

**2019
Annual Report
Put-in-Bay Township Park District**

**To
Common Pleas Court of Ottawa County**

***Dedicated to protecting and preserving
unique areas that enhance the heritage
of the Lake Erie Islands***

2019

Annual Report



P. O. Box 177
Put-in-Bay, Ohio 43456

Welcome to your Preserves!

Twelve years ago, the citizens of the islands created Put-in-Bay Township Park District. With the encouragement and support of property owners, individuals, organizations, the State of Ohio, and the Federal government, we have been able to safeguard and protect forested areas, wetlands, and grass lands which are disappearing to development at an alarming rate. With your help, we have been able to complement commercial and residential development with areas of green -- natural areas that preserve the treasures of the Lake Erie Islands. The Park District is proud of its accomplishments.

Thank you.

Members of the Board of Commissioners

Lisa Brohl

Kendra Koehler

Kelly Faris

FORMATION OF PUT-IN-BAY TOWNSHIP PARK DISTRICT

On July 18, 2006, a petition to form a park district (Consistent with Ohio Revised Code 511.18) was presented to the Put-in-Bay Township Trustees.

This petition was forwarded by the Put-in-Bay Township Trustees to the Ottawa County Board of Elections where the signatures were authenticated and validated by that agency.

The validated petition was forwarded on August 14, 2006, to the Ottawa County Common Pleas Court.

On September 7, 2006, Judge Paul Moon, Ottawa County Common Pleas Court, held a hearing on the appointment of the Board of Park Commissions (Common Pleas Court Case No: 06MI022). Legal Counsel for the Township; Trustee Glenn Cooper; and Kelly Faris attended the hearing before Judge Moon.

At that hearing, Judge Moon appointed the following individuals to the Board of Park Commissioners of Put-in-Bay Township Park District:

Marvin Booker, one year term. Lisa Brohl, two year term Kelly Faris, three year term.

On the expiration of each term, the Board of Commissions of Put-in-Bay Township Park District shall recommend to the Ottawa County Court of Common Pleas a person to fill that position. After the expiration of the original terms of office, each term of office shall be for a period of three (3) years.

The first meeting of the Commissioners of Put-in-Bay Township Park District was held on September 19, 2006.

At the General Election on November 6, 2007, an overwhelming majority of the electorate voted Yes on Issue 5 creating Put-in Bay Township Park District and affirming the action of the Common Pleas Court of Ottawa County.

The Board of Commissioners of Put-in-Bay Township Park District files an annual written report to the Ottawa County Court of Common Pleas. Put-in-Bay Park District is audited by the State of Ohio every two years.

Commissioners (Commissioners serve a three year term without compensation)

Kendra Koehler
Box 384
Put-in-Bay, Ohio 43456

Three Year Term
Term Expires: May 2020

Lisa Brohl
Box 155
Put-in-Bay, Ohio 43456

Three Year Term
Term Expires: May 2021

Kelly Faris
Box 404
Put-in-Bay, Ohio 43456

Three Year Term
Term Expires: May 2022

PIBTPD Protected Properties		MB Total	Middle Bass Island Forested Wetlands Preserve MBIFWP
Petersen Woods	1.50	1.50	
Lawrence Evans	0.75	0.75	
Prokesh	0.50	0.50	
Ladd-Carr	2.10		
Jane Coates Wildflower Trail	3.00		
Jane Coates Wildflower Trail Addition	2.00		
Woischke Purchase-LEICHP	2.00		
Gump Woods	0.50		
Scheeff East Point Preserve	9.00		
MBI East Point Preserve	8.00	8.00	
Costello Tract	4.00	4.00	
Massie Cliffside Preserve	7.00		
Knam Purchase	4.00		
MBI Forested Wetland-Schneider	7.33	7.33	7.33 WRRSP
MBI Forested Wetland-Burgundy Bay	6.27	6.27	6.27 WRRSP
MBI Forested Wetlands	2.00	2.00	2.00 CELCP Clean Ohio
Dieperink	7.54	7.54	7.54
Dodge	3.00		
MBI Forest Wetland-Private small	1.90	1.90	1.90 CELCP/ Clean Ohio
Victory Woods-Foley	0.50		
Burgundy Parcels	5.80	5.80	5.80 Conservation Fund
Hahn Tract	8.30	8.30	8.30
Island Development	4.40	4.40	4.40
TOTALS	91.39	58.29	43.54
Under Contract			
Coopers Woods	18.70		
Dodge Woods	0.75		
Cleveland Tract	2.36	2.36	
Benjamin Tract	2.54		
Manderbach	0.46	0.46	
	116.20	61.11	

WRRSP - Water Resource Restoration Sponsor Program
 CELCP - The Coastal and Estuarine Land Conservation Program
 Clean Ohio Fund - Preserving green space/improving outdoor recreation

Put-in-Bay Township Park District
Preserved and Protected Natural Areas

Massie Cliffside Preserve



Location: South Bass Island, East Point, State Route 357

Parcel: 024057531074400 Acres: 11
0242052233337001

Access: Parking area, canoe, and kayak

Trails: Rugged, hazardous areas, cliffs

This 11 acre shoreline parcel on the East Point of South Bass Island includes cliff habitat and a dock for fishing. Clean Ohio Conservation Funds, a Nature Works Grant, Ohio Coastal Management Grant, Coastal and Estuarine Land Conservation Program, the Lake Erie Islands Conservancy, private donations, and the land owner donation provided funding for the purchase and restoration.

A 1,750 foot trail winds through the woods to the cliffs, affording a spectacular view of Lake Erie and the surrounding Islands. Columbine and harebells bloom on the cliffs in the summer.

Scheeff East Point Nature Preserve



Location: South Bass Island – State Route 357, East Terminus

Parcel: 0240802110662000 - 11150 Acres: 9.1

Access: Foot, canoe, and kayak

Trails: Rugged, natural hazards

The Scheeff East Point Nature Preserve was the first property acquired by the Park District. Funding for the purchase was provided by the US Fish and Wildlife Service-Section 6 Grant, Western Reserve Land Conservancy, First Energy, Lake Erie Islands Conservancy, Clean Ohio Conservation Fund, Black Swamp Conservancy, Ohio Department of Natural Resources Division of Wildlife, Lorain National Bank, Ohio Department of Natural Resources Natural Areas and Preserves, private donations, and a significant donation by Rose B. Scheeff. With 1,700 feet of Lake Erie shoreline, the Park is one of the last remaining natural settings for people to enjoy South Bass Island. Offering spectacular views of Lake Erie and the surrounding Islands, East Point's rocky shores, shallow water, and upland cover also provide habitat for the Lake Erie watersnake, thousands of migratory songbirds and waterfowl, and a host of shoreline plants. Fishing and bird watching take place on the property. A 2,205 foot looped hiking trail winds its way through the Scheeff Preserve.

Jane Coates Wildflower Trail -- Ladd Carr Wildlife Woods



Location: South Bass Island – Put-in-Bay Road
Parcel: 0240659128669004 and 020659128669003; Part of Parcel
0240659128669000; 0240658828667005; 0240817710847001;
024065912866900; 0240659128669002; 0240817310843000

Acres: 9.1
Access: Foot
Trails: Rugged, natural hazards

Jane Coates Wildflower Trail and the Ladd Carr Wildlife Woods is a mature forested area, providing habitat for local species of birds and for migratory species.

Wild hyacinths and Dutchman's breeches are abundant in the spring.

Funding for these purchases was provided by Lake Erie Islands Conservancy, Clean Ohio Conservation Fund, Nature Works, and private donations.

A 2,550 foot looped hiking trail weaves its way through an abundance of wildflowers in the spring. A bench in the back of the preserve offers a place for wildlife watching.

Middle Bass Island East Point Preserve



Location: Middle Bass Island, North Shore Road
Parcel: 023-02887-03657-000 – North Shore Road Acres: 7.82
Access: Canoe and kayak only
Trails: Rugged, natural hazards

The Middle Bass Island East Point Preserve consists of exceptional Lake Erie Islands shoreline and interior island habitat on Middle Bass Island. The property hosts a diversity of habitats including natural beach lands, hardwood forest, and grasslands, which attract large numbers of migrating bird and songbird populations. The preserve provides critical habitat for the Lake Erie Watersnake. Because of habitat protection at this preserve and other Park District preserves, the Lake Erie Watersnake has been removed from the list of federally endangered and threatened species. Located near the tip of the Island's northeastern peninsula, the preserve overlooks Schoolhouse Bay, a popular destination for boaters and swimmers, and it contains a shallow-water pier for canoes and kayaks. It is one of the first kayak accessible parks in Ohio. Trout lilies bloom in the preserve each spring.

USGS Master Bander Tom Bartlett has identified over 120 species of birds at this site. More than thirty unique plant and tree species have also been identified.

Costello Tract Preserve - Middle Bass Island East Point Preserve



Virginia Bluebells

Location: Middle Bass Island, North Shore Road
Parcels: 023-06624-16348-000023-06624-16350-000
023-06624-16339-000023-06624-16340-000 Acres: 3.937
Access: Area not open until trails are established.

The 3.937 acre parcel is a unique forest area. The property provides a natural habitat for wildlife and plants. The Audubon Society and Birdlife International have identified the Lake Erie Islands as an important bird area. The Costello Preserve protects and maintains a forest community for migratory birds who use the Mississippi and Atlantic Flyways. A number of State of Ohio and federally listed species have been identified on the property including the melanistic Eastern Garter Snake, the Lake Erie Watersnake, and the Eastern Fox Snake.

The Costello Tract Preserve was purchased by the Put-in-Bay Township Park District in April of 2013 with Clean Ohio Funding (Ohio Public Works Commission Project No. CEGAB). The Black Swamp Conservancy of Perrysburg, Ohio, maintains a conservation easement on the property and the Middle Bass Island East Point Preserve, ensuring that these tracts will be maintained in its natural state in perpetuity.

Middle Bass Forested Wetlands Preserve Schneider Tract



Baltimore Oriole

Location: Middle Bass Island, Fox Road
Parcel: 023028680363000 Acres: 7.331
Access: Area not open until trails are established.

The Schneider Tract on Middle Bass Island, consisting of 7.331 acres, is part of an area defined in the publication, *Islands of Life: A Biodiversity and Conservation Atlas of the Great Lakes Islands* (2010), as an area that supports “globally rare shoreline, alvar, savanna and forest communities, which support globally significant biodiversity and important ecological functions.” According to this publication, “the key ecological systems of the western Lake Erie Islands are wetlands (marshes and swamps) and limestone⁷ plain forest complexes.”

These areas are rapidly disappearing within the Lake Erie Islands. This project protects these significant and sensitive wetlands.

The Schneider Tract is a limestone plain wetland forest whose hydrology is directly linked to Lake Erie water levels. The land provides migratory song bird habitat as well as breeding grounds for numerous varieties of amphibians.

Restoration and protection of this property is safeguarded by an Environmental Covenant with the Ohio Environmental Protection Agency. A report is filed each year with the OEPA.

Middle Bass Forested Wetlands Preserve Burgundy Bay Tract



Location: Middle Bass Island

Parcels: 0231322008340000, 3230322004392000, 0230322004410000
Acres: 14

Access: Area not open until trails are established.

Eight acres were added in 2017 and 2018 to the Middle Bass Island Forested Preserve – The Burgundy Bay Tract. The parcel is now 14 acres of limestone plain wetland forest habitat characterized by its geology – a relatively thin layer of soil overlaying carbonate bedrock whose hydrology is directly influenced by Lake Erie water levels. It is the largest remaining block of unprotected forested land on Middle Bass. The limestone plain forest provides rare habitat that has been largely lost throughout the Islands. The Eastern Fox Snake and the Lake Erie Watersnake are found on the site. The property is located in the North American migratory flyway and Atlantic flyway through which thousands of birds fly south to their wintering habitat and north to breeding grounds. A portion of this property is protected by an environmental covenant with the Ohio Environmental Protection Agency. Deed restrictions in place by the United States Fish and Wildlife Service protect the remainder of the tract purchased through the Conservation Fund.

Middle Bass Forested Wetlands Preserve Dieperink Tract

Location: Middle Bass Island

Parcels: A portion of 0230349404009000 – 7.6 acres

Access: Area not open until trails are established.

On January 11, 2018, Put-in-Bay Township Park District purchased the 7.6 acres from the Dieperink family. The purchase was funded with a Clean Ohio Conservation Fund Grant and a Coastal Estuarine Land Conservation Program.

Combined with the 7 acre Schneider Tract owned by the Park District, the tract is now 13.6 acres of contiguous forest. The eastern portion of this parcel is slightly higher in elevation. There is swamp forest of silver maples, elm, and swamp white oak.

Many dead and dying green ash trees are on this parcel and the adjacent Schneider tract. Camille Manoukian, an REU (Research Experience for Undergraduates) student from the Ohio State University Stone Lab and Lisa Brohl did research on this tract and the Schneider tract the summer of 2017 to determine what trees are replacing the dead green ash which were devastated by the emerald ash borer.

Rough-leaved dogwood and buckthorn are growing in sunny areas. The nonnative amur honeysuckle are also growing in the area.

EnviroScience removed invasive amur honeysuckle and buckthorn by basal spraying in 2017 and 2018. EnviroScience is a company that specializes in ecological consulting and ecological restoration throughout the United States and Canada, providing technology, recommendations, and solutions to meet environmental compliance needs. This work is funded by a National Park Service Great Lakes Restoration Initiative grant. Matthew Monteith, a REU student, studied the forest composition of the two plots after this removal and analyzed soil samples from the parcels in 2018. The higher ground holds sugar maples, hackberry, and eastern red cedar. The area is within ¼ mile of Lake Erie providing ideal habitat for migratory birds. The eastern fox snake and melanistic eastern garter snake are found in this tract. Because of their rarity, both are listed as “Species of concern.” Hibernacula for the Lake Erie Water Snake is also on the Dieperink Parcel.

Middle Bass Island Forested Wetlands Preserve Hahn Tract



Acres: 8.2

Location: Middle Bass Island

The Put-in-Bay Township Park District purchased 8.2 acres from Karl Hahn on July 3, 2019. The purchase of these mature wet woodlands was made possible with grants from the Clean Ohio Conservation Fund and the Coastal Estuarine Land Conservation Program. Mr. Hahn retained the 1 acre lot with his construction equipment on it and sold the remaining 8.2 acres to the Township Park District. Eventually trails will connect all portions of this Wetland Preserve. For now, they protect some of the most mature swamps on the Bass Islands.

Among all parcels operated by the Park District, this parcel is the richest ecologically with eastern cottonwood, silver maple, American elm, and swamp white oak with an understory of sedges, grasses, and shrubs. This woodland has been underwater during the recent record high levels of Lake Erie. Vernal pools provide a place for unisexual *Ambystoma* salamanders to feed and breed in early spring. These salamanders have a genetic makeup of more than one species including the Streamside Salamander (*Ambystoma barbouri*), the Blue-spotted Salamander (*Ambystoma laterale*) and the Smallmouth Salamander (*Ambystoma texanum*) and can have physical characteristics of all species. The populations of these complexes are all female and reproduce with a highly unique mode of reproduction, known only to occur in these animals.

Middle Bass Forested Wetlands Preserve Island Development Corporation Parcel



Great blue lobelia photo by Chad Machinski

Acres: 4.4 Acres
Location: Middle Bass Island

The Put-in-Bay Township purchased the Island Development Parcel from the estate of Roy Curtis and the Burgundy Bay Association on August 24, 2019, with funds from the Coastal Estuarine and Land Conservation Fund and the Conservation Fund. The lands were preserved in part by TC Energy and its subsidiary Columbia Gas LLC in partnership with the U. S. Fish and Wildlife Service in Ohio and the Conservation Fund. Additional funds were provided by the United States Environmental Protection Agency's Great Lakes Restoration Initiative (GLRI) implemented through the National Oceanic and Atmospheric Administration's Coastal and Estuarine Land Conservation Program. Gayle Rini-Curtis and the Burgundy Bay Association donated funds for the preservation of these parcels for the future.

Fronting Fox Road, the parcel has early successional habitat with a more mature swamp forest at the rear. This parcel was key to connect the Hahn tract with the existing Burgundy Bay Tracts to extend the protected Forested Wetlands Preserve. The Park District owns over 43 acres in one location.

Dodge Woods Preserve



Location: South Bass Island – Corner of Thompson and Langram Road
Parcel: 3.6 acres
Access: Foot
Trails: Rugged, natural hazards - A 852 foot looped trail

Dodge Woods was purchased by the Put-in-Bay Township Park District with Clean Ohio Conservation Fund Grants, Lake Erie Islands Conservancy, the John Ladd family, and the John Dodge Family.

This wooded area is mostly young forest. There is a mix of black walnut, common hackberry, black cherry, Kentucky coffeetree, wild grape, mulberry and eastern red cedar with some planted conifers and fruit trees on the edges as well as herbaceous plants and sedges. Spring wildflowers such as Virginia waterleaf, bloodroot, wild leeks, false Solomon's Seal, and buttercups are found in the trail area. Enchanters nightshade as well as the tall bellflower are followed by Short's aster and goldenrod in the fall.

The variety of habitats makes it an inviting stop for birds in the spring and fall migration season. The Eastern Fox Snake and the melanistic Eastern Garter Snake are found in the area.

The property is adjacent to the bicycle path on the island. Hiking, nature photography, bird watching, and scientific study are allowed. No motorized vehicles or camping are permitted.

The Put-in-Bay StoryWalk© is located within the Dodge Woods Preserve. Seventeen storyboards are placed along the trail with pages from children's books displayed on each board. Books are changed periodically by the Erie Islands Library manager Karen Wilhelm. The StoryWalk is sponsored with donations from the Ottawa County Community Foundation, community businesses and residents. Paula Ziebarth placed bird nesting boxes along the trail as well.

Black Swamp Conservancy to Put-in-Bay Township Park District

In January 2016 the following Tax Exempt properties, owned by the Black Swamp Conservancy, Perrysburg, Ohio, were donated and transferred to Put-in-Bay Township Park District:

<i>Name</i>	<i>Location</i>	<i>Parcel Number</i>	<i>Acres</i>
-------------	-----------------	----------------------	--------------

Gump Woods-South Bass Island—Victory Woods.

Gump Parcel	South Bass island	0240567603569000	.5
-------------	-------------------	------------------	----

.....

Petersen Woods-Middle Bass Island-1.5 acres.

Petersen Woods	Middle Bass Island	0230294603727000	1.5
----------------	--------------------	------------------	-----

.....

Prokesh Property-Middle Bass Island-Burgundy Bay.

Prokesh Parcel	Middle Bass Island	0230593028597000	.5
----------------	--------------------	------------------	----

.....

Lawrence Evans Property-Middle Bass Island

Lawrence Evans Parcel	Middle Bass Island	0230822718184001	.75
-----------------------	--------------------	------------------	-----

.....

Jane Coates Wildflower Trail-South Bass Island-3 acres.

LaPlante Parcel	South Bass Island	0240658828667005	
LaPlante Parcel	South Bass Island	0240817710847001	
Woischke Parcel	South Bass Island	0240659128669001	
Woischke Parcel	South Bass Island	0240659128669002	

Ladd Carr Wildlife Woods-South Bass Island-2.1 acres.

Brucken Parcel	South Bass Island	0240817310843000	
----------------	-------------------	------------------	--

Lake Erie Water Trails – Dedication



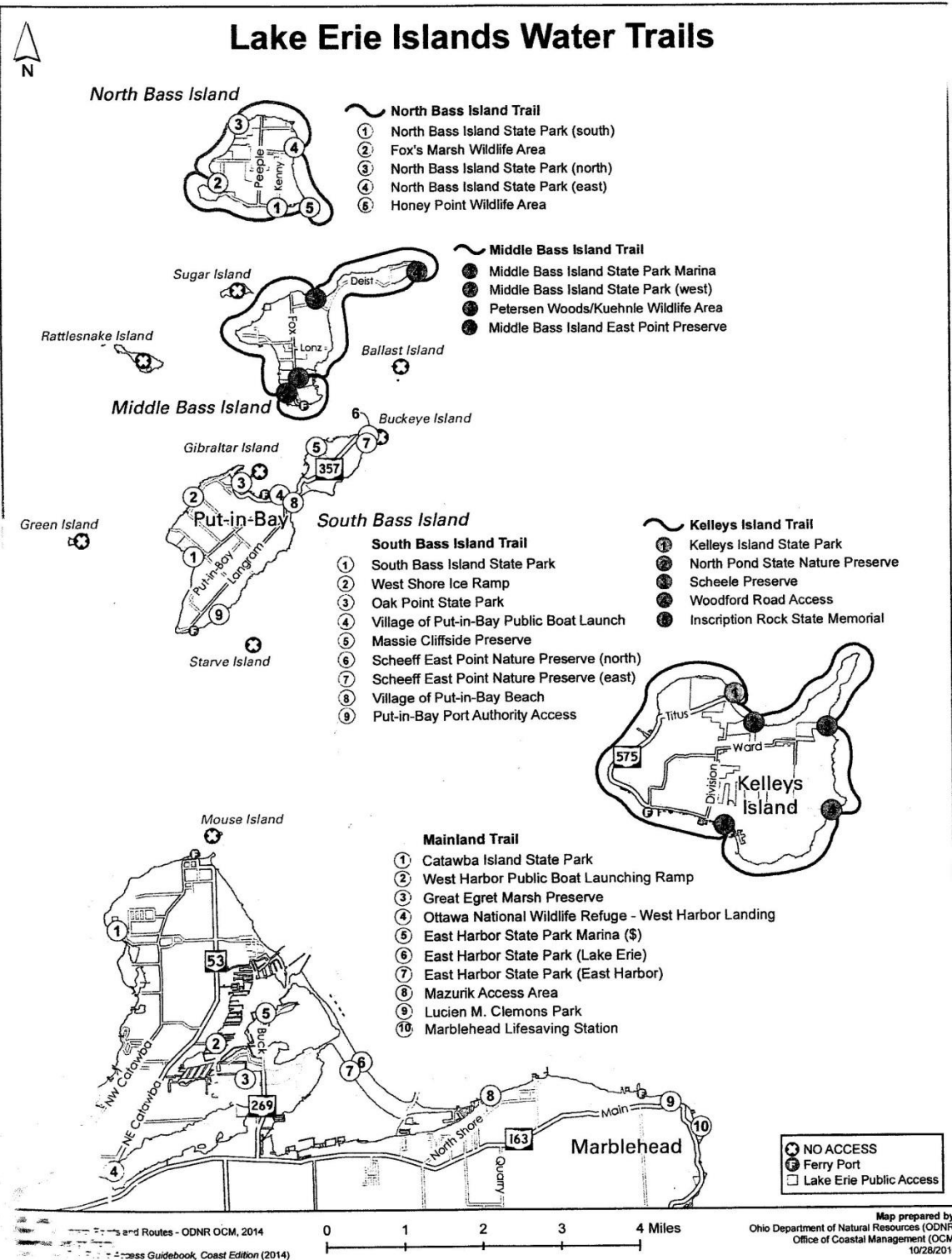
Lisa Brohl, CEO of Put-in-Bay Township Park District, watches as Mary Metz, director of the Ohio Department of Natural Resources, signs the document designating the Lake Erie Island Water Trail as an official water trail of the State of Ohio.

On Tuesday, August 6, 2019, at the State Park at Oak Point, Put-in-Bay, Ohio, approximately 40 people attended the formal dedication by the State of Ohio of the Lake Erie Islands Water Trail. A number of speakers recognized and praised development of the trail and the brochure that provides information on the newest of the State's Water Trails.

Mary Mertz, director of the Ohio Department of Natural Resources, provided final comments during the brief ceremony and said, "The state's water trails help bring communities together, encourage environmental awareness and provide opportunities for people to be active." After her comments, Director Mertz signed the official document designating the Lake Erie Islands Water Trail and a State of Ohio Water Trail. There are now 12 Ohio Department of Natural Resources designed Water Trails.

The Lake Erie Water Trail has five separate routes totaling more than 50 miles around North Bass, Middle Bass, South Bass Islands, Kelleys Island, and along the mainland of Catawba Island and East Harbor State Park. Each route is unique. Put-in-Bay Township Park District was the lead agency in developing the Lake Erie Islands Water Trail, and Lisa Brohl, Chief Executive Officer of the Park District, spearheaded the Water Trails project. Andrea Irland from the National Park Service's Rivers, Trails and Conservation Assistance Program provided technical assistance. Ohio Sea Grant developed the brochure and map of the Lake Erie Water Trails. The project was made possible by an Ohio Environmental Education Fund (OEEF) grant from the Ohio Environmental Protection Agency.

The Lake Erie Islands Water Trails has now become an official State of Ohio Water Trail. As a result of this official designation, the Park District became eligible to have brochures and replacement signs funded by the Ohio Department of Natural Resources.



Kristin Parrish:

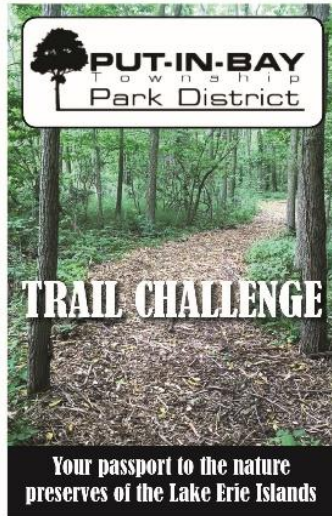


Kristin Parrish, a graduate student at the Ohio University Voinovich School of Leadership and Public Affairs, worked with the Put-in-Bay Township Park District to pursue her Master of Science in Environmental Studies. Her study was titled “A Mixed Media Campaign to Facilitate Public Participation in Recreation and Conservation of the Put-in-Bay Township Park District's Nature Preserves: A Question of Media Effectiveness.” She developed a print brochure, a social media program, and a trail challenge project.

Kristin graduated from Ohio University in 2013 with a Bachelor of Science in Environmental Geography and a minor in Political Science. She was employed by the Ohio Environmental Protection Agency’s Division of Air Pollution Control for five years and now works for OEPA in the Office of Financial Assistance as an environmental planner. Her duties are to provide funding for the protection or restoration of Ohio’s natural areas and to complete various wastewater or drinking water infrastructure projects in communities around Ohio. Ms. Parrish was awarded her Master’s Degree from Ohio University in December 2019. Ms. Parrish’s research projects at Put-in-Bay Township Park District Preserves were influential in her receiving her advanced degree. Lisa Brohl, CEO of the Park District, was a member of Kristin Parrish’s Masters Committee.

*The winds will blow their own freshness into you, and the storms their energy,
while cares will drop away from you like the leaves of Autumn.”*

— John Muir



The Trail Challenge was a great success. The Park District initially printed 1,000 booklets and needed to order additional copies. The Trail Challenge involved visiting all the Preserves of the Park District. Thanks to Christine Ontko of Freshwater Remedies for sponsoring the Challenge with a gift for those who finished all five trails. Thanks to Brian Cultice who laid out the brochure.

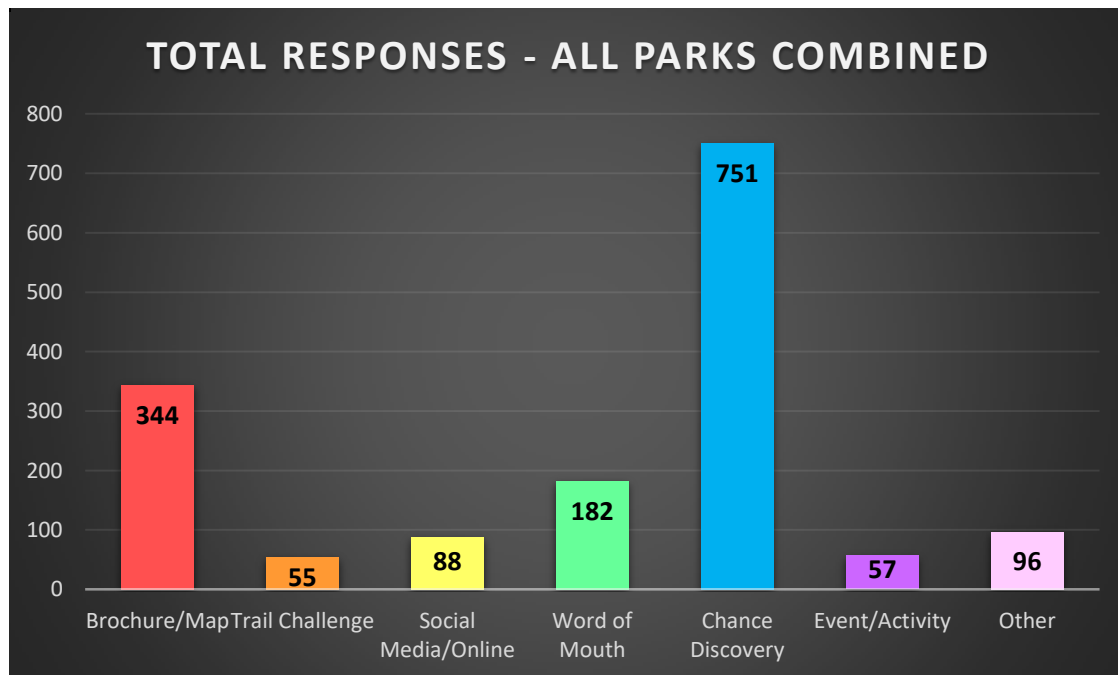
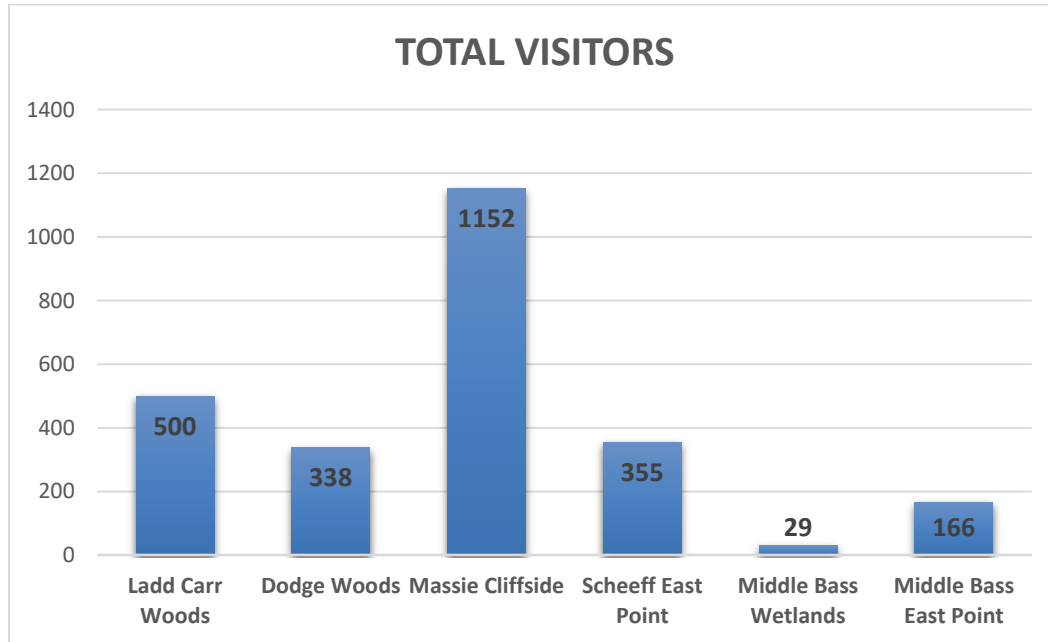


Christine Ontko of Freshwater Remedies presents
an award for completing the Trail Challenge to
Dr. Susan Rasche of The Ohio State University, Stone Lab.

“The creation of a thousand forests is in one acorn”

— Ralph Waldo Emerson

Survey: Responses from visitors who took survey (Data by Kristin Parrish)



Island Wildflower List and Locations

Sharp lobed Hepatica	<i>Hepatica acutiloba</i>	
Pink Spring or Purple Cress	<i>Cardamine douglassi</i>	JT
Cut-leaf Toothwort	<i>Dentaria laciniata</i>	JT, MC
Bloodroot	<i>Sanguinaria Canadensis</i>	LEINWC
Large-flowered Trillium	<i>Trillium grandiflorum</i>	CW
Dutchman's Breeches	<i>Dicentra cucullaria</i>	JT, DW, CW
Rue Anemone	<i>Thalictrum thalictroides</i>	CW, MC
Wild Leeks or Ramps	<i>Allium tricoccum</i>	JT, CW
May Apple	<i>Podophyllum peltatum</i>	JT, DW
Appendaged Waterleaf	<i>Hydrophyllum appendiculatum</i>	JT, DW
Virginia Waterleaf	<i>Hydrophyllum virginianum</i>	DW, CW, JT
Columbine	<i>Aquilegia Canadensis</i>	MC
Spring Beauty	<i>Claytonia virginica</i>	MC
False Solomon's Seal	<i>Maianthemum racemose</i>	JT, MBIEPP
Starry Solomon's Seal	<i>Maianthemum stellate</i>	CW
Solomon's Seal	<i>Polygonatum biflorum</i>	JT,
Hairy Solomon's Seal	<i>Polygonatum pubescens</i>	MBIEPP
Wild Hyacinth	<i>Camassia scilloides</i>	JT
White Trout Lily	<i>Erythronium albidum</i>	MBIEPP, SEPP
Yellow Trout Lily	<i>Erythronium americanum</i>	
Dame's Rocket	<i>Hesperis matronalis*</i>	MCP, LEINWC
Sweet Cicely	<i>Osmorhiza longisylis</i>	ALL
Blue Phlox or Wild Sweet William	<i>Phlox divaricata</i>	JT
Northern Bog Violet	<i>Viola nephrophylla</i>	
Downy Yellow Violet	<i>Viola pubescens</i>	JT, CW
Common Blue Violet	<i>Viola sororia</i>	
Early Meadow Rue	<i>Thalictrum dioicum</i>	JT
Hairy Beardstongue	<i>Penstemon hirsutus</i>	MCP
Herb Robert	<i>Geranium robertianum</i>	ALL
Wild Geranium	<i>Geranium maculatum</i>	CW
Virginia Bluebells	<i>Mertensia</i>	CT
Thimbleweed	<i>Anemone virginiana</i>	
Canada Anemone	<i>Anemone canadensis</i>	
Garlic Mustard	<i>Alliaria petiolata*</i>	ALL
Smooth Rock Cress	<i>Arabis laevigata</i>	
Alumroot	<i>Heuchera americana</i>	
Jack in the Pulpit	<i>Arisaema triphyllum</i>	JT, LEINWC
Large Flowered Bellwort	<i>Uvularia grandiflora</i>	
Upright Smilax	<i>Smilax ecirrata</i>	JT
Carrionflower	<i>Smilax herbacea</i>	JT
Spreading Chervil	<i>Chaerophyllum procumbens</i>	JT, LEINWC
Squawroot	<i>Conopholis Americana</i>	CW

Harebell	<i>Campanula rotundifolia</i>	MCP
Iris	<i>Iris versicolor</i>	PW
Spotted Jewelweed	<i>Impatiens capensis</i>	
Pale Jewelweed	<i>Impatiens pallida</i>	JT
Enchanters Nightshade	<i>Circaea quadrisulcata</i>	JT, DW
Jumpseed	<i>Phryma longistylus</i>	JT, DW, CW
Short's Aster	<i>Symphiotrichium shortii</i>	ALL
Calico Aster	<i>Symphiotrichium ericoides</i>	
Pringle's Aster	<i>Symphiotrichium pilosum</i> var. <i>pringlei</i>	
Tall Goldenrod	<i>Solidago altissima</i>	ALL
Zigzag Goldenrod	<i>Solidago flexicaulis</i>	
Grass-leaved Goldenrod	<i>Euthamia graminifolia</i>	
<i>Great Blue Lobelia</i>	<i>Lobelia siphilitica</i>	MBIFWP
<i>Ditch Stonecrop</i>	<i>Penthorum sedoides</i>	MBIFWP

Jane Coates Wildflower Trail-JT
Middle Bass Island East Point Preserve-MBIEPP
Scheeff East Point Preserve-SEPP
Massie Cliffside Preserve-MCP
Petersen Woods-PW
Costello Tract-CT
Coopers Woods-CW
Gump Woods-GW
Middle Bass Island Forested Wetland Preserve-MBIFWP
Lake Erie Islands Nature and Wildlife Center-LEINWC

*"The woods are lovely, dark, and deep,
But I have promises to keep,
And miles to go before I sleep,
And miles to go before I sleep."*

— Robert Frost

Research and Monitoring

2019 Lake Erie Watersnake Summary

Large Island Surveys:

In 2019, the presence of Lake Erie Watersnakes (LEWS) was studied and documented at 10 field sites on the five large US islands in the Western Basin of Lake Erie - Kelleys, South Bass, Middle Bass, North Bass, and Gibraltar Islands. A total of 1,458 LEWS were captured, 303 from Kelleys, 376 from South Bass, 124 from Middle Bass, 380 from North Bass, and 275 from Gibraltar (Table 1, Table 2).



Snake Fungal Disease (SFD):

Continuing the project began in May 2017, we surveyed LEWS for the fungal pathogen *Ophidiomyces ophiodiicola* linked to Snake Fungal Disease (SFD). To do this, we swabbed symptomatic and non-symptomatic individuals at our 5 surveillance, or control, field sites at South Bass Island State Park, South Bass Island East Point, Middle Bass Island State Park, Kelleys Island State Park, and Gibraltar Island. A total of 336 LEWS were swabbed for SFD, 51 from Kelleys, 173 from South Bass, 43 from Middle Bass, 21 from North Bass, and 48 from Gibraltar (Table 3). The swabs that were taken during the 2019 field season were sent to Dr. Matt Allender's lab at the University of Illinois. The results of the surveillance sites yielded an *O. ophiodiicola* prevalence of 50% at South Bass Island State Park, 63% at South Bass Island East Point, 69.8% at Middle Bass Island State Park, 70.2% at Kelleys Island State Park, and 48.7% at Gibraltar Island. In addition, 30 symptomatic snakes were transported to the Wildlife Epidemiology Laboratory at the University of Illinois College of Veterinary Medicine. These animals were divided into control and treatment groups. The treatment groups received nebulization with a 2mg/mL terbinafine solution while the control snakes received saline nebulization for 30 minutes daily for 30 days at a time. Results are pending as the trial is still in progress.



Table 1. Captures of LEWS on the five large US islands in the Western Basin of Lake Erie

Island	Number of Snakes
Kelleys	303
South Bass	376
Middle Bass	124
North Bass	380
Gibraltar	275
Total	1,458

Table 2. Captures of LEWS at 10 field sites on the five large US islands in the Western Basin of Lake Erie.

Island	Site	Number of Snakes
Kelleys	State Park	141
	Southeast Shore	72
	South Shore Docks	50
	Long Point	40
South Bass	State Park	249
	East Point	127
Middle Bass	State Park	124
North Bass	South Shore	327
	N, NE, E Shore	53
Gibraltar	Gibraltar Island	275
Total		1,458





Table 3. Number of LEWS swabbed for Snake Fungal Disease at 9 field sites on the five large US islands in the Western Basin of Lake Erie.

Island	Site	Snakes Sample	Number of Swabs Collected
Kelleys	State Park	45	
	East/Southeast Shore	4	
	Long Point	2	
South Bass	State Park	139	
	East Point	34	
Middle Bass	State Park	43	
North Bass	South Shore	21	
Gibraltar	Gibraltar Island	48	
Total		336	

List of volunteers in our 2019 Lake Erie Watersnake monitoring

Name	Affiliation	Hours of Volunteer Labor
Bob Brodman	St. Joseph College (IN)	16
Payton Fischer	IUPUI	16
Ally Wright	University of Illinois, College of Vet Med	14
Ellen Haynes	University of Illinois, College of Vet Med	72
Katie Vivirito	University of Illinois, College of Vet Med	72
Kennymac Durante	University of Illinois, College of Vet Med	72
Bryce Dibadj	University of Illinois, College of Vet Med	22
Ivana Levy	University of Illinois, College of Vet Med	20
Susan Lawrence	Independent	20
Jay Vecchiet	Independent	20
Andy Iverson	Northern Illinois University	10
Collin Jaeger	Northern Illinois University	10
John Vanek	Northern Illinois University	10
Jace Robinson	Harper College	10
Nick Gordon	The Toledo Zoo	22
Trevor Hoffman	The Toledo Zoo	4
Gage Stephens	Bowling Green State University	4
Charlie Gunn	OH Resident	4
Joe Kern	OH Resident	4
Allison Sacerdote	Peggy Notebaert Nature Museum	12
Maggie Bednarek	Independent	12
Rachel Riccio	Peggy Notebaert Nature Museum	12
Ashley Hosmer	Peggy Notebaert Nature Museum	12
Emily Baumgartner	Peggy Notebaert Nature Museum	12
Michelle Roy	Peggy Notebaert Nature Museum	12
Ben Warner	Independent	24
Chuck Gunn	Independent	4
Dave Gunn	Independent	4
Tyler McClain	Kelleys Island State Park	28
Mariah Sherer	Kent State University	72
Matt Neff	Smithsonian National Zoo	28
Ron Mattson	D.C. Resident	28
Jill Timko	OSU Stone Lab	28
Emma Scott	Ohio State University	10
Dan Guinto	Ohio State University	10
Lori Stevenson	U.S. Fish & Wildlife Service	4
Katy Greenwald	Eastern Michigan University	6

Cori Carson	Eastern Michigan University	6
Lara Devine	Eastern Michigan University	6
Molly Dixon	Eastern Michigan University	6
Louella Eliason	Eastern Michigan University	6
Maria Goodrich	Eastern Michigan University	6
Layla Khorsheed	Eastern Michigan University	6
Daniel Lee	Eastern Michigan University	6
Maggie McCullough	Eastern Michigan University	6
Taylor Mulder	Eastern Michigan University	6
Beatrice Nayh	Eastern Michigan University	6
Kari Neal	Eastern Michigan University	6
Edie Nissen	Eastern Michigan University	6
Jordan Rafferty	Eastern Michigan University	6
Bria Spalding	Eastern Michigan University	6
Caleb Willette	Eastern Michigan University	6
Anthony Zorney	Eastern Michigan University	6
Greg Lipps	Ohio State University	14
Isabelle Ryan	Ohio State University	14
Catherine Becker	Ohio State University	14
Kaleb Johnson	Ohio State University	14
Zachary Smith	Ohio State University	14
Elizabeth Rucki	Ohio State University	14
Emily Samar Akkari	Ohio State University	14
Carrie Watson	Ohio State University	14
Total		948

Garter Snake (*Thamnophis sirtalis*) Research

Rick Lehtinen, Professor of Biology, The College of Wooster

[Aided by students from the Herpetology classes from the OSU Stone Lab and Eastern Michigan University.]

Collecting permit is ODNR wild animal permit #20-224).

	<u>Date</u>	<u>Garter snakes seen</u>	<u># of tissue samples collected</u>
Massie Cliffside Preserve, SBI	5/22/19	1 (standard color morph)	(escaped, also saw 5 water snakes, 5 watersnakes, 1 fox snake, 12 red-backed salamanders and numerous unisexual salamanders
Scheeff East Point park, SBI	5/22/19	-	-water snakes and 1 fox snake
Gibraltar Island, Stone Lab	5/23/19	19 (all standard color morph)	5

Dodge Woods, SBI	5/23/19	1 (standard color morph)	1
Scheeff East Point park, SBI	5/23/19	-	- no garter snakes but several fox snakes, water snakes and a Dekay's brown snake
Kelleys Island State Park	5/24/19	8 (all standard color morph)	5 also found numerous water snakes, several fox snakes, dozens of marbled salamanders, 14 redbacked salamanders and numerous Ambystoma unisexual salamanders
Kelleys Island State Park	7/9/19	2 (all standard color morph)	2
Scheele Preserve, KI	7/9/19	-	- no snakes found
Long Point area, KI	7/9/19	-	- no snakes found
South Bass Island State Park	7/10/19	1 (melanistic morph)	0 escaped, 1 ringneck snake found
Green Island	7/11/19	-	- no snakes found
Dodge Woods, SBI	7/11/19	-	- no snakes found
Scheeff East Point park, SBI	7/11/19	-	0 no snakes found
Middle Bass Is State Park	7/12/19	5 (all standard color morph)	5
total		37 (36 standard morph, 1 melanistic)	18

2019 Lake Erie Bass Islands Avian Research Program Report

H. Thomas Bartlett

History

In the early 2000's, the Lake Erie Islands Historical Society began sponsoring two Elderhostel programs on South Bass Island. One dealt with fishing and the other with natural history/wine making of the islands. The popularity of evening natural history programs and optional morning bird walks soon led to a birding Elderhostel. In 2003, I was asked by Lisa Brohl, one of the leaders of the Elderhostel, to present a one-day program on bird banding and give a demonstration. The demonstration was conducted on a 20 acre property owned by Mark and Barb Barnhill on the eastern most part of the island. The program was a success and I have been asked back each year. In the summer of 2006, I retired from teaching. Lisa called and asked if I would work the week-long Elderhostel. I agree and banding increased. The Elderhostel has changed its name to Road Scholar, opening up to a wider group of people and is now run by the Lake Erie Islands Nature and Wildlife Center on South Bass Island. Over the years the Road Scholar programs have increased to 6 weeks during spring and fall. Lisa is also the chair of the

Lake Erie Islands Conservancy and on the Board of the Put-in-Bay Park District. These organizations have used the data we've gathered to help secure funds to buy and protect land on the Bass Islands. In 2009, we started a banding project on Middle Bass Island. In 2010, one of my sub-permittees, Dr. James Marshall working at Stone Lab, began expanding our efforts with a summer banding project on North Bass Island. The North Bass Island summer study involves avian use of the remaining vineyards on the island. This data gives an idea of which species of birds are using the islands for breeding, wintering, and stopover during migration. It shows that the Lake Erie Islands are critical for migrant birds. Over 25 natural areas have been protected on the Bass Islands with the use of our data. On Middle Bass Island, about 52.8 acres have been protected or will be and on South Bass Island, 63.1 acres have been or will soon be protected.

2019 Update

We now have bird banding data for South Bass (17 years), Middle Bass (11 years), and North Bass (10 years) Islands plus my long-term data set (24 years) from Kelleys Island. Banding data has been used to purchase and protect properties on South Bass, Middle Bass, and Kelleys Islands. In that time period we have banded over **29,951 individual birds of 119 species and 2 hybrids**. The Put-in-Bay Township Park District, as owners of natural areas on South Bass and Middle Bass Islands, makes use of the banding data to help manage the properties for migratory and nesting birds as well as other wildlife. The Barnhill family, Put-in-Bay Township Park District, Lake Erie Islands Conservancy, Dr. William Cleveland, and the Lake Erie Islands Nature and Wildlife Center have supplied access and funding to assist in our banding projects again this year. As always, we are thankful for the support from Mark and Barb Barnhill for the use of their property on South Bass Island and assistance in our studies. However, 2019 has proven to be a very sad year for this great relationship. Early in the year, both Mark and Barb passed away. They will be sorely missed. This year's report is dedicated to their support and memory. I will always have fond memories of the two. It was always an enjoyable time at their place.

On Middle Bass Island, we have continued to receive much assistance, food, and lodging from Teddi Keith-Morris and Nancy Welter. In addition, the efforts of Ron Helman, Chris Helman and family to maintain the trails and net lanes at East Point Preserve have been extremely helpful. And thank you also to Tina Larsen, Ken & Ann Shelton and Lisa Brohl for their assistance to the banding operations. It is hoped that the banding projects can be continued in years to come. This past year 550 individuals visited our Bass Islands research stations.

2019 was an excellent year for our research efforts on the Bass Islands. During the 2019 banding season, banding occurred on 43 days. 1943 individual birds of 83 species were banded on South Bass, Gibraltar, Middle Bass, and North Bass Islands. In addition, 214 banded birds were recaptured or recovered (178 individuals, some individuals were recaptured more than once). Of these, 53% (94) were banded prior to 2019. Two individuals were first banded in 2013, three birds in 2014, seven birds in 2015, eleven birds in 2016, twenty-seven birds in 2017, Thirty-six in 2018 and 81 individuals earlier in 2019. Our oldest recapture was a Northern Cardinal banded June 27, 2013 on Middle Bass Island as a after hatch-year male making it at least seven years old. The second oldest bird was a Red-winged Blackbird banded July 9, 2013 on Middle Bass Island as a second year female making her 7 years old. In addition, we heard from the Bird Banding Laboratory on a Tree Swallow that we recaptured in 2016. It was banded May 6, 2013 at Holiday Beach Conservation Area outside of Leamington, Ontario Canada. Thirty-one individuals escaped or were released before being processed. There were two casualties during the banding operations.

Our rate for casualties this year was 0.09% of total birds handled, which is outstanding and says a lot about the skill of our extraction team. All this was done over 43 banding days and 2713.00 net hours. 2177 individual birds were handled this year and 0.59 birds were banded per net hour of effort and 0.68 birds handled per net hour.

The top ten most banded species for 2019 were:

339	Purple Martin	59	Common Grackle
284	Red-winged Blackbird	58	Swainson's Thrush
103	Ruby-crowned Kinglets	50	Magnolia Warbler
95	American Robin	46	Yellow-rumped (Myrtle) Warbler
86	White-throated Sparrow	45	Red-breasted Nuthatch

Over the last seventeen years of our banding effort, we have banded **12,776 individuals of 118 species on the Bass Islands and one hybrid**. This was accomplished in 357 banding days and 23,307.75 net hours of effort resulting in 0.51 birds banded per net hour. This past year we banded two new species for the islands. They were Chimney Swift (1 on South Bass Island during the summer by Dr. Marshall) and a Tufted Titmouse (also on South Bass Island early this winter). The Tufted Titmouse is the first banded on the Lake Erie Islands and is considered very rare for the islands. Also, banded was one new hybrid, a Golden-winged X Blue-winged Warbler, on South Bass Island this past spring. In addition, another banding project continues with Purple Martins and Tree Swallows. It was taken over in 2017 by Thomas Kashmer and his crew, of Green Creek Wildlife Society and Black Swamp Bird Observatory. Their data is shared with us.

The top ten most banded species over the sixteen years have been:

2966	Red-winged Blackbird	480	Swainson's Thrush
1075	Purple Martin	420	Tree Swallow
931	American Robin	388	Yellow Warbler
569	White-throated Sparrow	325	Yellow-rumped (Myrtle) Warbler
494	Common Grackle	279	Ruby-crowned Kinglet

South Bass Island

On South Bass Island we banded 1067 individuals of 67 species in 2019. Two new species were banded. They were Chimney Swift and Tufted Titmouse. This was the first titmouse to be banded on the Lake Erie Islands. Over the seventeen years of this South Bass Island study, 101 species and 8,035 individual birds have been banded. This year we were able to band 7 days in the spring, three days in the fall, and three days in December. Dr. Marshall was able to band 10 days in the summer with his Stone Lab class. Again this year, the banding of the Purple Martins banded by Tom Kashmer and his team. In early December we again banded for three days at Lisa Brohl's feeders, one evening of owl banding at the Wildlife Center and two evening of owl banding at the Vineyard. We banded 58 individuals of 10 species. This also gave us a chance to continue to train some of our volunteers in bird extraction which will help us greatly in the future. Nancy Welter and Teddi Keith-Morris from Middle Bass Island came over to participate and work on their extraction skills. On South Bass Island we had 373 visitors to the banding stations.

Middle Bass Island

On Middle Bass Island we banded 718 individuals of 68 species in 2019. One new species was banded. It was two individual Golden-winged Warblers. This was done over 16 banding days,

1435.0 net hours. There were 8 escape/released birds and zero casualties. We handled 810 individual birds during 2019. Over the eleven years of this study on Middle Bass Island, 4041 individual birds of 103 species have been banded. On Middle Bass Island this year we had 171 visitors to the banding stations. The Beaver which showed up on the island in 2018, has survived and still working the pond area. We also managed to capture and release a Silver-haired Bat in the fall. This was a first for us and a good find for the preserve. One hundred and seventy-one people visited the banding station here.

North Bass Island

On North Bass Island we banded 58 individuals of 8 species in only three days of effort. One new species, Common Grackle, was banded. Over the last eight years of the North Bass Island study, 700 individuals of 24 species have been banded. This year we had one recaptured individual, an Indigo Bunting, which was banded earlier in the summer. During the year we had 6 visitors to the North Bass banding station.

The State of Ohio's plan to remove the vineyards on North Bass Island appears to have changed and at least some of the vineyards remain allowing this study can continue. It would be nice to get addition banding data during spring and fall as well in the future. We are actively working on a Fall 2020 outing to the island in an effort to add some fall migration banding data.

2019 Data

The data for all banding activities in 2019 on the Bass Islands follows. Included are some historical data, birds banded, recaptures, and some observational notes for each island. A special thanks should be given to the volunteers and supporters of this project: Paula Bartlett, Mark & Barb Barnhill and family, Lisa & Russ Brohl, Jim & Betsy Brohl, Karen Dolej, Ken Farber, John Lortz, Dr. James Marshall, Dr. Andy Jones, Tina Larson, Alice Lentz, John & Peg Leopold, Teddi Keith-Morris, Nancy Welter, Shane Roberts, Ken & Ann Shelton, Chris Helman and family, Bob Stausmire, Gerald Shanley, Dr. William Cleveland, Susan Harrington, Doris Hubschman, the Lake Erie Islands Conservancy, the Lake Erie Islands Nature and Wildlife Center, Miller Boat Line, U.S. Fish & Wildlife Service, Ottawa County Community Foundation, and the Put-in-Bay Township Park District.

One area of improvement in 2020 will be to document all species of birds seen and heard during our work. These surveys will be noted on a daily checklist. Perhaps this data can be entered into eBird.

Species		Total	South Bass Island	Middle Bass Island	North Bass Island
Chimney Swift	1	1	1		
Ruby-throated Hummingbird	1	10	6	4	
Eastern Screech-Owl	1	3	2	1	
Red-bellied Woodpecker	1	1		1	
Downy Woodpecker	1	13	7	6	
Northern Flicker	1	2		2	
Yellow-bellied Flycatcher	1	2	2		
Least Flycatcher	1	20	15	5	
Eastern Phoebe	1	2	1	1	
Great Crested Flycatcher	1	1		1	

Eastern Kingbird	1	7	4		3
White-eyed Vireo	1	2	2		
Blue-headed Vireo	1	12	3	9	
Warbling Vireo	1	5	2	3	
Philadelphia Vireo	1	2		2	
Red-eyed Vireo	1	1		1	
Blue Jay	1	19	14	5	
Purple Martin	1	339	339		
Tree Swallow	1	40	38	2	
Barn Swallow	1	10	9		1
Black-capped Chickadee	1	23	16	7	
Tufted Titmouse	1	1	1		
Red-breasted Nuthatch	1	45	38	7	
White-breasted Nuthatch	1	5	2	3	
Brown Creeper	1	1	1		
House Wren	1	11	5	6	
Carolina Wren	1	7		7	
Golden-crowned Kinglet	1	2	1	1	
Ruby-crowned Kinglet	1	103	60	43	
Eastern Bluebird	1	5		5	
Veery	1	11	8	3	
Gray-cheeked Thrush	1	35	3	32	
Swainson's Thrush	1	58	22	36	
Hermit Thrush	1	14	1	13	
American Robin	1	95	61	34	
Gray Catbird	1	19	10	9	
Brown Thrasher	1	2		2	
European Starling	1	10	2	5	3
House Sparrow	1	15	15		
House Finch	1	8	8		
American Goldfinch	1	22	2	8	12
Chipping Sparrow	1	4	3	1	
Field Sparrow	1	3	2	1	
Savannah Sparrow	1	1		1	
Lincoln's Sparrow	1	6	5	1	
Swamp Sparrow	1	9		9	
White-throated Sparrow	1	86	14	72	
White-crowned Sparrow	1	3	1	2	
Dark-eyed Junco	1	13	12	1	
Baltimore Oriole	1	18	14	4	
Brown-headed Cowbird	1	14	7	7	

Red-winged Blackbird	1	284	183	70	31
Common Grackle	1	59	45	13	1
Ovenbird	1	15	8	7	
Northern Waterthrush	1	9	2	7	
Golden-winged Warbler	1	3	1	2	
Blue-winged Warbler	1	3	2	1	
BWWA X GWWA hybrid	1	1	1		
Black-and-white Warbler	1	12	3	9	
Tennessee Warbler	1	11	1	10	
Orange-crowned Warbler	1	2	1	1	
Nashville Warbler	1	19	9	10	
Connecticut Warbler	1	3		3	
Common Yellowthroat	1	13	6	7	
Hooded Warbler	1	1		1	
American Redstart	1	28	10	18	
Cape May Warbler	1	7	4	3	
Northern Parula	1	3	3		
Magnolia Warbler	1	50	36	14	
Bay-breasted Warbler	1	32	7	25	
Blackburnian Warbler	1	3	3		
Yellow Warbler	1	46	22	22	2
Chestnut-sided Warbler	1	4	4		
Blackpoll Warbler	1	44	1	43	
Black-throated Blue Warbler	1	22	11	11	
Palm Warbler (Western)	1	41	8	33	
Yellow-rumped Warbler	1	40	5	35	
Black-throated Green Warbler	1	7	6	1	
Wilson's Warbler	1	2	2		
Scarlet Tanager	1	1		1	
Northern Cardinal	1	27	23	4	
Rose-breasted Grosbeak	1	1		1	
Indigo Bunting	1	9	1	3	5
Total Individuals	83	1943	1167	718	58
Total Species		83	67	68	8

Species	Total	South Bass	Middle Bass	North Bass
		Island	Island	Island
Species	Total	SBI	MBI	NBI
Banding Days	43	24	16	3
Owl Banding Days	4	3	1	0
Recaptures	204	120	83	1
Escapes/releases	31	23	8	0
Casualties	2	2	0	0
Total birds handled	2177	1308	810	59
Nets		14-20	9.5-22	9.5

Tree Swallow and Purple Martin Report

By Paula Ziebarth - Ottawa County Area Contact, Ohio Bluebird Society

In spring of 2019, a new 5-box trail was installed at Dodge Woods Preserve. Nest boxes have a 1-1/8" entry hole to restrict use to that of Black Capped Chickadees or House Wrens. I feared allowing Tree Swallows to use boxes would be frightening for young children walking the storybook trail here. Tree Swallows are rather aggressive when people approach their nest box, swooping on passersby and flying toward their heads.

2019

SPECIES	#Attempts	1 st Egg	#Eggs	#Hatched	#Fledged	Success Rate %
House Wren	9	5-23	35	31	30	
Tree Swallow	2	5-23	12	8	8	100
House Sparrow*	3					

Jane Coates: 2 nest boxes; Dodge Woods: 5 nest boxes restricted for BCCH or HOWR use; Wild Life Center: 4 nest boxes; monitored by AmeriCorps intern Emma Young and Paula Ziebarth

Native Birds Fledged Annually and Non-Native Nest Attempts

YEAR	Tree Swallow	House Wren	HOSP Attempts*
2015	9	15	1
2016	4	7	0
2017	7	14	3
2018	7	7	1
2019	8	30	3
TOTAL	35	73	8

*No non-native House Sparrows (HOSP) fledged

2018

SPECIES	#Attempts	1 st Egg	#Eggs	#Hatched	#Fledged	Success Rate %
Tree Swallow						
	2	5-25	9	8	7	100
House Wren	1		7	7	7	100
	2		6	0	0	0
House Sparrow	1			3	0	0

Jane Coates = 2 nest boxes in woods (top data)

Wild Life Center = 4 boxes

2017

SPECIES	#Attempts	1 st Egg	#Eggs	#Hatched	#Fledged	Success Rate %
Tree Swallow						
	2		9	7	7	100
House Wren	2		7	7	5	50
	2		9	9	9	100
House Sparrow*	3		10	0	0	0

Jane Coates = 2 nest boxes in woods (top data)

Wild Life Center = 4 boxes

2016

SPECIES	#Attempts	1 st Egg	#Eggs	#Hatched	#Fledged	Success Rate %
Tree Swallow						
	3		12	10	4	33
House Wren	2		14	7	7	50
	3		7	0	0	0
House Sparrow*						

Jane Coates = 2 nest boxes in woods (top data)

Wild Life Center = 4 boxes

2015

SPECIES	#Attempts	1 st Egg	#Eggs	#Hatched	#Fledged	Success Rate %
Tree Swallow						
	2		10	10	9	100
House Wren	2		10	10	10	100
	4		12	5	5	25
House Sparrow*	1					

Jane Coates = 2 nest boxes in woods (top data) Wild Life Center = 4 boxes

Scheeff East Point Nature Preserve Trail History

By Paula Ziebarth, Ottawa County Area Contact Ohio Bluebird Society

The Purple Martin colony at Scheeff East Point Nature Preserve has continued to grow and thrive. For those unfamiliar with successful Purple Martin colonies, proper habitat is necessary for success. South Bass Island has excellent habitat for them. Lake Erie breeds a myriad of flying insect species that allow them to thrive and raise a family. Housing must be at least 40 feet from any tall trees to protect them from marauding hawks and owls.

Purple Martin housing should be monitored every 5 to 7 days to check on the progress of the birds and to deal with any problems found during the nesting cycle. Two of the biggest challenges are attempts to take over colonies by non-native, invasive House Sparrows and nest hygiene. European Starlings are also an aggressive non-native nest site competitor, but have been mostly excluded from the gourds at Scheeff by using Starling Resistant Entry Holes. Many Purple Martin landlords use pesticides in nest compartments to control insect and mite infestations found in nests. I do not do this, preferring to replace nesting material with soft, dry white pine needles once or twice during the nest cycle to eliminate most of the pests found in nests and provide young birds with clean nest material during their 28-day stay in their nest compartment.

Purple Martins are North America's largest swallow. A Purple Martin's diet consists solely of flying insects. These birds consume a lot of them during their 4-month stay here in Ohio. There are 48 artificial gourds available at Scheeff East Point Nature Preserve for Purple Martins to use. In 2019, Purple Martins laid 226 eggs. 202 of those hatched and 195 young fledged. This year's young are currently winging their way to Brazil, making their first long trip to their winter home.

A tree swallow's plumage is iridescent blue/black back with a white underbelly. These birds primarily eat small flying insects. Each Tree Swallow family consumes more than 300,000 flying insects during the nesting season. Tree Swallows usually raise one brood per season, but we are seeing more late second nest attempts in Ohio, likely due to climate change. Tree Swallows overwinter in the southern states and Central America. They leave South Bass Island before the Purple Martins. There are 16 nest boxes available for Tree Swallows to use at Scheeff. In 2019, Tree Swallows laid 108 eggs. 72 of those hatched and 66 young fledged.

2019

SPECIES	#Attempts	1st Egg	#Eggs	#Hatched	#Fledged	Success Rate %
Purple Martin	48	5-28	226	202	195	90
Tree Swallow	17	5-19	108	72	66	82
House Sparrow*	6		0	0	0	0

16 nest boxes; 48 vertical Troyer gourds; monitored by AmeriCorps intern Emma Young and Paula Ziebarth.

Native Birds Fledged Annually and Non-Native Nest Attempts

YEAR	Purple Martin	Tree Swallow	EUST Attempts*	HOSP Attempts*
2009	0	49	0	0
2010	19	59	0	4
2011	61	58	5	3
2012	118	55	10	0
2013	110	57	18	5
2014	129	58	0	5
2015	164	92	0	5
2016	221	76	0	6
2017	200	78	2	25
2018	212	76	0	22
2019	195	66	0	6
TOTAL	1429	724	35	75

*No non-native European Starlings (EUST) or House Sparrows (HOSP) fledged

2018

SPECIES	#Attempts	1st Egg	#Eggs	#Hatched	#Fledged	Success Rate %
Purple Martin	47	5-23	246	225	212	98
Tree Swallow	19	5-9	111	82	76	84
House Sparrow*	22		3	0	0	0

16 nest boxes; 48 vertical Troyer gourds; monitored by AmeriCorps intern Samantha Newhouse and Paula Ziebarth.

2017

SPECIES	#Attempts	1st Egg	#Eggs	#Hatched	#Fledged	Success Rate %
Purple Martin	48	5-20	266	213	200	85
Tree Swallow	18		101	82	78	78
European Starling*	2		5	5	0	0
House Sparrow*	25		5	0	0	0

16 nest boxes; 48 vertical Troyer gourds; monitored by AmeriCorps intern Samantha Newhouse and Paula Ziebarth.

2016

SPECIES	#Attempts	1st Egg	#Eggs	#Hatched	#Fledged	Success Rate %
Purple Martin	48	5-20	252	229	221	98
Tree Swallow	20	5-9	112	83	76	75
House Sparrow*	6		0	0	0	0

16 nest boxes; 48 vertical Troyer gourds

2015

SPECIES	#Attempts	1st Egg	#Eggs	#Hatched	#Fledged	Success Rate %
Purple Martin	44	5-12	229	198	164	95
Tree Swallow	27	5-16	137	99	92	78
House Sparrow*	5		5	0	0	0

16 nest boxes; 48 vertical Troyer gourds

2014

SPECIES	#Attempts	1st Egg	#Eggs	#Hatched	#Fledged	Success Rate %
Purple Martin	51	5-19	154	131	129	53
Tree Swallow	18		106	60	58	61
House Sparrow*	5			0	0	0

16 nest boxes; 48 vertical Troyer gourds

New 24-gourd rig (all SREH vertical gourds) installed spring of 2014 – Columbus Zoo Conservation Grant. Girl scouts added 3 new nest boxes to site.

2013

SPECIES	#Attempts	1 st Egg	#Eggs	#Hatched	#Fledged	Success Rate %
Purple Martin	24	5-23	126	111	110	100
Tree Swallow	13	5-17	74	63	57	85
European Starling*	18		5	0	0	0
House Sparrow*	5		4	0	0	0

13 nest boxes; 24 vertical Troyer gourds

All gourds at Scheeff converted to SREH

2012

SPECIES	#Attempts	1 st Egg	#Eggs	#Hatched	#Fledged	Success Rate %
Purple Martin	24	5-11	140	118	118	96
Tree Swallow	18		98	62	55	72
European Starling*	10		2	0	0	0

13 nest boxes; 24 vertical Troyer gourds

2011

SPECIES	#Attempts	1 st Egg	#Eggs	#Hatched	#Fledged	Success Rate %
Purple Martin	23	5-31	78	67	61	61
Tree Swallow	14		73	60	58	79
European Starling*	5		5	0	0	0
House Sparrow*	3		0	0	0	0

13 nest boxes (11 and 11A back to back on same pole); 24 vertical Troyer gourds

24-gourd rig installed at Scheeff spring of 2011 – Columbus Zoo Conservation Grant. Darlene Sillick banded PUMA young 6-23-11

2010

SPECIES	#Attempts	1 st Egg	#Eggs	#Hatched	#Fledged	Success Rate %
Purple Martin			27	26	19	100
Tree Swallow	13		77	65	59	85
House Wren	1		5	0	0	0
House Sparrow*	4		2	0	0	0

12 nest boxes; 24-unit aluminum Heath house donated to site – vandalized and removed end of season

2009

SPECIES	#Attempts	1 st Egg	#Eggs	#Hatched	#Fledged	Success Rate %
Tree Swallow	13	5-13	64	50	49	77

Trail established spring of 2009. 11 nest boxes donated by Wally Hall. Poles and baffles donated by Darlene Sillick.

*No non-native European Starlings (EUST) or House Sparrows (HOSP) fledged



A 24 Gourd Purple Martin Rig – Scheeff East Point Nature Preserve

“Earth provides enough to satisfy every man's needs, but not every man's greed.”

“What we are doing to the forests of the world is but a mirror reflection of what we are doing to ourselves and to one another.”

*“Oh Beautiful for smoggy skies, insecticided grain,
For strip-mined mountain's majesty above the asphalt plain.
America, America, man sheds his waste on thee,
And hides the pines with billboard signs, from sea to oily sea.”*

— George Carlin, comedian



Tree Swallows at Scheeff East Point Nature Preserve

Island Green Week

The Lake Erie Islands Nature & Wildlife Center, Lake Erie Islands Conservancy, OSU's Stone Laboratory, the Put-in-Bay Township Park District and the Lake Erie Islands Historical Society have collaborated to produce a mixture of Ecotourism, Adventure Travel, Agritourism, and History sponsored by the Put-in-Bay Chamber of Commerce, the Put-in-Bay Gazette, Miller Boat Line, Jet Express, Park Hotel, Frosty Bar, Cameo Pizza, The Boardwalk, and Lake Erie Shores and Islands. In 2019, this celebration, Island Green Week, was held from August 3rd - August 14th. This annual event allows visitors to learn more about the island's many natural treasures through a variety of events all in one week. Participants will enjoy the natural beauty, geology, and ecology of these islands.

MBI 3rd Poker Kayak Day

Kicking off Green Week in 2019, the 5th MBI Poker Kayak Day was held at the Middle Bass Island State Park. The money raised goes to Put-in-Bay Park District for the benefit of the preserves on Middle Bass. Tina Larson and other volunteers coordinate this event.

Middle Bass Island Music Festival

The Middle Bass Island Music Festival in 2019 - Called “Rock The Lake” – was held on the patio of the historic Lonz Winery in Middle Bass Island State Park. Among the bands were Mo Mojo, Hillbilly Idol, North Coast Goats, and the Riley Brothers Band. The event is family friendly and admission is free. Food and drink are available. Organized by Bruce Miles, the Middle Bass Dock Company was a main sponsor. Nancy Welter was the manager. Lake Erie Shores and Islands and the Ohio Arts Council awarded grants for the festival.

Annual Review by the Western Reserve Land Conservancy



The annual visit of the Western Reserve Land Conservancy to inspect the Scheeff East Point Nature Preserve took place on June 25, 2019. Haley Surckia, Land Steward Intern for Western Reserve Land Conservancy, completed the on-site review of the property.

As with each of the preserves owned and operated by the Put-in-Bay Township Park District, there are deed restrictions and/or conservation easements which ensure that the properties will remain natural areas.

Representatives of Western Reserve visited the property to ensure that the conservation easement on the Scheeff Preserve is being upheld.

A formal letter documenting the 2019 visit from Sarah Kitson, Land Steward for the Southern and Western Region of the Western Reserve Land Conservancy, stated, “...high water from the lake has altered the locations of beaches on the property and has slightly altered trails There were no other significant changes noted this year ... The Scheeff East Point Nature Preserve ...provides excellent habitat for purple martins and tree swallows. The views are gorgeous....

Black Swamp Conservancy Annual Monitoring Visit



Photo: (l to r) Elisabeth Anderson and Betsy Brohl at the Middle Bass Island East Point Preserve.

The Black Swamp Conservancy maintains a conservation easement on the Middle Bass Island East Point Preserve and the Costello Tract owned by the Put-in-Bay Township Park District. Once a year, the Black Swamp Conservancy reviews the property to ensure that the Park District is maintaining and protecting the parcels consistent with the conservation easement. This year Elisabeth Anderson from the Black Swamp Conservancy visited the preserves with Lisa Brohl on July 25. Thanks to Betsy Brohl for providing the transportation and company!

*“The one process now going on that will take millions of years to correct
is the loss of genetic and species diversity by the destruction of natural habitats.
This is the folly for which our descendants are least likely to forgive us.”*

--E. O. Wilson

*“Water and air, the two essential fluids on which all life depends,
have become global garbage cans.”*

— Jacques-Yves Cousteau

Volunteers

This year we had trail monitors who walked the trails and let us know when there were issues. Teddi Keith-Morris and Nancy Welter walked the Middle Bass Island East Point Preserve. Joe Byrnes walked our preserves on South Bass Island. Joe and his father, Mike, removed many downed trees off the trails and bench areas at Scheeff, Massie, and Jane Coates Wildflower Trail. Burns Pierce assisted with larger trees that were blocking the trail at the Scheeff East Point Preserve. This preserve has been hard hit with the high Lake Erie levels and has lost many trees along the shoreline. Ken Farber helped with brush and tree removal around the purple martin boxes and with clearing the flooded overgrown path at the Scheeff East Point Preserve. Melinda McCann spent some time working on the Jane Coates Wildflower Trail in spring. Art Otermat also helped us keep an eye on things at the Jane Coates Wildflower Trail. With the large number of ash trees dying due to emerald ash borer, tree removal from the trails is a constant job. Howard and Elaine Martens and Carol Craigs maintain monarch butterfly gardens around the benches at the Massie Cliffside Preserve. Marv Booker helps with mowing at the Massie Cliffside Preserve and checking trail side garbage cans.

Neighbors Chris and Ron Helman have been mowing and maintaining the trail at the Middle Bass Island East Point Preserve and have removed downed trees blocking the trail. Chris, Jennifer Spencer, and his family have picked up litter along the shoreline, replaced our LEIWT sign on the dock, and cleared the bird banding net lanes there as well as assisting with bird banding efforts.

The Park District is grateful to the Put-in-Bay Township employees for doing the late season mowing at the Scheeff East Point Preserve at the tree swallow nest box grid (Jack Wertenbach) and at the Middle Bass Island East Point Preserve (Del Taylor.) Thus the Park District is able to maintain about an acre of tall grasses each year to allow maximum diversity of habitat for migratory and resident birds and other wildlife.

On Earth Day April 22, 2019, a large group picked up garbage along the shoreline at the Scheeff East Point Preserve and then moved on to the Jane Coates Wildflower Trail to pull the invasive garlic mustard (Kristin Stanford, Missy, Cody and Caleb Kowalski, Barb Mitchell, Julene Market, Sarah Lowe, Sue Bixler, Marissa Rence joined Lisa Brohl at the Jane Coates Trail to remove invasive garlic mustard and English ivy from the preserve.



The Marjorie Book Continuing Education Society visited the Jane Coates Wildflower Trail in July spreading mulch on the trail and pulling invasive garlic mustard. The Boardwalk Family restaurants provided lunch for the volunteers Maria and Joe Link, Ann Lucas, Dana Metcalf, Bill Ritter, Becca Melvin, James Robb and Lisa Brohl.



The Laurel School 7th graders visited the Jane Coates Wildflower Trail on September 4 pulling invasive garlic mustard rosettes with Lisa Brohl.

Ohio State University – Buckeye Hop



Young Vivian Scarpelli assists at the Buckeye Hop

The Ohio State University Stone Laboratory's Buckeye Hop was held October 19, 2019. Lisa Brohl met participants Madeline Baker and Josh Hug, Kristin Stanford and Vivian Scarpelli to finish mulching the trail at the Jane Coates Wildflower Trail. Thanks again to Kristin Stanford and Sue Bixler of the Ohio State University Stone Lab for organizing the volunteers and to Richard Gump for mulching trails and trees at the Preserves.



Madeline Baker and Josh Hug at Buckeye Hop

Intern



Capital University student Emma Young was the AmeriCorps intern shared by the Put-in-Bay Township Park District, the Lake Erie Islands Conservancy, and the Lake Erie Islands Nature and Wildlife Center again this summer. She had a very busy summer with monitoring our bird nesting boxes, trail work, coordinating volunteer programs at our preserve, social media, interpretive programs, and walking trails weekly/changing out recycling bins/replacing brochures. Emma did a special project on use of our recycling/trash bins at our preserves.

Recycling

Our AmeriCorps intern Emma Young emptied recycling and trash bins at the Jane Coates Wildflower Trail, Scheeff East Point Preserve, Dodge Woods Preserve, and Massie Cliffside Preserve. The bins are marked for aluminum, glass, plastic and trash . Many of the recyclables items were contaminated with liquids or foods and straws and wrappers. Emma made signs to show visitors how to properly recycle. After the signs were in place, the percentage of correctly recycled items increased. The Jane Coates Wildflower Trail had a high percentage of contaminated recyclables .

Visits to Preserves

Lake Erie Islands Conservancy member Teddi Keith-Morris showed the Conservation Fund's Peg Kohring and the USFWS Angela Boyer a project on Middle Bass Island and Julene Market drove them to see a project on South Bass in 2019. Teddi also provided transportation for a Phase 1 Environmental study employee on Middle Bass. Bob Cummings also helped transport our appraiser around Middle Bass this fall to help with grant applications.

A team of bat researchers-Sarah Stankavich of the Ohio Division of Wildlife and Heidi Bencin and Austin Waag research technicians with the Ohio University visited island caves on South Bass on March 8, 2019, to look for overwintering bats. They visited some sites the PIBTPD is working to purchase with Lisa Brohl. Unfortunately, no bats were found.

The Firelands Audubon Society paid a visit to our South Bass Islands Preserves for birding and nature walk on July 17, 2019, with Lisa Brohl. The Lake Erie Wing Watch program visited our preserves in September with Lisa.

Office for Put-in-Bay Township Park District

Linda Shull and Melinda McCann spent some time helping Lisa Brohl organize files at the Put-in-Bay Township Park District office at 1494 Langram Rd. at the Put-in-Bay Airport.

Donations

Mark Wright of the Old Forge is working on the design of two interpretive signs donated by Jim and Betsy Brohl on migratory birds and emerald ash borer.

Dean Sheldon donated 10 bur oak trees that were planted this spring at the Dieperink and Schneider Tracts of the Middle Bass Island East Point Preserve. Dean passed away this summer but will leave the trees to carry on his work.

"At one time in the world, there were woods that no one owned"

— Cormac McCarthy

"The creation of a thousand forests is in one acorn"

— Ralph Waldo Emerson

Objectives and Goals



The Board of Commissions of Put-in-Bay Township Park District recognizes that forested areas and natural fields in Put-in-Bay Township are disappearing to development at an alarming rate. It is the hope of this Board that commercial and residential development will be complemented with areas of green space, natural areas that preserve the natural heritage of the Islands.

Natural areas have an inherent value and an aesthetic value. They are sites that will help to safeguard the unique flora and fauna of the Lake Erie Islands. Put-in-Bay Township Park District will preserve natural, scenic, and agricultural locations to enhance the quality of life for the residents and visitors of Put-in-Bay Township. The Board of Commissioners will continue to review and to evaluate unique and exceptional areas in terms of preservation as park land.

Put-in-Bay Township Park District is also aware that vineyards within Put-in-Bay Township are disappearing. For years, vineyards were the economic mainstay of the Islands and are intricately interwoven into the historic fabric of Put-in-Bay Township. The pressures of increased development and the subsequent rise in land value have created a situation where the operation of vineyards is rapidly becoming economically unfeasible. Put-in-Bay Township Park District has an interest in creating a park that would preserve and maintain an operating vineyard. This may be the only way in which vineyards may continue to exist in the Islands.

The Put-in-Bay Township Park District will continue to work with the Black Swamp Conservancy, the Western Reserve Land Conservancy, the Trust for Public Land, the Ohio Department of Natural Resources Coastal Management Assistance Program, the Conservation Fund, the United States Fish and Wildlife Service, the Federal Great Lakes Restoration Initiative Program, the Ohio Nature Works Program, the Ottawa, Seneca, Sandusky Solid Waste District Programs, the Ohio Environmental Protection Agency, the Ohio Public Works Commission, The Ohio State University, the National Park Service, and especially the Lake Erie Islands Conservancy in efforts to preserve and protect areas of significant ecological importance.

Future Projects

Possible breakwall construction to prevent erosion at the Scheeff East Point Preserve, replacement of a metal stairway at the Massie Cliffside Preserve Dock, the hiring of a part-time employee, joining the State of Ohio Uniform Accounting Network (UAN), the hiring of a part-time fiscal officer, increasing the number of walking trails, improving some walking trails, and upgrading parking areas.

Thank You

A special thank you goes to Neal Hess for his assistance as conservation realtor and environmental consultant for the Park District. PIBTPD also recognizes Richard Gump of R. Gump Builders who has been extremely generous in donating his time, expertise, and equipment to the Park District for repairs and maintenance.

Use of Park District Preserves

Along with the hundreds of visitors who have enjoyed the Park District Nature Preserves, the following agencies and groups have used the Preserves: the Middle Bass Environmental Adventure Nature Camp, the Northeast Ohio GeoCachers, Put-in-Bay Girl Scouts, the Put-in-Bay School Environment Club, The Ohio State University, Rockford College of Northern Illinois, the Lake Erie Islands Conservancy, the Audubon Christmas Bird Count, Ohio Wing Watch, Middle Bass Environmental Adventure Camp, the Put-in-Bay Legislative Day, and the Road Scholar Program.

Partners

Put-in-Bay Township Park District works closely with the Lake Erie Islands Conservancy which serves as an advisory council to the Park District. The Park District assists in the educational efforts of the Lake Erie Islands Nature and Wildlife Center (LEINWC), and the District maintains cooperating agreements with the National Park Service and The Ohio State University to work on island preservation and environmental education.

Legal Representation

Mr. James VanEerten, Ottawa County Prosecutor, serves as the legal counsel for Put-in-Bay Township Park District. Additional legal assistance was provided by Marsha Collett of Wickens, Herzer, Panzas, Cook and Batista.

Grant Received from the Conservation Fund

Island Development Corporation Tract – Middle Bass Island Forested Wetland Preserve:

In 2019, Put-in-Bay Township Park District was awarded a grant from The Conservation Fund for the acquisition of 4.4 acres of critical migratory bird habitat on Middle Bass Island. The protection of this land, which is part of a larger conservation effort on the Islands, will ensure that some of the island's remaining forest and wetland ecosystems will remain intact and increase recreation opportunities for visitors.

“Our goal to protect migratory bird habitat and the Lake Erie Islands is our top priority in Ohio,” said Peg Kohring, senior associate for conservation services at The Conservation Fund. “We’re happy to have worked with Put-in-Bay Township Park District to make this project possible.”

Put-in-Bay Township Park District will now preserve and protect over 35 contiguous acres of island swamp providing habitat for migratory birds, amphibians, reptiles, and other wildlife on Middle Bass Island.

This conservation effort will also help protect the water quality of Lake Erie. The ground underneath the Lake Erie Islands is porous, so any pollution caused by development on these islands can easily reach the surrounding lake through this permeable rock.

It is critical to keep these lands protected for the large and diverse flocks of migratory birds which utilize the Islands during their spring migration. Each spring, millions of birds fly north to nest in the United States and Canada. Western Lake Erie and particularly the Bass Islands are important resting and feeding areas for their migratory journey. More than 110 species of bird have been documented on Middle Bass Island, including the black-and-white warbler, Tennessee warbler, and several other warbler species.

In addition, the 4.4 acres of preserved land are home to multiple species of amphibians and snakes, including the eastern fox snake and melanistic garter snake, both of which are Species of Concern in Ohio. The Lake Erie Islands also serve as a breeding area for migrating monarch butterflies, a species which has endured significant population losses in recent decades.

“I went to the woods because I wished to live deliberately, to front only the essential facts of life, and see if I could not learn what it had to teach, and not, when I came to die, discover that I had not lived.”

— Henry David Thoreau

Conservancy in the Islands – A Chronology

1993 - Black Swamp Conservancy

The Black Swamp Conservancy (BSC) was founded in 1993 by a group of people alarmed by the rapidly accelerating rate of development in rural northwest Ohio. These concerned citizens recognized the need to protect and enhance the best remaining natural and agricultural areas in this region and to promote responsible stewardship of the land.

2000 - Lake Erie Islands Chapter of the Black Swamp Conservancy

The Lake Erie Islands Chapter of the Black Swamp Conservancy was formed and functioned under the auspices of its parent organization the Black Swamp Conservancy. The six original members of the LEIC-BSC were Lisa Brohl, Chair; Kelly Faris, Treasurer; Carol Richardson, John Ladd, Lianne Genzman, and Claudette Moore.

2004 - Petersen Woods-Middle Bass Island-1.5 acres-purchase

Acquired with a Clean Ohio Conservation Fund Grant with matching funds from LEIC-BSC, the Ohio Chapter of the Nature Conservancy, and the Division of Wildlife. The wet woods borders Lake Erie on the north and the Kuehnle State Wildlife Area to the east. It was dedicated in the fall of 2004 with the Petersen family present.

2006 - Lawrence Evans Property-Middle Bass Island-.75 acres-purchase

This property was acquired with Ohio Division of Wildlife Diversity and LEIC-BSC funds. The emergent wetland is located between Kuehnle State Wildlife Area and Petersen Woods. We hope to complete a boardwalk and observation platform for an Eagle Scout project for the boundary of the property with Petersen Woods. Deed Restrictions were placed on this property in 2017 to match those of other protected parcels on Middle Bass.

2006 - Prokesh Property-Middle Bass Island-Burgundy Bay-donation

This wet woods of less than 1 acre was donated in 2006. It is adjacent to property owned by the Middle Bass Island State Park. It is hoped that more wet woods can be preserved by donation or purchase in this area. Deed Restrictions have been placed on the property with the Burgundy Bay Association so that no building can occur on site.

2006 - Ladd Carr Wildlife Woods-South Bass Island-2.1 acres-purchase

Acquired with a Clean Ohio Conservation Fund Grant and matching funds from Georgia Ladd McVean, Mary Ladd Carr, and Richard Gump. The property is protected through deed restrictions from a Clean Ohio grant. The wild hyacinths and Dutchman's breeches are beautiful in the spring!

2007 - Put-in-Bay Township Park District-

The public petitioned and requested a Township Park District be set up to obtain grant funds for the Scheeff East Point project. Judge Paul Moon appointed Kelly Faris, Lisa Brohl, and Marv Booker as commissioners. The PIBTPD was affirmed by a ballot initiative in November of 2007. Current commissioners are Kelly Faris, Lisa Brohl, and Kendra Koehler. The LEIC serves as an advisory board for the PIBTPD. The Park District now holds ownership of all the preserves with deed restrictions and conservation easements in place to insure that they remain protected.

2007 - Jane Coates Wildflower Trail-South Bass Island-3 acres-purchase

Adjacent to Ladd Carr Wildlife Woods, this property was acquired in 2007 from the La Plante and Woischke families with a Clean Ohio Conservation Fund grant with matching funds from donor Vince Cox in memory of Jane Coates. Trail construction in May 2008 by Corp Respond, Richard Gump and volunteers with funding raised by Julene Market. Jim Speck and John Jaeger of the Toledo MetroParks assisted with trail design. Deed Restrictions were placed on the property through a Clean Ohio grant. The footpath entrance and small parking area are located on Put-in-Bay Road near the Mapleleaf Cemetery. The Trail was dedicated July 9, 2008. An interpretive sign on wildflowers was purchased by Gary Coates and installed in 2018. A brochure rack is at the trail head and two bird nest boxes were installed by Paula Ziebarth and Darlene Sillick on the trail in 2016. Recycling containers from an Ottawa Sandusky Seneca Solid Waste District Grant were installed in August 2018.

2008 - Scheeff East Point Nature Preserve-South Bass Island-9 acres-

This was a joint project with Put-in-Bay Township Park District, Western Reserve Land Conservancy, the Lake Erie Islands Chapter of the Black Swamp Conservancy. The purchase was secured with a Section 6 , U. S. Fish and Wildlife Service Grant for \$1.8 million. A Clean Ohio Conservation Fund Grant and donations from the Ohio Division of Natural Areas and Preserves, the Ohio Division of Wildlife, First Energy Foundation, Sandusky Eagles Foundation, and private individuals. It was named for major donor Rose Scheeff and was dedicated August 16, 2008. A footpath is maintained by neighbor Mark Barnhill, native trees donated by Brad and Zoe Titchener and Stan and Connie Wulkowicz. Two purple martin rigs have been purchased with conservation grants from the Columbus Zoo by Darlene Sillick. The boxes for a tree swallow grid were constructed by Wally Hall and were installed and are maintained by Paula Ziebarth. Benches were purchased by the Smith family and Ladd (Brookner) family, and a new entrance was installed. Funds for fencing was provided by Brad and Zoe Titchener. A new educational kiosk was completed in June 2015 with funds from the Ottawa County Community Foundation, the Ottawa, Seneca, and Sandusky Solid Waste District grant, and private donations through a booster.com campaign by Kalen Cap. Doris Hubschman donated additional signs and Julene Market a bicycle rack. We have had assistance with maintaining the trail and parking from Ken Farber and John Anderson. A new bench was installed by the family of Wally and Jean Hall in 2018. A chimney swift tower and interpretive sign was built and installed by Casey Carty with funds from donor Karen Jennings in 2018 with assistance from Eric Booker, Richard Gump, and Ken Farber. An interpretive sign in memory of Martha Marquard was placed on the trail on migratory birds in fall of 2017. Recycling containers from an Ottawa Sandusky Seneca Solid Waste District Grant were installed in August 2018.

2008 - Gump Woods-South Bass Island—Victory Woods-donation

This wooded property was donated by Richard Gump. Although the property is less than 1 acre, it is hoped that more donations or purchases can be made in the Victory Woods area. The beautiful wildflower display and proximity to Lake Erie shores provide habitat for migratory songbirds. A rare beetle was found nearby by Dr. Kip Will.

2008 - Lake Erie Islands Nature and Wildlife Center-South Bass Island-donation & purchase

The Center includes 1.2 acres of woods with two cave sites, .5 acre with North American Wildlife Museum. The former Alaskan Birdhouse Museum and contents was donated by Stan and Joey Wulkowicz with the purchase of woods with funds from Foundations and private individuals. It was dedicated October 18, 2008. Formerly operated under the Lake Erie Islands Historical Society with a joint board with LEIC-BSC members, this property is now operated by its own nonprofit organization since 2012. A frog pond, bald eagle's nest exhibit, nature trail and phenology and butterfly gardens have been added. The Center is open weekends in May and September and every day from Memorial Day to Labor Day.

2010 - Jane Coates Wildflower Trail Addition-South Bass Island-2 acre purchase

Two additional wooded acres to the north of the Jane Coates Wildflower Trail were purchased with a Clean Ohio Conservation Fund Grant, Nature Works grant, and donations from foundations and individuals. It was dedicated on Earth Day, 2010, with a commemorative bench on the north end of the Wildflower Trail.

2010 - Middle Bass Island East Point Preserve-Middle Bass Island-8 acres

This kayak accessible shoreline preserve was dedicated in October of 2010. The property is owned by the Put-in-Bay Township Park District and was purchased with the assistance of the Trust for Public Land. The property is protected with a conservation easement by the Black Swamp Conservancy. Funds for the purchase came from a Clean Ohio Conservation Fund Grant, Land and Water Conservation Fund, the Ohio Coastal Management Assistance Grant, the Sandusky Eagles Foundation, Friends of Magee Marsh, The Frost Parker Foundation, Firelands Audubon, and private donations. The property's home and garage was removed with a restoration grant from the Lake Erie Protection Fund and donations from the BSBO Young Birders. A walking trail is in place and maintained by Ron Helman and Bruce Miles. Annual bird banding efforts by Tom and Paula Bartlett and Dr. James Marshall have led to a management plan for a variety of habitat for migratory birds and the Lake Erie watersnake. A watersnake hibernacula has been constructed on site. Signs are at both the road and lake entrance. An access sign on the dock was funded by LEIC-BSC. An osprey platform was erected on site in 2013 by the Ohio Edison crew. It was funded by the Ohio Young Birders and assembled by Andy Slaine and Marv Booker. Interpretive signs were installed in 2014 designed by Chloe Nostrant and paid for by Jim and Betsy Brohl and the BSC - LEIC.

2013 - Costello Tract-Middle Bass East Point Preserve-Middle Bass Island-4 acres

This four acre parcel was purchased with a Clean Ohio Conservation Fund grant by the Put-in-Bay Township Park District in 2013. The grant was written by the Black Swamp Conservancy with assistance and funds from the Lake Erie Islands Chapter. The BSC holds a conservation easement on the property. The wooded four acre parcel is t-shaped with frontage on Norman, South Shore and North Shore Drives and is in close proximity to the MBI East Point Preserve. It adds to the acres protected for migratory birds, Lake Erie watersnake, and 2 species of concern, the eastern fox snake and the melanistic phase of the eastern garter snake.

2014 - Woischke Purchase-2 acre purchase

An additional two wooded acres to the north of the Jane Coates Wildflower Trail Addition was purchased with a Clean Ohio Conservation Fund grant in December of 2014. This purchase brings the total of protected woods to 9 acres including the Ladd Carr Wildlife Woods and the Jane Coates Wildflower Trail and Addition. The Trail may be extended into this area in the future. Matching funds were provided through the Lake Erie Islands Critical Habitat grant application which included funds from the LEIC-BSC. A cave and old home foundation are on the property.

2014 - Schneider Parcel-Middle Bass Island-7.33 acres

This seven acre parcel was purchased through the WRRSP program through the OEPA with the assistance of conservation realtor Neal Hess for the Put-in-Bay Township Park District in 2014. It is a good example of a forested wetland (Great Lakes limestone plain forest) and successional forest habitats on Middle Bass Island. It provides habitat for migratory songbirds, eastern fox snake, and salamanders. There is currently no public access until trails and parking can be developed.

2015 - Middle Bass Forested Wetlands-Burgundy Bay Tract-6 acres

With the assistance of conservation realtor Neal Hess, this parcel was purchased from the Burgundy Bay Association with Water Resource Restoration Sponsor Program (WRRSP) funds for the Put-in-Bay Township Park District. The parcel has frontage on Fox Road for an eventual parking lot and a trail access. It is currently undeveloped wet woodlands with habitat for salamanders, migratory songbirds, frogs, and wetland plant communities. Additional lots have been purchased nearby from the Burgundy Bay Association and private property owners for another approximate 4 acres.

2015 - Massie Cliffside Preserve-South Bass Island-approx. 7 acres

The Massie's Cliffside Preserve was purchased in May 2015 with a grant from the Lake Erie Islands Critical Habitat Clean Ohio Fund for the Put-in-Bay Township Park District with matching funds from the WRRSP program, the LEIC, and private donors. It includes 265 feet of Lake Erie shoreline with cliffs and the state threatened harebell (*Campanula rotundifolia*). There is a walking path to the lake and benches have been installed on site. The dock is available for fishing and as a stop on the Lake Erie Islands Water Trail. The Park District was awarded a Natureworks grant and Ohio Coastal Zone Management Grant to remove the buildings, install parking and trails, and replant trees. Removal of the buildings was completed in early 2016 with assistance from Richard Gump, Put-in-Bay Investments, Miller Boat Line, Lake Disposal, and Fox Stone Products. Conservation realtor Neal Hess oversaw grant efforts. Restoration plantings of trees from Riverside Native Trees and plants from Natives in Harmony was completed in the fall of 2016. The trail was laid out by Ken Farber, cut by Richard Gump, Eric Nowak and Nicky Fresch, and mulched by Boy Scout and OSU Buckeye Hop volunteers all in 2016. The Massie Cliffside Preserve was dedicated on August 7, 2016 with unveiling of the entrance sign, interpretive sign at the second parking area, and a bench in honor of Lisa Brohl. Four benches were installed with funds from donors-the Martens family, Farber family, North family and Ladd Brookner family. Bike racks from the original cottages were cleaned and put in place. Brochure and donation boxes and an interpretive sign purchased by Kalen Capp were installed in 2017. Recycling containers from an Ottawa Sandusky Seneca Solid Waste District Grant were installed in August 2018.

2015 - Lake Erie Islands Conservancy

The Lake Erie Islands Conservancy became an independent organization and a 501-C3 non-profit organization in 2015. *The mission of The Lake Erie Islands Conservancy is to encourage conservation and protection of natural and agricultural lands in the Lake Erie Islands for the benefit of future generations.*

2016 - Knam Parcel-4 acres on South Bass Island

Adjacent to the Massie Cliffside Preserve, this four acre parcel was purchased in March of 2016 with a CELCP –Great Lakes Initiative grant received by the Put-in-Bay Township Park District. Len Knam patiently waited from 2006 until 2016 for the Conservancy/Park District to purchase and preserve this parcel. This wooded parcel will bring the total area protected in the area to 11 acres and will increase the area available for birdwatching, walking, and nature study.

*“The battle for conservation will go on endlessly.
It is part of the universal battle between right and wrong.”*

John Muir

2016 - Middle Bass Forested Wetland Addition - 12 acres

The Put-in-Bay Township Park District received a CELCP grant and a Clean Ohio Conservation Fund grant in 2016 to purchase an additional 12 acres of wet woodland adjacent to the other parcels already owned. On January 11, 2018, the PIBTPD closed on seven acres from the Dieperink Family. The Put-in-Bay Township Park District made 5.2 acres purchase on Middle Bass Island in spring of 2018 with funds from the Conservation Fund. It is immediately adjacent to the Middle Bass Island East Point Preserve. A trail designed by Lisa Brohl and Theodora Pertner and installed by Schmidlin Construction with a parking lot and interpretive sign (donated by Jim and Betsy Brohl) was completed in the summer of 2018. A bicycle rack was donated by Julene Market. A dedication was held August 5, 2018 as part of Island Green Week with a cake reception after at the Middle Bass Island State Park picnic pavilion. The ribbon was cut by Kelly Faris, Lisa Brohl, Bruce Miles, and Nancy Welter. Donors Jim Brohl, the MBI Poker Kayak Paddle Event, and in memory of Dan Martin Sr. helped purchase the sign for the location.

2017 - Dodge Woods Preserve-3 acres

The Put-in-Bay Township Park District received a Clean Ohio Conservation Fund grant to purchase 3.5 acres of woods from John Dodge. Our match for the Clean Ohio program came from a bargain sale from Mr. Dodge, a \$15,000 donation from the Lake Erie Islands Conservancy, and \$2,000 donation from John and Paula Ladd. We closed on the property in February of 2017. A sign, bicycle rack, brochure and donation boxes, and small trail are available. The property was dedicated on August 5, 2017. The ribbon was cut by Michelle and Ava Heineman with Kendra Koehler and Lisa Brohl. Recycling containers from an Ottawa Sandusky Seneca Solid Waste District Grant were installed in August 2018. In August of 2018, the Put-in-Bay StoryWalk was installed on the trail by Karen Wilhelm of the Erie Islands Branch of the Ida Rupp Library. Members of the community and the Ottawa County Community Foundation have sponsored individual signs/pages. Richard Gump and Mark Wilhelm assembled and installed the trail. Books to be read by children will be changed periodically by the Library. It is very popular!

2017 - Burgundy Bay Lots-4 acres

Fifteen small lots (10' x 750') totaling just under four acres were purchased with funds from the Lake Erie Islands Critical Habitat Clean Ohio Conservation Fund and CELCP grants in 2016 and 2017. These lots are immediately to the south of the Middle Bass Forested Wetland-Burgundy Bay Tract purchased in 2015.

2017 - Foley Donation

The PIBTPD received the donation of two lots in Victory Woods from John P. and Ellen Foley. Gump Construction was hired to remove the old cottage on site. The Foley family agreed to pay \$400 in closing costs. March 13, 2017. Lot 46 and Lot 48 of Victory Woods.

2017 - Watson Donation

Maribeth Watson donated a .5 acre parcel of wet woods off of Anchor Lane on Middle Bass Island on June 14, 2017. It is immediately adjacent to the Prokesh parcel. Both parcels have no road access currently as the subdivision within Burgundy Bay was never constructed. PIBTPD paid all closing costs. Deed restrictions were placed on the parcel at closing so that no construction will ever take place in exchange for release from utility fees from Burgundy Bay.

2019 - Middle Bass Forested Wetland Addition-Hahn Parcel

The Put-in-Bay Township Park District purchased 8.2 acres from Karl Hahn on July 3, 2019. The purchase of these mature wet woodlands was made possible with grants from the Clean Ohio Conservation Fund and the Coastal Estuarine Land Conservation Program. Mr. Hahn retained the 1 acre lot with his construction equipment on it and sold the remaining 8.2 acres to the Township Park District.

2019 - Middle Bass Forested Wetland Addition-Burgundy Bay Lots-9 lots- approx. 2 acres

Funds were provided by the U. S. Environmental Protection Agency's Great Lakes Restoration Initiative (GLRI) implemented through the National Oceanic and Atmospheric Administration's Coastal and Estuarine Land Conservation Program to purchase an additional nine lots from private individuals in the Burgundy Bay subdivision area adjacent to the MBFW. These were purchased from the Mays (Gilbert H. Kinchen Trust), Eli Ralich, Patricia Houser, Deanna Raggozine, Tony Villers and Karen J. Arnold, Daniel J Vician, Trustee of the Roy Curtis Remainder Trust, Charlotte Perez et al (Donna Murphy Mataltich, Michael, Donald, Mark, and James Murphy, jr., Bill Ritley, Angelo Costello, Mary Ritley White), Leon and Mary Jane Wyzsinski. The Put-in-Bay Township Park District closed on these parcels on August 31, 2019. These lots are all wet wooded lots

2019 - Middle Bass Forested Wetland Addition- Island Development Parcel-4.4 acres

The Put-in-Bay Township purchased the Island Development Parcel from the estate of Roy Curtis and the Burgundy Bay Association on August 24, 2019 with funds from the Coastal Estuarine and Land Conservation Fund and the Conservation Fund. The lands were preserved in part by TC Energy and its subsidiary Columbia Gas LLC in partnership with the U. S. Fish and Wildlife Service in Ohio and the Conservation Fund. Additional funds were provided by the U. S. Environmental Protection Agency's Great Lakes Restoration Initiative (GLRI) implemented through the National Oceanic and Atmospheric Administration's Coastal and Estuarine Land Conservation Program. This acquisition was a team effort. The land was made available through a cooperative effort between Gayle Rini-/Curtis, represented by Mr. Dan Vician, Trustee of the Roy Curtis Remainder Trust, and Mr. Mark Lawless, President of the Burgundy Bay Homeowners Association (BBA), represented by Mr. David Buda, Esq. Both Rini-Curtis and the BBA have separately supported Conservation efforts on Middle Bass Islands over many years. The Put-in-Bay Township Park District sincerely thanks Gayle Rini-Curtis and the leaders and members of the Burgundy Bay Association. Marsha Collett, Neal Hess, and Judy Twarek-Bickley of the Hartung Title also contributed greatly to this very complicated project's completion. BBA and Gayle Rini Curtis made stewardship donations to the PIBTPD. The parcel has early successional habitat fronting Fox Rd. with more mature swamp forest in the rear.

2019 - Coopers Woods-South Bass Island-18.7 acres-

The Lake Erie Islands Conservancy has signed a contract with the DeRivera Park Trust to purchase Coopers Woods. The LEIC has secured 2 million dollars in grant funds from the Conservation Fund and from the Clean Ohio Conservation Fund with which to purchase the parcel.

2019 - Benjamin Parcel-South Bass Island-2.53 acres-

The Put-in-Bay Township has received a Land and Water Conservation Fund grant to purchase 3 acres of wooded land abutting the Coopers Woods Preserve from the Benjamin family. The PIBTPD has been invited to submit a full proposal to the Conservation Fund for the remainder of the purchase price. The Lake Erie Islands Conservancy has promised \$10,000 toward the purchase.

2019 - Cleveland – Middle Bass Island East Point Addition -2.83 acres

Put-in-Bay Township Park District received a Clean Ohio Conservation Fund grant for a portion of the bargain purchase. The Park District was approved for a Conservation fund grant for the remaining funding for the purchase. The Lake Erie Islands Conservancy pledged \$10,000.00 for this project.

2019 - Dodge Woods Addition - .7 acres

Put-in-Bay Township Park District received a Clean Ohio Conservation Fund grant for a portion of the sale of \$75,000.00. The Lake Erie Island Conservancy pledged \$5,000.00 toward the project. The parcel is adjacent to the Dodge Woods Preserve. The area has an abundance of wildflowers and wooded terrain. The parcel will provide a buffer for the trail which is currently winds through the Dodge Woods Preserve.

Conservation Notes

Lake Erie Water Snake-Ohio Division of Wildlife Conservation Easement Program

The Lake Erie Islands Conservancy operates a program for conservation easements to provide habitat for the Lake Erie watersnake and other wildlife on private property. Our first easement was located on the western shore of Kelleys Island and is now held by our parent organization the Black Swamp Conservancy.

Nature Camp from LEIC to Lake Erie Islands Nature and Wildlife Center

This popular program was started by the LEIC-BSC in 2003 and was moved to the new Lake Erie Islands Nature and Wildlife Center nonprofit in 2013. The Nature Camp Program is a series of day camps focusing on the unique island environment and is designed for children ages 4 to 16. Classes are limited to 20 students and are led by teachers and specialists in the field of science. Each session is designed for the student's specific age group and programs vary each year.

Research Experiences for Undergraduates (REU)

The Put-in-Bay Township Park District has participated in the REU program for undergraduate students at the Ohio State University Stone Laboratory. In 2017, student Camille Manoukian studied the forest composition after the death of green ash trees at the Schneider and Dieperink Tracts. She found a high percentage of invasive trees including amur honeysuckle and buckthorn filling the gaps. Her findings were part of a poster at the Ohio Academy of Science in April 2018. In 2018, student Matthew Monteith studied forest composition at the Schneider and Dieperink Tracts after the amur honeysuckle and buckthorn had been removed by EnviroScience with a grant from the Great Lakes Restoration Initiative. He also looked at soil composition of the two sites. Lisa Brohl was the advisor for both students.



Lake Erie Islands Nature and Wildlife Center

Located on Meechan Road, Put-in-Bay, Ohio, the Lake Erie Island Nature and Wildlife Center offers a magnificent collection of North American wildlife, fish and birds, a nature trail, a phenology garden and a frog pond.

Road Scholar - Elderhostel:

Road Scholar is an American not-for-profit organization that provides educational travel programs primarily geared to older adults. Road Scholar was formerly known as Elderhostel.

The year 2020 will make the 19th year of offering Road Scholar programs at Put-in-Bay. The Lake Erie Islands Nature and Wildlife Center is sponsoring this year's program: The Spirit of the Lake Erie Islands: The Drama, The Beauty, The Science

**Events –Lake Erie Islands Conservancy**

The LEIC annually sponsors a native plant sale, winter bird sale, and Christmas Craft Bazaar as well as other community events.

AmeriCorp intern

The LEIC has sponsored an AmeriCorp intern annually since 2011 (Colleen O'Brien, Leah Bilski (shared with LEINWC), Carmen Levand, Chloe Nostrant, Jenna Prahst, Samantha Newhouse (2017-2018), and Emma Young (2019.) This has allowed us to have a greater presence in the community during the busy summer months (10 week program.) Interns have written grants, maintained trails, designed signs and brochures and provided educational walks for the public.

Arbor Day – Village of Put-in-Bay Tree Commission

Put-in-Bay, Ohio, has been named a Tree City USA by the Arbor Day Foundation in honor of its commitment to the goals and principles of the Arbor Day Foundation. Put-in-Bay achieved Tree City USA recognition by meeting the program's four requirements: a tree board, a tree-care ordinance, an annual community forestry budget, and an Arbor Day observance and proclamation.

Each year, Put-in-Bay Arbor Day Celebration takes place on the third Friday in April at 4:00pm. The Council of the Village of Put-in-Bay allocates funding for the Arbor Day expenses.

End of the Year Financial Report for 2019

Put-in-Bay Township Park District
Ottawa County Ohio
Box 177
Put-in-Bay, Ohio 43456-0177

TO:
Auditor of State of Ohio
88 East Broad Street
Columbus, Ohio 43215

Balance, Jan. 1, 2019	\$140,125.43
-----------------------	--------------

Receipts:

Property Tax	\$90,512.50
Charges for Services	\$699.00
Intergovernmental Rev	\$948,919.97

Total Cash Receipts	\$1,040,131.47
---------------------	----------------------

Disbursements:

Insurance	\$1,732.00
Property Purchase/Development/Protection	\$985,426.43
Audit	\$8,740.75
Office Supplies	\$1,539.13

Total Cash Disbursements	\$997,438.31
--------------------------	--------------------

Excess of Receipts Over Disbursements	\$42,693.16
---------------------------------------	-------------

Balance: Jan. 1, 2019	\$140,125.43
-----------------------	--------------

Balance: Dec. 31, 2019	\$182,818.59
------------------------	--------------

