlife a voice on Capitol Hill, and protects the integrity of the National Wildlife Refuge System.

NWRA's leadership has resulted in an incredible impact on the Refuge System, including a \$26 million increase for Refuge System funding for FY2020.

www.refugeassociation.org



Friends of Ottawa National Wildlife Refuge 14000 W State Route 2 Oak Harbor, OH 43449 www.friendsofottawanwr.org