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We exist because...

Fresh water is a finite resource. We are working to protect it. The Ottawa National Wildlife Refuge Complex is located along the southern shore of Lake Erie, the 11th largest lake in the world. The Great Lakes contain about 20% of the world's fresh water but they are in jeopardy. The wetlands of Ottawa National Wildlife Refuge play a critical role in the Lake Erie ecosystem, acting as the kidneys of the landscape; working to protect NW Ohio's drinking water, work, and leisure. They also provide important nesting and stopover habitat for birds, fish, and wildlife. Friends of Ottawa National Wildlife Refuge works to support Ohio's only national wildlife refuge complex through fundraising and volunteerism so that we can be the change that our wildlife and community deserve.



Hello folks, I'm Tony Everhardt. A volunteer photographer for the Ottawa National Wildlife Refuge. My interest in photography goes back as far as the mid 80's. Because of a 60 hour plus work week in the auto industry I was never able to pursue the hobby until after my retirement in 2015. Afterwards my sister-in-law saw some of my landscape photos and highly suggested entering a local contest. So I entered a couple of photos in my first contest and won two 1st place and a 3rd place. That was a real confidence booster for me. Since then winning the Grand Prize in Lake Erie Living Magazine's 2021 Photo Contest is by far my proudest win yet.

When the kids were youngsters we always enjoyed the spring hatch of all the geese along the entrance at the refuge. We visited the refuge every year. But it wasn't until about 2015 when I entered the parking lot one day to do a turnaround when I found the Wildlife Drive. Since, I have tried to spend as much time on the Wildlife Drive as possible.

February of 2021 I was accepted to become a volunteer photographer for Ottawa National Wildlife Refuge. Being able to share with you what the refuge has to offer is a dream come true. One of my favorite places at the refuge is at the Crane Creek bridge. I've seen beaver, coyote, deer, otter, mink, eagles, hawks, pelicans and many different types of ducks all near the bridge. Many times I'll just sit there just waiting for something to happen and listen to the serenity of nature.

The refuge is a special place to me. And I would like to thank everyone at Ottawa National Wildlife Refuge for managing such a beautiful refuge for all of us to enjoy.

-Tony Everhardt, 2021 Annual Report Cover Photographer

Letter from the President

I am Pete Schwager, the outgoing President of Friends of Ottawa National Wildlife Refuge. As you may know, Friends of Ottawa National Wildlife Refuge has served the Northwest Ohio community and Ottawa National Wildlife Refuge for nearly 25 years. Our priorities are:

- to support youth development programs throughout Lucas and Ottawa Counties
- · to increase public access throughout the Refuge properties
- and to increase the size of the Refuge through land acquisition and restoration.

Each property that we obtain for the Refuge is one more that will be restored back to its original purpose: a wetlands buffer for Lake Erie. The Great Black Swamp's original design if you will.

Thanks to the foundation built by our board, staff, and our dedicated volunteers and donors, our organization has been successful in continuing our work on the refuge throughout this pandemic. One of our biggest success stories over the last 21 months came from a huge financial challenge we faced when our main revenue stream, the Rookery Nature Store had to be closed due to the pandemic. With the organization's solid financial planning and the support of our community we were able to start 2021 with a 16.5-acre land purchase, continuing our mission to enhance, conserve, and protect Ottawa National Wildlife Refuge.

Through collaboration with community partners and the support of Friends like you, we will continue creating a positive impact at Ottawa National Wildlife Refuge for future generations.

On behalf of the Board of Directors, I want to thank each volunteer, donor, and visitor for a successful year.



Pete Schwager 2021 Friends Board President



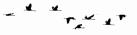
successful year.

A Note from Kendra Foust, Incoming Friends Board President



As I step into this leadership role. I would like to extend my gratitude towards my fellow board members for granting me the opportunity to be the leader of such an incredible organization. Friends of Ottawa National Wildlife Refuge wouldn't be what it is today if it weren't for all my predecessors and of course the most important piece of our organization, our supporters. The past two years have been a challenge for everyone. Even amongst all the trials we as an organization and as individuals have faced, our supporters have been there for us. You have allowed us to be part of your refuge amongst all the chaos.

Your support has helped us accomplish so many great things for the refuge. I look forward working to with all of my fellow board members as I step into this new role. Here's to a new year, with new opportunities, and more great accomplishments with you.



Kendra Foust

Incoming Friends Board President

From the Manager's Desk

Reflections of a Year Not Forgotten

Another year to remember...but with a similar twist. Ottawa National Wildlife Refuge staff, volunteers, and partners rose to the challenge and helped to make 2021 a conservation success story worth telling. Yes, the year started and finished much like 2020 with the pandemic twist. The pandemic dominated the national public health conversation again and continued to create refuge operational challenges at all levels. However, in the words of Eleanor Roosevelt, "*If life were predictable it would cease to be life, and be without flavor.*" I believe that success in the face of adversity shows the true character of people.

Service staff, volunteers, and our partners showed grit and resilience to find focus and energy to maintain the purposeful path to achieve our conservation mission. I am amazed and proud of the team of dedicated individuals that work passionately to serve the American people and conserve our fish and wildlife resources. Their work continued to help ensure that the communities we serve have a place to disconnect from Covid and connect with nature. Being an outlet for those needing refuge from the stress of life by providing opportunities for mental health breaks has been a way for the refuge to give back to our communities during the pandemic.

It was definitely a flavorful year. **The Refuge and our partners had many successes to celebrate including opening new public use areas, new land acquisitions, habitat restorations, and completion of deferred maintenance projects.** The year saw two new public recreation areas open: the 39-acre Nehls Memorial Nature Preserve and the 77-acre Fox Nature Preserve. Both nature preserves were made possible by innovative partnerships and community support. The Friends helped to fund habitat restoration, hiking trails, an ADA compliant kayak access launch, interpretation signs, and parking areas at the nature preserves. The Refuge acquired another 133 acres and the Friends added



Jason P. Lewis Refuge Manager another 16.5 acres. The new acquisition will provide public recreation and wildlife habitat benefits. The Refuge added four new maintenance staff, which was made possible by habitat restoration grants and the Great American Outdoor Act. The Fish and Wildlife Service collaborated with the Ohio Department of Natural Resources to restore Lake Erie hydrology and water quality benefits to 932 acres of the refuge through the H2Ohio Program. In addition, the Refuge replaced five mission critical water control structures that had been in a deferred maintenance status for years, which help to improve habitat for migratory birds and other wildlife.

"A true conservationist is a man who knows that the world is not given by fathers, but borrowed from his children." – John James Audubon

The success of the refuge is a direct result of the generosity and support that the Friends receives from all of you. You all help to ensure that these borrowed lands are the conservation pillars that the next generation can proudly stand to carry on the legacy as the next conservation stewards.

Thank you for your support and commitment to Ottawa National Wildlife Refuge.



REFUGE STAFF

Jason Lewis, *Refuge Manager* Karl Fleming, *Assistant Refuge Manager* Ron Huffman, *Refuge Biologist* Jeff Finn, *Private Lands Biologist* Rebecca Lewis, *Visitor Services Specialist* Clayton Hamilton, *Federal Wildlife Officer* Scott Bryant, *Administrative Assistant* Chuck Shier, *Maintenance Mechanic* Ramsay Houze, *Maintenance Worker* Brandon Giesler, *Maintenance Worker* Keith (Troy) Atkinson, *Maintenance Worker* Keith Findlay, *Maintenance Worker* Kenneth Millerschone, *Maintenance Worker* Alex Cherpes, *Biological Technician* Buck Buchanan, *Laborer*

"Ottawa National Wildlife Refuge is a valuable asset for nature and wildlife. The refuge is always there for us to explore and experience. It's my go to place to relax my mind and soul. Also my favorite refuge during migration. An important rest area for many species of birds and wildlife. A beautiful place to enjoy my hobbies of birding and nature photography."

> Dave Smith, 2021 Photo Contest Best of Show Winner Crane Creek Sunrise

Be sure to join the **"Friends of Ottawa NWR Photo Club"** group on Facebook. We have all skill levels from amateur to professional. This incredible group is very helpful in directing you to their favorite spots to see wildlife. Seeing the refuge through their eyes helped to keep us all connected during the pandemic.

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 7,930 acre refuge is managed for waterfowl, shorebirds, neo-tropical 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 <u>www.fws.gov.</u>



Duigar

Friends Priorities

Impact Areas

♦ LAND ACQUISITION

Since 2013 the Friends have managed a growing fund for Land Acquisition and Restoration. One of our long-term goals is to establish a \$500,000 revolving fund that will allow us to aid the refuge with the purchase of land from willing property owners and restoration of existing refuge parcels from Toledo to the Sandusky Bay. **To date, we have conserved 57 acres.**

YOUTH DEVELOPMENT

Making sure that the next generation cares about conservation as much as we do is a priority for our group. Therefore Friends of Ottawa NWR provides life-changing career opportunities through living stipends for interns, and field trip grants to bring schools and classes to experience all that the refuge has to offer. With the Visitor Center closed, Environmental Education field trips were cancelled but we were able to provide 7 internships.

PUBLIC USE PROJECTS

Friends of Ottawa NWR is committed to helping the refuge improve access for its six public uses: Wildlife Observation, Environmental Education, Interpretation, Photography, Fishing and Hunting. We help to install access points with trails, observation decks, provide equipment to maintain these areas, and help to keep the public updated and connected with what's happening at the refuge.

An Award-Winning Year!

Friends of Ottawa NWR was honored to receive two prestigious awards this year. In May, the Friends and the Refuge received national recognition as the winners of the **Public Lands Partner Award**. This award presented by the Public Lands Alliance recognizes an exemplary partnership in preserving public lands and enhancing experiences of their visitors.

In October, we were awarded the **2021 Nonprofit Excellence Award** presented by the Greater Toledo Community Foundation, The Andersons, and The Blade. This award recognizes organizations that demonstrate active involvement in advancing the organization's mission as well as outstanding community impact and results.



Top: Partnership Award Plaque. Below: Award Winners (I to r) Dianne Barndt, Executive Director, The Victory Center; Aimee Arent, Executive Director, Friends of Ottawa National Wildlife Refuge; Jori Jex, Executive Director, Valentine Theatre; Jim Stengle, Board Chair, Valentine Theatre



Established in 1997, the Friends of Ottawa National Wildlife Refuge works to support conservation of the Lake Erie marshes at Ottawa Refuge.

Contact Us

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Facebook: @FriendsofOttawaNWR Twitter: @FriendsofOttawa Instagram: @FriendsofOttawaNWR

Join the **Friends of Ottawa NWR Photo Club** Group on Facebook to get the most up to date wildlife sightings, share refuge photos, get tips, and chat with Friends.

2021 BOARD MEMBERS

Pete Schwager, *President* Jenni Biegala, *Vice President* Carol Fingerhut, *Secretary* Michael House, *Treasurer* Melanie Bowen-Greenwald Shirley Haar Mary Willoughby Kris Johnston Jim Krieger Kendra Foust Tom Romito Michael House Rob Swindell Justin Woldt Ron Overmyer

FRIENDS STAFF

Aimee Arent, *Executive Director* Julia Hinca, *Nature Store Clerk*



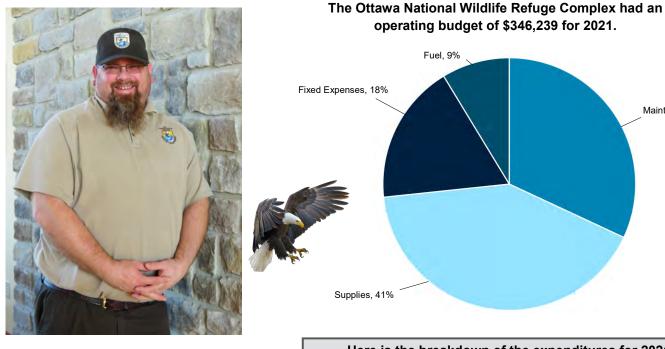
From the Refuge Admin



Maintenance, 32%

My name is Scott Bryant, and I am the Administrative Assistant for Ottawa National Wildlife Refuge. My role is to assist with balancing the budget, process payroll, order supplies, keep the lights on, and anything else the staff needs me to do.

Congress appropriated \$1.25 million to Ottawa NWR in fiscal year 2021. This is a decrease of \$66,000 from fiscal year 2020. We also received "special funding" (Great Lakes Restoration Initiative, Great American Outdoors Act, CARES Act, carry over accounts, cooperative agreements) to the amount of \$3.5 million which is separate from funds appropriated by Congress. Special funds are earmarked for very specific purposes and in most cases can't be used for most daily functions.



Scott Bryant

Administrative Assistant

The maintenance funds go to the highest priority repairs as we only have a small percentage of funding to use. Fortunately, we were able to use some special funding provided by the regional office (CARES Act and Federal Highway funding) to offset other priority repairs and modifications. Other maintenance repair projects are earmarked

Here is the breakdown of the expenditures for 2021:

- **Maintenance:** \$110,590, including repairs to properties, structures, vehicles, and equipment
- **Supplies:** \$143,341, including office and field supplies, visitor/ volunteer services supplies for all programs
- **Fixed Expenses:** \$62,223, including utilities, phones, water, propane, trash removal, etc.
- Fuel: \$30,085 to fuel vehicles and equipment for all programs

out of special funds. We were able to complete some much-needed repairs to Moist Soil (MS) Units 3/4/5 with some support from the H2Ohio Initiative. Once the MS-5 Unit was drained to install the H2Ohio water control structure/fish passage, our maintenance staff was able to perform the maintenance on the rest of the MS units. This initiative is a collaboration with the State of Ohio to help improve water quality and fish habitat in Lake Erie, and restore agricultural lands back to natural habitat.

Our largest utilities expenditure is electricity. Most of our water control pump structures are electrically operated and 64% of our total electricity usage was spent on water management. The solar array near the Visitor Center continues to supply 2/3 of our electricity needs for the Visitor Center.

This past year, once again, has been challenging to the refuge staff. We've been able to perform the most necessary maintenance work, all while keeping safe. We can only extend our sincerest thanks with the patience that you have had during these difficult times. We are looking forward to 2022 and an eventual return to some sense of normalcy!

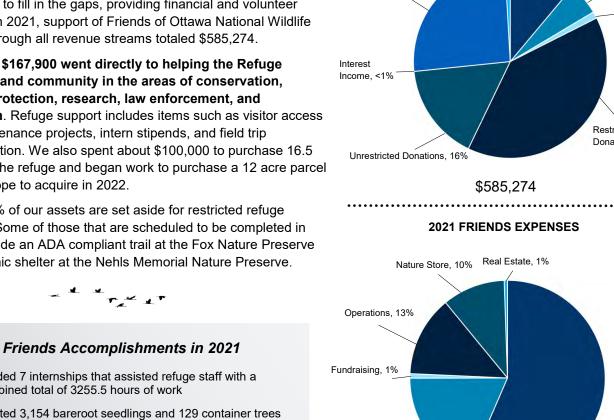
Friends Financials

2021 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 2021, support of Friends of Ottawa National Wildlife Refuge through all revenue streams totaled \$585,274.

A total of \$167,900 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. We also spent about \$100,000 to purchase 16.5 acres for the refuge and began work to purchase a 12 acre parcel that we hope to acquire in 2022.

About 40% of our assets are set aside for restricted refuge projects. Some of those that are scheduled to be completed in 2022 include an ADA compliant trail at the Fox Nature Preserve and a picnic shelter at the Nehls Memorial Nature Preserve.



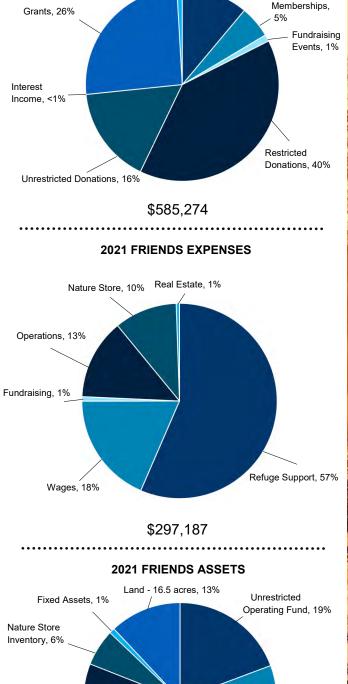
Funded 7 internships that assisted refuge staff with a

- combined total of 3255.5 hours of work
- Planted 3,154 bareroot seedlings and 129 container trees on the Fox Nature Preserve
- Built a parking area and kiosk at the Fox Nature Preserve and created a mile long mowed grass hiking trail that is now open to the public
- Purchased waders, an educational archery range and other supplies for youth sportsmen programs
- Hosted a veteran and adaptive angler event for 72 participants and launched Puddles Kids Club
- Purchased 16.5 acres of land and restored it to wildlife habitats through the assistance of the Partners for Fish and Wildlife Program
- Paved the parking area and provided lawn and garden maintenance at West Harbor Landing
- Built an ADA compliant kayak launch and parking area and reinforced the shoreline at the Nehls Memorial Nature Preserve
- Helped to fund the Bird Friendly Facility Project to prevent bird strikes on the Refuge Visitor Center
- Served as the fiscal sponsor for the Portage River Water Trail project and completed design work for brochures and signs



Nature Store, 11%

Investment Income, 1%



Restricted

for Refuge Projects,

39%

Short-Term Savings, 4% \$769,159.72

Land Acquisition Fund, 18%

Interns: Leaders of Tomorrow

My name is Jessica Duez. I earned my Bachelor of Science degree in Biology with a concentration in Organismal Biology and Ecology from the University of Toledo. While in college, I worked at a veterinary office and then after graduation I worked for the U.S. Postal Service, but I knew I wanted to pursue my interests in conservation, environmental education, and biology. So, I applied for the Visitor Services internship at Ottawa National Wildlife Refuge (ONWR) sponsored by the Friends of ONWR, and I was offered the position in March of 2021!

How did you become interested in conservation?

From a young age, I was drawn to animals and nature. I have always felt a strong responsibility to do my part to protect the environment and help animals, whether pets or wildlife. I was enrolled in the Environmental and Agricultural Technologies career program at Clay High School, where I focused on animal and aquarium management, but also learned about local flora and fauna of northwest Ohio. During my high school years, I volunteered with Clean Your Streams and Weed Warriors, with my first experience at Ottawa NWR volunteering to pull invasive plant species. I began my first year of college with the goal of going to veterinary school, but after taking my first biology courses, I quickly changed my major to Biology.



Hall

Mike

Photo:

What was your role at Ottawa?

Throughout my internship I have worked on developing the refuge's social media content, planning special events like Discover Ottawa Day, a fishing event for veterans and adaptive anglers, working on special projects like the Bird Friendly Facility Challenge, hosting Seek Refuge Days virtual education programs, leading a volunteer beach clean-up project, evaluating ONWR sites and trails for accessibility and submitting the reviews to Birdability Map, and staffing the Ranger Pod and Visitor Center when it was open for a brief period of time this summer.

Jessica Duez

Visitor Services Intern



Jessica poses with the new eagle graphic on the front of the Visitor Center

What were your top three favorite moments or accomplishments?

By far my favorite accomplishment was working on the Bird Friendly Facility Challenge. This project aimed at creating solutions that could be applied to the windows of our buildings to reduce the events of bird window collisions, which unfortunately causes an estimated one billion bird casualties in the United States and Canada each year.

From creating the designs for the one-way film that was installed on our windows, to constructing and hanging "zen curtains", this project has been the most hands-on and rewarding experience of my internship. Discover Ottawa Day, a fishing event for veterans and adaptive anglers, was an amazing event that I was extremely grateful to be apart of. Some of my favorite moments at the refuge involve witnessing the beauty of the refuge, and the wildlife that call Ottawa NWR home. Watching the release of a juvenile bald eagle after spending some time rehabilitating at Back to the Wild, and watching an eastern fox snake slither into its hiding spot are just a couple of my favorite moments on the refuge!

Thank you for completing a Birdability Site physical accessibility of birding locations b Once complete, please visit birdability.	nelps ensur	e that birding truly is for everyboo		
Question numbers on this checklist corres Review; not all guestions in Part 1 are incl	spond to th	e question numbers in the online	Birdability Site	
Part 1: General Information	-4	Part 2: Birding Location Accessibility Criteria		
i, a) Trail/bird blind name;	*** ;;	1. Parking	40	
		No parking area		
		Pull-off areas (for car hirdin	ig)	
. b) Location name (park or area):		Signed accessible parking s	paces. Number:	
4) Good car birding site? Describe If so:		Van accessible parking span is 132 in. (3.3m) wide, with wide aisle/side space for a	extra 60 in. (1.5m)	
		Curb cuts present from par sidewalk/trail	king lot to	
		Surface is paved		
5) Length of trail:	6000	Surface is gravel		

Bird Friendly Facility Challenge



Warblers now line the windows along the stairwell.

Visitor Services Intern through a program with Environment for the Americas. I was offered the position, and begin this next chapter in January of 2022! I am excited to spend this next year working with the phenomenal team at Ottawa NWR and continuing to gain experience, knowledge, and perspective that will help me move closer to a dream job working in the field of conservation.

What projects were you involved with?

The most notable project I worked on with the Ottawa NWR team was the "Bird Friendly Facility Challenge". A paper published in Science by Rosenberg et al. in 2019 brought to attention an alarming decline in North American bird numbers, estimating that nearly 3 billion adult breeding birds have been lost since 1970. These findings were a call to action for the U.S. Fish and Wildlife Service (FWS), and the Region 3 Migratory Bird Program proposed a challenge for FWS facilities to come up with a plan to make their facilities more bird friendly. I was involved with researching potential actions, proposing the plans for our facility, determining the budget for the project, and bringing the plans to life! I am so proud to have been a part of this project to help save birds. I also worked to evaluate the refuge's sites and trails for accessibility with an ADA-CAT screening toolkit provided by The Romich Foundation and submitted those reviews to Birdability Map. Birdability is a non-profit working to make birding accessible, safe, and inclusive for everyone, and to encourage people with disabilities or other health concerns to experience the joy of birding and the outdoors. I thoroughly enjoyed going out to all of Ottawa NWR's sites and trails, but more importantly I was honored to be apart of this sublime movement.

How did your internship prepare you for the future?

The experience I have gained through my internship has been so valuable to both my personal and professional growth. I have made so many connections with the staff at Ottawa NWR, and will forever cherish their encouragement and kindness. This opportunity has honed my strengths, and has put into clearer perspective my goals for my professional future. I am confident that the experience I have gained through this internship will build up my resume and lead to further opportunities

down the road.

What are your future plans/dream job?

As December crept closer, I was sad to know that my time at Ottawa NWR was about to end. That was until I found out about an opportunity to continue working as a Jessica uses the ADA-CAT toolkit to screen sites for accessibility.



Conservation Corner



Why should you protect Ottawa National Wildlife Refuge?

T I IT

The world is in the hands of the next generation. Learn how Mia is using her painting talents to conserve Ottawa National Wildlife Refuge.

Hi, my name is Mia. I am currently in eighth grade. I enjoy reading, gaming, art, photography, and going to wildlife refuges. I feel people should protect Ottawa National Wildlife Refuge (ONWR) because it is home to so many animals and other wildlife. If we don't protect wildlife it affects the whole ecosystem. Ottawa Refuge is trying to





turn farm fields back into marshes and forests for the animals and other wildlife to live in. If ONWR is not protected, so many of them will lose their homes. Many more animals use the refuge as a safe place to rest while migrating through our area. Without the refuge, the whole ecosystem would be out of balance. Protecting ONWR now means that generations from now others can go there to enjoy and learn about nature and how to protect it.

I love going to ONWR a lot. We go as many days as we can when the Wildlife Drive is open. I love seeing all the animals and wildlife and just enjoy being around

it all. I also love taking pictures of the animals we see. I use some of those pictures as inspiration for paintings I make. I sell my paintings and donate half of what I make back to ONWR and other places that help animals and wildlife. I love to see all the animals, but one of my favorites is the bald eagle. I have seen many families grow year after year in and around Ottawa National Wildlife refuge and I hope to see many more.

We just went to ONWR on November 27 and 28 and I was very happy to see the seasonal drive open. I even got to watch a female bald eagle fly from her nest right above

us. It was so amazing to see her fly right over us. I also saw some northern harriers which I have never seen before and that just shows that no matter how many times you look in the same place you can always see something new or different. I can't wait to go back out to Ottawa National Wildlife Refuge again and I will do whatever I can to help protect and preserve it for the animals and wildlife who live there. *I hope that you will do what you can to help, too!*



Mia painting refuge scenes.

2021 Visitor Stats for the Ottawa National Wildlife Refuge Complex



Photos (I-r) The Fox Nature Preserve kiosk and trail head (Vince Capozziello). Volunteers and board members get together to prepare a mailing. Soren and Andrea check out the Estuary Trail as part of our Scavenger Hunt. They were later drawn as the Grand Prize winners of an optics package!

Visitor Services

One of the best things about this year was the team that I am privileged to be a part of. I love to see all the great things the small but mighty staff do so well to manage the refuge habitat. There were a few seasonal staff and interns this year and they quickly became part of the team, with everyone chipping in to help each other out. Volunteers help in every aspect of refuge management and this year was no exception. While our numbers were certainly limited, the dedication and commitment shown by our volunteers is limitless. And of course, I cannot possibly express how valuable the Friends of Ottawa National Wildlife Refuge are. There are so many projects that could not have been completed this year if it weren't for



Visitors enjoying a day of free family fishing during our Veteran and Adaptive Angler event

them. Whether it was expansions to the refuge or paying intern stipends the Friends make it possible. I want to thank everyone for being on our team, and all our visitors and supporters for making what we do possible.



Nehls Kayak Access



Fox Nature Trail



West Harbor Landing

Project Photos: 1. A fully accessible EZ Dock kayak launch was installed this year at the Nehls Memorial Nature Preserve. 2. Former landowner Barbara Fox and Curtis & Bethany Kalina were the first to hike the new mowed grass trail at the Fox Nature Preserve. 3. Through the support of a National Fish and Wildlife Foundation grant, the West Harbor Landing parking area was paved and striped to further increase accessibility for fishing and wildlife observation on Ottawa Refuge.

Life in the Ranger Pod

While we could not welcome visitors into the Visitor Center through most of the year we did the best we could with what we had. We wanted to greet visitors, do programs, and share the refuge with all of you but we needed to keep our volunteers, interns, and staff safe. One of the first steps was to place a shelter at the front of the Visitor Center allowing us to greet visitors but not be blown away with the usual spring winds. A small heater and a fan kept us comfortable, and the faces of our visitors kept us motivated to keep making changes.

Virtual Programming

Thanks to the hard work of Friends of Ottawa NWR we were able to do virtual programming. A variety of topics by a larger variety of people than we would have ever been able to do in person made for a great spring event. The refuge staff was able to present on a variety of topics and even take everyone on a morning bird walk. I will take



Rebecca Lewis

Visitor Services Specialist

any excuse to enjoy a relaxing stroll through the South Woods on a spring morning. An important point to take from this is that it could not have happened without the Friends and volunteers. The planning, scheduling, promotion, moderating, and presenting were done by this group of dedicated people and I am very grateful to them. And a special thanks to all of our incredible speakers!

Seek Refuge Days

A virtual nature program series featuring Ottawa National Wildlife Refuge



We had a few events mid-summer, we even opened the Visitor Center for a few weeks, and connected with many of you virtually. While these were not typical visitor interactions, we learned from them, and are looking forward to changes in the coming years.

Citizen Science & Research



Surprise! It's a... white purple martin?

"This one's a different color!" was a statement that got Ottawa National Wildlife Refuge volunteers Mike and Dawn Zook scrambling to the gourds. As the Youth Conservation Corps assisted with nest changes they discovered quite a surprise. A white purple martin!



Field by Tony Everhard

Yellow

This purple martin chick (pictured left) is exhibiting leucism, a condition caused by a genetic mutation which inhibits melanin from being deposited in its feathers. Instead of the normal velvety purple, this little martin will have even the most seasoned birders doing a double take with its light lavender plumage.



The Youth Conservation Corps assists Mike & Dawn Zook with changing nesting material in the purple martin gourds. The refuge's 84 purple martin gourds were at full capacity this year!

Citizen Science Nest Monitoring

Species	Nests	Total # eggs	Total # nestlings	Total # fledglings
Killdeer	1	4	4	4
Purple Martin	84 out of 84!!	428	377	373
Tree Swallow	36	225	195	177
Eastern Bluebird	1	8 (2 attempts)	5	1

Research Projects at Ottawa National Wildlife Refuge

<u>The Lake Erie and Aquatic Research Network</u> (**LEARN**) is funded by H2Ohio and consists of researchers from multiple universities: Bowling Green State University, Heidelberg University, Kent State University, Ohio State University, University of Toledo, and Wright State University. Project LEARN goals are to evaluate the effectiveness of H2Ohio wetland restorations in improving water quality, and provide information to guide future restorations and management. In 2021 the refuge worked with this research group in their pilot monitoring year, and will continue collaboration in 2022 and beyond on this long term research effort. Monitoring on the refuge will occur at the following H2Ohio restoration/enhancement sites: Pool 3, MS 5, and Darby Pools 1 and 4.



<u>Coastal Observations, Mechanisms, and Predictions Across Systems and</u> <u>Scales – Field, Measurements, and Experiments</u> (**COMPASS-FME**). This research project will examine the interactions and changes that occur between water, soils, and plants as water levels change over time. The underlying processes that drive changes in vegetation communities from upland to coastal marsh zones in response to changes in water levels are poorly understood, and results of the study will help build models to predict future changes, such as from climate change. This project is lead **ational Wildlife Refuge** by the Department of Energy Pacific Northwest

2021 Nest Counts on West Sister Island National Wildlife Refuge

Species	# Nests in 2021	# Nests in 2020
Great Blue Heron	1037	611
Great Egret	913	1465
Black-Crowned Night Heron	338	495
Double-Crested Cormorant	2602	2829

National Laboratory, with partners Argonne National Laboratory, Los Alamos National Laboratory, Oak Ridge National Laboratory, Smithsonian Environmental Research Center, University of Toledo, and Michigan Tech University. This 2 year pilot study will likely be expanded to a 10 year monitoring effort. Solar array and sampling stations will be visible from the Wildlife Drive.

Youth Conservation Corps



Hello! My name is Alex Cherpes (a.k.a Puddles the Goose), and I am so grateful to be a part of one of the best refuges in the world! I'm from a small town called Boyce in Northern Virginia. I graduated in 2016 from Virginia Commonwealth University with B.S. in Environmental Studies and a minor in Biology. Before taking on the role of the 2021-2022 Biological Science Technician, I worked within the Virginia State Park System as a naturalist and as a Gardener within NOVA Parks.



Puddles shares homemade cookies with Ron Huffman & Trevor Zook

different tasks and projects with my coworkers, and currently I am in the process of completing the primitive woodland trail in the Fox Nature Preserve.

Tell us about the Youth Conservation Corps.

Each summer Ottawa National Wildlife Refuge hosts a Youth Conservation Corps Program. The purpose for this program is to help connect community youth with a work experience at the refuge while also providing an educational experience. The three employees this year included Alyssa, Jasmine, and CJ (pictured below). Over the course of 8 weeks, they were able to accomplish several different projects and together we explored and discussed natural areas around Northern Ohio.



What was your role at Ottawa NWR?

I was hired to lead the refuge's Youth Conservation Corps Program over the summer. It's an 8-week program where I worked hands-on with a group of teenagers completing various assignments for the refuge, such as installing kiosks and maintaining trails. The other half of my role was to teach the kids about the refuge and about the area, the animals and plants and different geological features unique to Ohio. After the program ended my role became more flexible. I have performed

Alex Cherpes

Youth Conservation Corps Coordinator & Biological Science Technician

What were the projects you worked on?



The biggest accomplishment was being able to build the kiosk at the Nehls property from start to finish. It was really gratifying being able to see the fruits of our labor after we finished. We also helped remove invasive species, such as thistle and spotted knapweed. Others projects included trail maintenance projects

CJ, Alex, Jasmine & Alyssa on a field trip

and maintenance along the Wildlife Drive.

What were some of the things the YCC crew learned?

"[We] learned the key characteristics of differing Queen Anne's lace from poison hemlock," CJ said. "We also learned that thistle is widespread across the state".

Jasmin noted how glacial grooves were carved into the bedrock in some areas of Ohio, as the glaciers in North America melted into the Great Lakes.

While talking about our trip to the Lake Metro Farmpark, Alyssa stated, "Learning about the animals was fun and learning about where our food comes from is neat!".



A Big Year for Habitat Restoration

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.

Flashback to 2019...

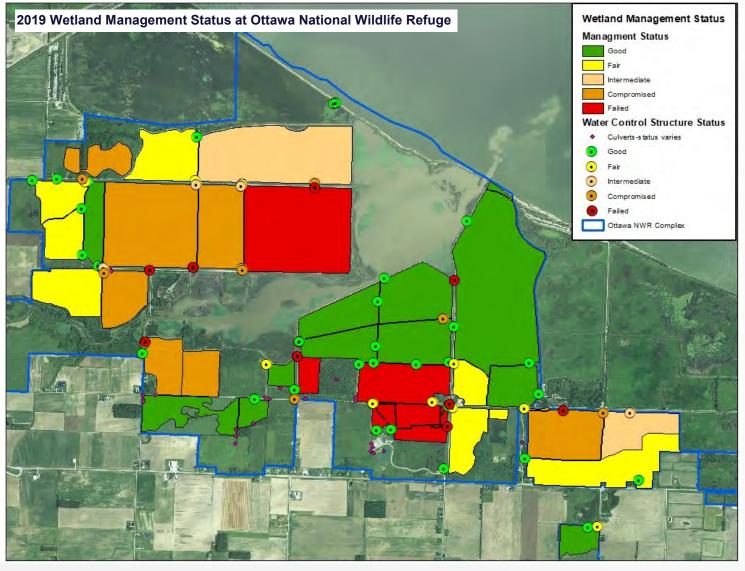
This water management was extremely challenging in 2019. Lake Erie continued the trend of an increasing lake level, and set new record highs for the five-month period from May through August. A new all-time record high for Lake Erie of 574.62' was set in June, 2.6' above the long-term average lake level for the month of June. Biology and maintenance staff spent considerable time pumping water for flood mitigation in an effort to protect critical infrastructure.

Failing water control structures and pumps had 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 were reaching the end of their serviceable life. As you can see in the chart below, in 2019 five pumping stations were in critical condition, greatly impeding the refuge's ability to manage water for suitable wildlife habitat.



In 2019, Friends of Ottawa NWR submitted a statement regarding the refuge's deferred maintenance issues to

the Public Lands Alliance (PLA). The statement was used as one of five examples of the national funding issue in testimony presented to Congress by the PLA. Thanks to the many voices of partners across the country, the Great American Outdoors Act (GAOA) was signed into law August 4, 2020. Through GAOA, the Department of the Interior is investing in much-needed maintenance for critical facilities and infrastructure in our national parks, forests, wildlife refuges, recreation areas and Tribal schools.



Restoration and Enhancement Projects

Over the past two years, significant work has been accomplished in replacing and maintaining infrastructure through the following means:

H2Ohio

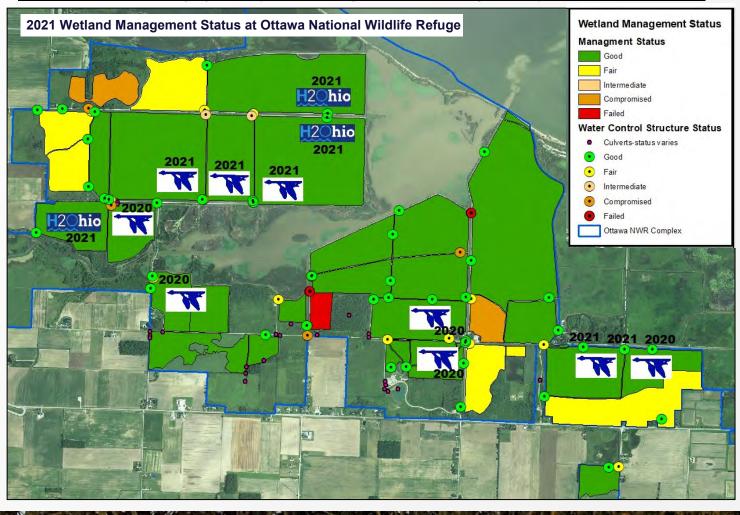
Ottawa National Wildlife Refuge is a project partner for the state of Ohio's H2Ohio initiative, which aims to improve water quality throughout Ohio. Refuge projects are focused on improving water quality and fish access through improved connections between coastal wetlands and Lake Erie and its tributaries. Funding was awarded to Ottawa Soil and Water Conservation District in 2020, and in cooperation with the Ohio Division of Wildlife wetland restoration on five units was completed in 2021. They include installing a new water control structure that will filter water from Crane Creek, one structure that allows fish passage and water filtration from Veler ditch and Crane Creek, and installing three structures on the Darby Unit that will create fish passage and water quality benefits from LaCarpe Creek and the private lands that drain through the refuge. *(Locations of these projects, excluding the Darby Unit, are marked with the H2Ohio logo on the map below).*

Addressing Deferred Maintenance

Deferred maintenance projects were a priority for the refuge in 2020-2021. With funding from GAOA, the refuge added three new four-year term maintenance positions in the summer of 2021 to help address the deferred maintenance backlog across the National Wildlife Refuge System. These new employees split their time between Ottawa Refuge and other national wildlife refuges to tackle projects that are long overdue for attention. Together refuge staff replaced the MS3, MS4, and MS5 water control structures, two water control structures at Woodies Roost, and fixed the MS7 and Trail Head Parking Lot pump structure. Additionally, funding through the Great Lakes

Restoration Initiative provided the opportunity to hire a wetland restoration heavy equipment operator (a two-year term position). The new equipment operator will restore and enhance wetlands and other critical fish and wildlife habitats across the refuge. The four new positions will provide an increase in the Service's capacity to complete mission critical projects in the coming years. These four new employees include Brandon Giesler, Keith Atkinson, Keith Findlay, and Kenneth Millerschone (pictured top to bottom). *(Locations of projects addressed by the Ottawa Refuge maintenance crew are indicated by Blue Goose symbols below.)*

With those 7 structures being replaced/repaired, the refuge now has full management capabilities on over 915 acres.







Water Management Success

Water Management

While Lake Erie water levels declined slightly from the record highs of the last two years, overall high lake levels continued to cause some erosion problems. A significant amount of time was devoted to drawdowns for restoration projects and installation or replacement of water control structures identified in the previous section.

With 11 units in drawdown for a total of 1640 acres, Ottawa National Wildlife Refuge had excellent spring migration use of drawdown areas by shorebirds and waterfowl. Annual plant production was outstanding—especially for nodding smartweed which reached 8 feet plus in height in some areas. The units also had very good use by waterfowl in fall migration.

What's Beneath the Surface?

The photos below show the installation and completion of the replacement water control structure on MS 5. It's interesting to see what is happening beneath the surface!

The original structure had failed causing the loss of all water management capability for the 250 acre unit. Funded by H2Ohio, the new structure provides improved fish access, water quality benefits, carp exclusion, and is all aluminum for corrosion resistance.



More to Come in 2022

GLRI Projects

- The Navarre Marsh restoration will restore 790 acres in cooperation with Ducks Unlimited, H2Ohio, Ohio DOW, and Energy Harbor. It will reconnect Pools 2 and 3 to the Toussaint River and Lake Erie hydrology by a fish passage structure, which will provide fish access to the marshes, and water quality benefits by wetland filtration.
- Ottawa NWR coastal project will restore and enhance 600+ acres of habitat throughout the complex through planting and installation of water control structures. Work will include the following areas: Pool 9, HU 6, MS 6, Darby, Two Rivers, and Turkey Run.





Ron Huffman Refuge Biologist



Above: L-R USFWS Regional Director Charlie Wooley, Ron Huffman, ODNR Director Mary Mertz & Jason Lewis try out the updated water control structure in the MS 5 Unit of Ottawa Refuge. Below: Contractors install the new structure to improve water management for fish & wildlife habitat.



MS 5 has Come Alive!

Much of the Ottawa National Wildlife Refuge and the surrounding lands were once part of the Great Black Swamp. A vast network of habitats consisting of forests, wetlands, and grasslands, the Great Black Swamp was biologically diverse. Today much of the swamp has been destroyed, and refuge habitat management involves a variety of tools and techniques that mimic the habitat conditions once common within the Great Black Swamp.

With improved infrastructure Ottawa National Wildlife Refuge had outstanding annual plant response in Moist Soil Unit 5 including nodding smartweed, millet, and nutsedge. Seeds from these plants provide food for migrating waterfowl in the fall.

Photo: USFWS/Ron Huffman

Maintenance Updates

Ottawa NWR Maintenance staff had another big year with lots of accomplishments:

- Enhanced the shoreline to prevent erosion and to improve access for fishing and other public uses at the Nehls Memorial Nature Preserve and created a parking lot and hiking trail. Dave Howell of Howell Orchards graciously volunteered to mow and maintain the trail at the property.
- Built the Fox property parking lot.
- Utilized a Swamp Devil and excavator to manage vegetation in the marshes to improve water management and habitats.
- Certified 6 employees and volunteers on the use of heavy equipment to support Refuge operations and management projects.
 - Replaced damaged sidewalk by Trail Head Parking Lot and poured a new accessible parking area for the pit toilet.

 Poured a pad at the RV parking lot which is utilized by our RV volunteer program.

• Implemented repairs to the boardwalk (pictured right) with more work to occur in 2022.

Karl Fleming Assistant Refuge Manager

IN EQUIPMENT THAT REQUIRES A CDL

miles





Chuck Shier

Maintenance Mechanic

Ohio

Partners for Fish and Wildlife



The Partners for Fish and Wildlife Program is the USFWS program that assists private landowners with habitat restoration projects. 2021 was a good year for private lands restorations. We were able to restore over 146 acres of wetland habitat on 7 different projects and 39 acres of upland habitat on 6 projects. A majority of these projects were completed in Ottawa, Erie, and Sandusky Counties.

Although our normal funding sources have gradually been decreasing, we've been able to partner with other organizations like Ducks Unlimited, Ottawa County Soil and Water Conservation District, USDA, and Ohio Division of Wildlife to leverage \$647,500 from outside sources. The Great Lakes Fish and Wildlife Restoration Act has



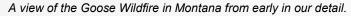
A 39 acre wetland restoration underway just south of Port Clinton.

provided our partnership with crucial funding that allows us to continue restoring habitat in strategic locations. I also spent a great deal of time assisting the ODNR with their H2Ohio initiative. This initiative is aimed at improving the health of waters in the state with a focus on the Western Lake Erie Basin. The improvements are made by restoring cropland back to wetlands and riparian buffers. These restorations will help filter runoff and improve water quality. ODNR is providing landowners with a \$2,000/acre incentive bonus for every acre they restore. **We were able to sign up over**

2,300 acres in Ohio during the first sign up that was offered. A majority of this acreage was in NW Ohio and Ottawa County had the most projects of any county. We are currently at the end of a second application period, where another

1.8 million dollars in incentive bonuses will be awarded to landowners.





As the Private Lands Biologist, I assist with a wide array of activities both on and off refuge. This year I trained 10 people from various refuges on UTV/ ATV's throughout the year and assisted with some tree clearing around the Ranger Station. I also assisted with prescribed fires at Ottawa NWR, Big Oaks NWR, and also spent a couple weeks in Minnesota assisting refuges with prescribed fire needs. We formed a USFWS fire module to assist with wildfires in the West, helping out in SW Montana. We also went to NE Minnesota to help with a large wildfire in September.

Jeff Finn Private Lands Biologist

Wildfire or Prescribed Burn?

A wildfire by definition is an uncontrolled, destructive fire that spreads quickly over woodland or brush.

A prescribed burn is a **planned fire** and is used to meet management objectives. A prescription is a set of conditions that considers the safety of the public and fire staff, weather, and probability of meeting the burn objectives. Prescribed fire is one of the most important tools used to manage habitat today. A scientific prescription for each fire, prepared in advance, describes its objectives, fuels, size, the precise environmental conditions under which it will burn, and conditions under which it may be suppressed. The fire may be designed to create a mosaic of diverse habitats for plants and animals, to help endangered species recover, or to reduce fuels and thereby prevent a destructive fire. Prescribed fire also can be the most cost-effective way to maintain control over invasive plants at Ottawa National Wildlife Refuge.



Maintenance Mechanic Chuck Shier lighting prescribed fire on the Ottawa National Wildlife Refuge Complex's Moist Soil Unit 7 on 4/19/2021.

One month later, a flock of 13 Sandhill Cranes were actively foraging the fire site as new plant growth emerged.

Photos: Ron Huffman/USFWS

Friends Biology Intern



My name is Trevor Zook and I am from Mansfield, Ohio. I graduated from Hocking Technical College in the spring of 2020 with an Associate's Degree in Natural Resource and Wildlife Management. I have always loved nature, especially birds, but in recent years I have developed a passion for plants as well. I've had plenty of volunteer experience at Ottawa, from nest monitoring to conducting frog and bird surveys for the Marsh Monitoring Program. I



"Other duties as assigned". Wetland Tech Trevor Zook cleaning sediment from the MS 8b pump intake pipe.

have always loved this refuge, and getting the opportunity to work here and contribute to the amazing projects and studies that go on here has been a dream come true.

How did you become interested in conservation?

I have always known from a very young age that I wanted to work in some sort of scientific field. Ever since I was a little kid, my parents would take me camping across the state in all sorts of state and county parks. I have been visiting Ottawa for as far back as I can remember. My parents and I have volunteered here for years. Our biggest responsibility is monitoring the

Purple Martin gourds, as well as the Tree Swallow and American Kestrel nest boxes. This amazing refuge has shaped my love of nature and continues to inspire my professional career as well as my hobbies and passions.

What was your role at Ottawa NWR?

I started in the spring as a Wetland Technician, transitioned to Invasive Species Manager in the summer, and ended the year as Hunt Coordinator in the fall. My responsibilities ranged from water level maintenance and monitoring, to invasive species detection and removal, and managing the hunt units and communicating with hunters. I especially love removing the invasive plant species from the refuge, since you can almost immediately see the positive impact it has on the refuge habitats and the native plant species we protect.

What were your top three favorite moments or accomplishments?

I've had so many memorable experiences during my time at Ottawa that it's hard to pick just three. Participating in the nest survey on West Sister Island NWR was an incredible experience. It's amazing to see the unique habitats the island has to offer and visit a place I may never get the opportunity to see again. My favorite accomplishment has to be rediscovering the invasive Japanese Barberry on the refuge, mostly because everyone thought it was gone twenty years ago. I was able to treat 100% of the population, so hopefully this will be one less problem the refuge will have to deal with in the future. My other favorite memory is a lot of memories. Through this job I got to meet so many amazing people, especially the other interns at the refuge. I am very thankful for the relationships I formed over my time here, and I'm sure they'll last a lifetime.

How did your internship prepare you for the future?

I have gained so much valuable experience and training from this internship. The biggest step I made was earning my pesticide applicator license this spring. I have become very passionate about invasive plant management and this license will definitely help me advance my career in that field. I have also worked a lot with water level management, including cleaning and operating various types of pumps and gate structures. I had never worked with water management before, and these experiences have significantly broadened my skillset and opened up many more career opportunities for me in the future.

What are your future plans/dream job?

I plan to go back to school and earn my Bachelor's Degree in the coming year, although I have not decided where just yet. As far as a job is concerned, I would absolutely love to work for the FWS eventually (hopefully at Ottawa), but I'm sure I'll be happy in any conservation-related job as long as I can get out into the field. I would love working with invasive



Trevor Zook Wetland Tech & Hunt Coordinator

plants more in the future and have briefly tossed around the idea of opening a business in that field with a friend from college. I still have plenty of time to figure out what I'll do and where I'll be in the long run, and no matter where I end up, I'm sure I'll be doing what I love.



One of the many goals of the National Wildlife Refuge System is to restore and protect imperiled ecosystems and habitats. Part of that process is managing or eliminating invasive species with herbicide application. The number of individual plants treated this year could fill 33.7 acres of land, if every single plant was side by side. With over 10,000 acres across the refuge complex, there are unfortunately problems that will often go unresolved, so we are forced to prioritize certain species and properties over others. Some of the most concerning species that we treated on the refuge this year

were autumn olive, bush honeysuckle, Canada thistle, purple loosestrife, and phragmites.

Autumn Olive & Shrubs

Invasive shrubs can be very difficult to manage, as they often infect the larger stands of native dogwoods on the refuge, making off-target effects from herbicide applications difficult to avoid at times. One way to counteract this is with cut-stump treatments, where the shrub is cut off near the ground and a small amount of herbicide is applied directly to the fresh cut. This ensures that the chemical goes directly into only

the targeted shrub and does not harm the native dogwoods.

Canada Thistle

Canada thistle is the only invasive thistle on the refuge that is a perennial, meaning it cannot be properly managed by mowing like bull or musk thistle. It often forms dense patches that completely displace the native flora. In these cases, we often broadcast spray the entire area where the thistles have taken over in order to effectively keep them in check.

Purple Loosestrife



Purple loosestrife is a common marsh plant on the refuge that develops a woody root system that makes them very hardy. We often have to spot-spray individual plants' leaves as well as the tops of the roots in order to have the proper effect on larger and older plants. Besides chemical control, biological controls have been used on the refuge for years in an attempt to push this species back. Beetles have been brought to the refuge that specifically feed on loosestrife, and in certain parts of the refuge this management strategy has proven to be very effective.

Biology Interns Trevor Zook & Phoebe Jackson's Phragmites Experiment

One of the most widespread and difficult to manage invasives on the refuge is phragmites, or common reed. This tall and densely clustered grass can be found just about anywhere on the refuge. It has a colonial root system that allows it to spread quickly and efficiently, making it very difficult to keep up with. One management technique for eliminating invasive phragmites is injecting chemical into the stem of the plant. This method is more precise as it eliminates the chances of off-target effects through drifting, a side effect that can often come with foliar spraying. Stem injection treatments are not very common, and research on the topic can be hard to come by, so we decided to create our own experiment.

We started in late June by blocking off a few test plots in the garden behind the Visitor Center. There were some small patches of young phragmites mixed in with all the native wildflowers, and we needed to prevent it from spreading and displacing the desired native flora. We injected multiple stalks with different chemicals in each test plot in order to find out which would be more effective. We cut the stems about an inch off the ground and injected 0.1-0.3 ml of pure chemical into the cut. The hope was that the chemical would work its way down into the roots and spread through the colony, ultimately requiring only a few injections here and there to target a larger area. We monitored the plots for about a month and definitely got the results we were hoping for. The plot for glyphosate, a popular and commonly-used herbicide, seemed to show the best results, with upwards of 90% of the stalks dying back. This proved that the chemical did move through the roots as expected. We hope that we will be able to perform a more proper study on this method next year, with larger test plots and different concentrations of chemicals.

Invasive species management is a year-round job and an ever-evolving process. We worked with over thirty different invasive species on the refuge this year alone, and used many different management strategies. Even though it often feels like an uphill battle, invasive species management can be some of the most rewarding work in restoring and maintaining our vital refuge ecosystems.

Phragmites australis

Thank you for your support in 2021!

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Photo: Foggy Meadow by Bonnie Yarbrough

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In Memory of Robert Kochmit Hilde Pentz Nancy Stein Donald and Adele Wheeler

In Memory of Marilyn Jane Dulgar

<u>In Memory of</u> <u>Robert McPherson</u> Nancy and Ansel Woldt

<u>In Memory of</u> <u>Dhana Capozziello</u> Vince Capozziello

In Memory of Larson LaBine Jason & Samantha Johnson Josh & Christy Noble Candace & Thomas Dewitz Donna L. Genzman Mike & Kelley Guthrie Danny & Chervl Harder Bob & Betty Harder Gary & Chrystal Lipstraw Robert & Marleen Madison John & Lisa McNary Don Reinhart

In Memory of Lee Hoover James & Marilyn Rollins

In Memory of Berta Schlecht Charlie & Karen Peck

In Memory of Roland Romito Rob & Peg Bobel

In Memory of Marilyn Johnson Teresa Kaye Hagedorn

In Memory of Robert Bennett Mary Jo Bennett

In Memory of Ray Wehrman Terri Wehrman

In Memory of William Repka Dr & Mrs Hinman

In Memory of Dr. Alvin Zohn Eileen & Harold Hoffman

In Memory of Gary Neuman Ken Vinciquerra

In Memory of Linda Mary and Ken Schilstra

In Memory of Patricia Myers Gaynelle Predmore

In Memory of Amy Kobosky Rudy Kobosky

In Memory of Richard Pennell Jenny Brenke

In Memory of Clara Jean Casner James Casner

In Memory of Diane Matusic Sharron & Greg Ferrell

In Memory of Mabel Baker Jane & Mark Gravbell

In Memory of Wendy Heather Pottker

In Memory of Theone Caris Patti Hotmer

In Memory of Bob Finkelstein Paula Lozano

In Memory of Jim Crozier Ellsworth & Jennifer Shriver III Dick & Linda Potts

In Memory of Art & Iva Weidner **Dick & Linda Potts**

<u>In Memory of</u> <u>Richard Johnson</u> Susan McPhail

In Memory of John Nicodemus Janice Nicodemus

In Memory of Del Nida Linda Nida

In Memory of Gene Anderson Ed & Donna Peercy

In Memory of Donald Flayer Jamie Rohrer

In Memory of Nadine Walsh Peggy and Peter Seniuk

In Memory of Larry Deb Witherell

ANIMAL ADOPTIONS

Trudy Aleksander Jean Alexander Dennise Amundson Claudia Anders Mary Applegate Aimee & Greg Arent Susie Armstrong Larry Bagwell Nancy Ball Sandy Bartosik Peggy Bliss Steve Blue Kevin Bresnahan Mark Bretz Diana Brown Drs Everett & Ellen Greene Bush Debra J Cailor Vince Capozziello Josephine Capozziello James Casner Randy Cloonan Don Collins Cynthia Constien Brent Cousino Brent Cousino Amy Glendenning Cox Carol Crowlev Carol Fern Culhane Stacy Cupps-Alexander Rebecca Davis Heather Dilly Angie Dornauer Ethan Downey Robert & Lisa Draves Mary Dresbach Tracy K. Dresser Linda Duda Michael Duffey

Jane Dulgar Christi Dunfee Ruth Earl Constance R Faddis Barbara Fifer **Beth Figley** Barbara Ford Kim Frazier Tim Freistuhler Lois Froehlich Ellen George Harold and Carol Hamilton Laura Hamman Chip Haverstick Sharon Heinberger Robin Herman Jan Hiestand John Hinkle Diana Hopkins Pat and Steve Horn Johnston David Kaman Meghan King Gary Kolk Peter Kuntz Judith Lamp Diane LeBlanc Jan Lefkus Caron loshua Leix Elizabeth Lomont Anna Lukasik

> Tracy L Marr Mari-Joan McGovern Patricia McKimmv Barbara McKinley Deborah Meek Sherlee Meyer Linda Miller Deborah Miller Huffman Lori Monska Robert and Lynnette Moyer Dale Muetzel Tracey Muniak Anita Myroniak Candy Navor Janice Nicodemus Mary Obringer Carmen Osborne Tonya J Perry Scott Piter Gretchen Platzke Linda & Dick Potts Gaynelle Predmore September Reau Sarah Riedmaier Amy Rizer Howard & Ann Rosenberg Willard Roth Peter Schwager Mary Selzer Chris Singerling Taiinder Singh Les Smeach Ken South Patrricia Spears Deborah Steinert

Patricia Steinfurth

Jane and Greg Strayer Sarah Svihlik Carol Thierry Connie Tilson Rosemary Titkemeier Janet Trentel William Tuttamore Joan and David Vacco William Verne Carol Wehenkel Cathy Whitt Sherri Winegardner Cynthia Wise Charles & Kathy Wojcicki Mark Worley Mary Maloney Young Bernie Zeiher Sharon Zeinert Judith Zimmerman Greg Sanderson and Stephanie Fryman Friends of Fitchville Conservation League



TRUMPETER CLUB

Aimee & Greg Arent Paul Armstrong Rob & Peg Bobel Susi Brown Joanne Darr Martha Dreier Letha Ferguson Barbara Ford Suzan & Jim George Heather M. Hodges Dr. and Mrs David Jarzen Karen Le Compte Bill & Caryn Long Swarovski Optik Ron & Janice Overmyer Linda Patterson Charles Pike Terry & Lori Totman Martin & Laura Tuck

SNOWY OWL CLUB

Carol Fingerhut Eunice Koebel

EAGLE CLUB

Ruth Ann and Daniel Fraser Jacqueline Kochalski Jacob Price

OSPREY CLUB

Anonymous

Marcia Hornstein Cynthia Johnson Kristina and Doug Jacqueline Kochalski Eunice M Koebel Kathleen Lawrence

Jim Mantel

A Story of Resilience

Dear Friends,

Coming in on the heels of one of the most uncertain years we have faced, 2021 was a true test for all of us. <u>With your help, it has become a story of resilience.</u>

One of the most notable days of the year was August 11 when a severe thunderstorm caused serious damage on Ottawa National Wildlife Refuge. Six out of eight eagle nests on the main complex were blown down and destroyed. The North Woods nest that stood proudly above the tree line for all to see from the Visitor Center was one situation where the tree itself collapsed. This massive oak estimated at 140 years old may very well have been a seedling when the Great Black Swamp was drained. Luckily, bald eagle chicks fledge in July and no eagles were reported to be injured by the storm.

Bald eagles are well known for being our nation's symbol. They are described as strong, powerful, and awe-inspiring to each visitor who comes to see them. One thing you may not know is that they are highly adaptable. Frozen water and no access to fish? They'll eat roadkill to survive the winter.



Bald eagle gathering sticks from a muskrat hut by Sherri Winegardner

Trees collapse? They will salvage sticks and rebuild nearby. Watching the eagles adapt to these challenges reminds me of our refuge crew and Friends organization. Throughout this report, you've read ways that our team has also been adaptable and resilient when faced with difficult times.

In spite of those difficult economic times, Friends of Ottawa NWR was fortunate to:

- Sponsor seven internships—including Jessica and Trevor who you met in this report
- Open an ADA compliant kayak access
- Purchase and restore a 16.5 acre parcel & have another 12 acre parcel under contract
- Secure funding for picnic shelter at the Nehls Memorial Nature Preserve and funding for an ADA compliant trail at the Fox Nature Preserve (coming in 2022)



- Receive two prestigious awards—the Public Lands Partner Award & the Nonprofit Excellence Award
- Recruit 3 new board members who will continue to move the Friends group forward

While our eagles adapt to challenges and rebuild their nests, we continue to adapt as well, and with your support we will start 2022 stronger than ever.

Ottawa National Wildlife Refuge continues to be a place where we find the peace and strength to face these uncertain times. We invite you to become involved. **Visit** <u>www.friendsofottawanwr.org</u> to sign up for our mailing list and plan your visit today. We can't wait to see you.

Aimee Arent

Friends Executive Director

Survival is to Begin Again.

This oak holding one of the oldest eagle nests on the Ottawa National Wildlife Refuge Complex collapsed during a severe thunderstorm on August 11, 2021. Numerous large trees were lost throughout the Refuge Complex, with ages to at least 140 years old. Look closely and you will see Biologist Ron Huffman's hat on the trunk for size reference.

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Six of eight eagle nests were lost during this storm. By late 2021, all eagle pairs were building new nests on the refuge. *Photo: USFWS/Ron Huffman.*





Scan to Shop!

Did you know that the Ottawa National Wildlife Refuge Visitor Center was only open for limited hours on 24 days this year? That means that the Rookery Nature Store had to find creative ways to reach our visitors and that's exactly what we did! We brought our store outdoors with "pop-up shops" & into your home, or anywhere, with **The Rookery Nature Store Online**! It was wonderful chatting with so many of you this year, hearing about what makes Ottawa NWR so special to you & helping you find items to support your refuge. Because of the continued support of our visitors in 2021, the Rookery Nature Store realized almost quadruple the revenue of the previous year. **Thank you!**

The Friends of Ottawa NWR used the continued shutdown in 2021 to switch over our point of sale system to offer our supporters a new website to shop, as well as new checkout options; even tap-to-pay! We think that these changes will be beneficial to our volunteers who help run the Nature Store as well as offer our visitors more payment options making checkout quicker and easier than ever.

The store is full of unique and custom products that focus on native and migratory wildlife at Ottawa NWR. We work with local artists, offer products made in the USA as well as eco-friendly and fair trade products. Check it out!

Proceeds from The Rookery Nature Store support wildlife conservation at Ottawa NWR.

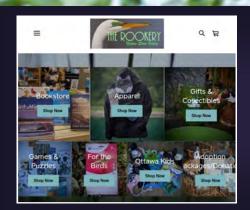


Founded in 1975, the Refuge Association's mission is to conserve America's wildlife heritage for future generations through strategic programs that protect and enhance the National Wildlife Refuge System and the landscapes beyond its boundaries.

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. Learn more online.

www.refugeassociation.org



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