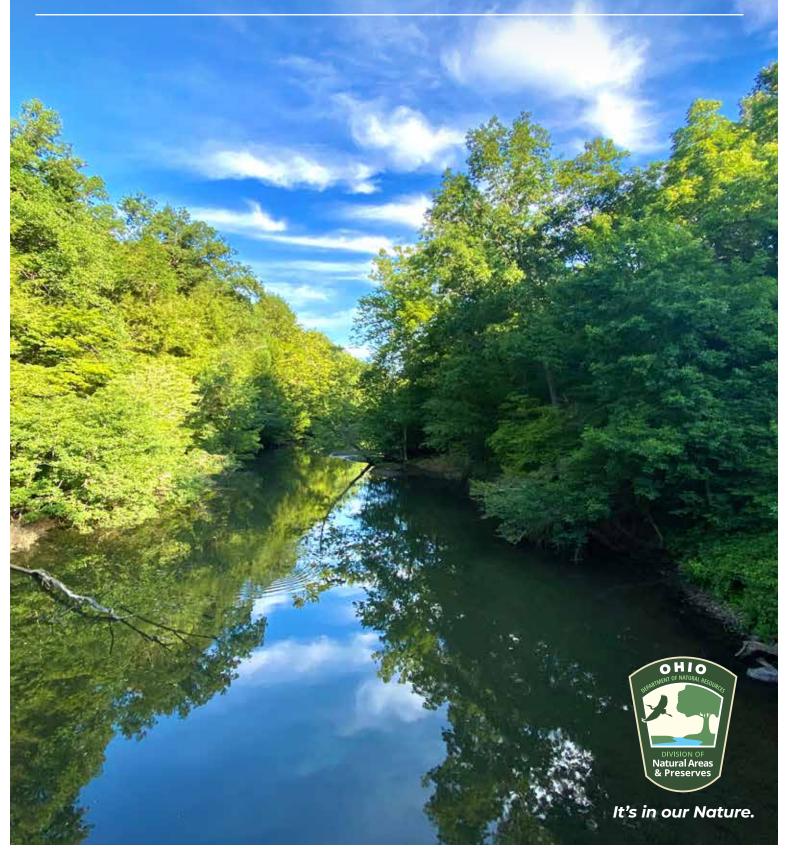


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Chief's Message

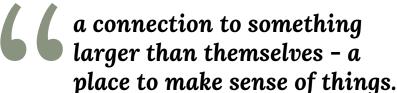


This year, unprecedented numbers of Ohioans have again found solace in nature. Ohio's parks, forests, wildlife areas, scenic rivers and nature preserves have been a refuge for people, offering peace and serenity, a connection to something larger than themselves - a place to make sense of things. It has been one of the Division's top priorities to provide such an experience, and an honor.

To expand our reach and ability to educate and inspire, the Division has continued the purposeful and strategic growth of our programs, as well as our technological capabilities. For the first time in the history of our popular Botanical Symposium, we exceeded 1,000 attendees, and the purchase of the Division's first drones are being used in education, ecological management, research, and monitoring. Visitors can use ODNR's new Detour app for trail information and maps, while newly designed interpretive signs with QR codes will continue to be installed to share the unique stories about our sites. Our Scenic Rivers Program has grown to include a new region in southeast Ohio, and for the second year in a row, we have added new nature preserves, Miriam Walter Barrens in Meigs County, and Coyote Run in Fairfield County, bringing our total number of preserves to 140.

We could not have done this important work without our supporters. Thank you for your donations, contributions to the Ohio Nature Preserves and Scenic Rivers tax checkoff program, and purchase of Scenic Rivers and Nature Preserves license plates. These methods of support help fund critical projects and remain a lifeblood for our program.

I also want to recognize some very special friends of the Division: Dr. Barbara Andreas and the Columbus Audubon's Service in Preserves volunteers.



ODNR honored the Audubon volunteers with a Cardinal Award to recognize their nearly 40-year commitment and thousands of hours of service to the Division. Dr. Andreas was inducted into the ODNR Hall of Fame for her lifetime of dedication to the field of botany and conservation in Ohio. Barb has been a wonderful friend, supporter and colleague of the Division for many decades. Retired division chief Guy Denny was inducted into the ODNR Hall of Fame as well. Guy has played a major role in the Division for decades and has continued to support our mission even after retirement.

I hope you enjoy reading about the division's many successes this year, as well a few of my favorite pictures. We continue to appreciate tremendous support for our program and have many exciting projects planned for the future. *It's in our Nature*.

Sthrage





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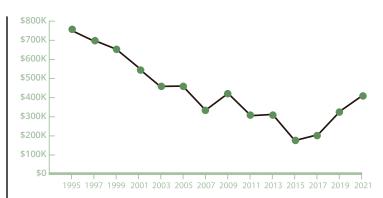


Funding & Support

Your Tax Check Off

DONATIONS AT WORK

Every year at tax time, Ohioans have the opportunity to donate all or part of their state income tax refund to the Division of Natural Areas and Preserves by choosing "Nature Preserves/Scenic Rivers" on line 26c of the 1040 Individual Income Tax Return. This is a vital revenue source for the Division that funds important projects all over the state, and we are grateful to all who donate each year to support our natural areas, scenic rivers and natural heritage programs.



1995 was a banner year of support for the Division. Though currently well below that peak, donations have been steadily rising - a trend we hope continues.



Your generous donations directly fund:

- land protection
- trail and facility improvements
- educational materials
- research and monitoring
- ecological management



Over the past year, a number of important projects have been funded through tax check off donations including:

Miriam Walter Barrens State Nature Preserve. **Meigs County**

Though this 46-acre preserve was generously donated to the Division by Mr. Aderer, and at his request named in honor of his parents Walter and Miriam Aderer, checkoff funds were used to cover costs associated with land acquisition such as a survey and title work. Ohio's 139th State Nature Preserve, this special natural area includes three barrens and mature oak-hickory and mixed mesophytic forests.

Halls Creek State **Nature Preserve. Warren County**

With years of regular use, well-loved trails often need extensive maintenance. or in the case of a trail at Halls Creek, a complete reroute. A total of 1,100 linear feet of newly routed and constructed earthen trail was built at Halls Creek, allowing the closure of an old trail that had developed erosion problems. Visitors will have the opportunity to enjoy Halls Creek's beautiful forests and wildflowers on this new sustainable trail.

Fowler Woods State Nature Preserve. **Richland County**

A beautifully sinuous, 1.25mile, accessible boardwalk was constructed, replacing the existing, old and damaged boardwalk. The new boardwalk includes handrails and benches for visitors to sit and enjoy the surrounding old growth trees and abundant wildflowers. Funding was provided through a Recreational Trails Program grant, with 20% match funding provided through check off funds.

Augusta-Anne Olsen State Nature Preserve. Huron County

Three new staircases were constructed along two of the preserve's wooded trails, allowing visitors easier access into the Vermilion River valley. With this new infrastructure in place, visitors have improved access to impressive spring wildflower displays and scenic views of the Vermilion River.

When Governor Mike DeWine took office in 2019, he made water quality a top priority by launching H2Ohio: a comprehensive, science-driven approach to improving water quality. ODNR's role in the initiative is to reduce nutrient loads

in the initiative is to reduce nutrient loads in rivers and lakes by creating or restoring wetlands. The initial \$50 million dollar investment was quickly put to good use, thanks in large part to ODNR's strong relationships and effective collaborations with over two dozen partners.

Because the Maumee and Sandusky State Scenic Rivers are large tributaries to Lake Erie, the Division's Scenic Rivers
Program has been working closely with ODNR's H2Ohio team. In total, DNAP has been implementing
\$17,054,739.40 in H2Ohio funding across the Maumee and Sandusky Watersheds,
as well as the Chagrin, Grand and Black Fork Watersheds.

H2Ohio PROGRESS

Once the current projects are complete, there will be approximately 90,000 acres of watershed filtered by wetland projects and more than 8,600 acres of wetlands created, restored, or enhanced.

H2Ohio, at its core, is a powerful collaboration. It is an alignment of missions across state agencies, industry, agriculture, and conservation organizations working together to improve water quality. New projects will continue to be identified and implemented throughout 2022. For more information on the H2Ohio initiative or current and future wetland projects, please visit **h2.ohio.gov**.



Redhorse Bend Floodplain Restoration: Sandusky County, \$976,000

Fifty-four acres of frequently flooded agricultural land along the Sandusky River in Fremont was purchased by Black Swamp Conservancy using Clean Ohio Funds and taken out of agricultural production. With H2Ohio funds, flood water from the river will be captured in restored wetlands, wet meadows, and forests that will filter sediment and nutrients. Once the restoration is complete, the property will be open to the public and managed by the Sandusky County Park District.

Forder Bridge Floodplain Reconnection: Paulding County, \$400,000

Fifty-four acres of former agricultural fields along the Maumee State Scenic River, purchased by Black Swamp Conservancy using Clean Ohio Funds, will benefit from 1,700 linear feet of stream restoration and a wetland that will passively filter water. These features will help reduce nutrients and restore natural hydrology. Separate funding was also used to improve existing access to the Maumee River Water Trail with the addition of a canoe/kayak launch.



2021 was another busy and successful year for the Division in preserving Ohio's natural heritage. For the first time in

Celebrating Over 1,300 Acres

NEWLY PROTECTED IN 2021

One of the year's highlights is the addition of nearly 66 acres to Springville Marsh State Nature Preserve in Seneca

roughly 15 years, the Division has surpassed the 1,000-acre mark in new acres protected within a year, with over 1,300 acres protected through conservation easements, acquisition and dedication. This includes the addition of two new state nature preserves and expanding the size of existing preserves.

County, an acquisition made possible thanks to funding from Governor Dewine's H2Ohio initiative. It is the first acquisition in nearly three decades. The land is currently in agriculture and will be restored to upland prairie, marsh, and wet meadow habitats. Staff are looking forward to discovering what native seeds may still be present in the soil.













This acquisition and pending restoration are significant because the 267-acre Springville Marsh is the best remaining remnant of Big Spring Prairie (also called Horse-shoe Prairie due to its horseshoe shape), a wet prairie, fen and marsh complex that was historically much larger and dominated by grasses, sedges and many forbs. Originally about 10 miles long and ½ to 1 mile wide, almost all of it has been developed or converted to agriculture, except for these few small areas that remain today.

Springville Marsh protects 26 state rare species such as green star sedge, northern adder's-tongue fern, few-flowered spike-rush, tower mustard, Virginia rail, and shining ladies'-tresses orchid. It also has some last examples of twig-rush wet meadow in Ohio.

Other completed land protection projects in 2021 included the 46-acre acquisition and dedication of Miriam Walter Barrens State Nature Preserve in Meigs County. The Division dedicated Coyote Run State Nature Preserve, a new 230-acre preserve owned by Coyote Run, Inc. in Fairfield County and additional 93 acres at Ka-ma-ma Prairie State Nature Preserve in Adams County, owned by Arc of Appalachia. For Scenic Rivers, a 29-acre acquisition and 847-acre conservation easement were completed on the Little Beaver Creek Wild and Scenic River in Columbiana County.

2021 will be a year to remember in protecting land in perpetuity. With about a dozen other real estate projects in the works, 2022 should be exciting as well. Of course, once land is protected, we do not stop there. Staff are looking forward to discovering what native seeds may still be present in the soil.

It's in our Nature.



Celebrating Over 1,300 Acres

Nature Preserves: 31,572
Scenic Rivers: 6,646
Total to Date: 38.218



Science & Restoration

Biological surveys and monitoring are important functions of the Division's

Documenting Biodiversity

AT CAMP GARFIELD

mission and a hallmark of the science-based work Division staff perform on state and other agency lands. Camp James A. Garfield Joint Military Training Center (C-JAG), formerly known as the Ravenna Arsenal, is a site the

Division has been monitoring every ten years since the early 1990s.

"It's a unique opportunity

to survey this large area

really given us insight on changes overall in the

region and contributes to

the knowledge of Ohio's

every 10 years. It has

Originally commissioned during World War II, the 21,683-acre facility located in Portage and Trumbull Counties is now used by the Ohio Army National Guard (OHARNG) for joint training operations.

Biological surveys began again in 2020 and were focused on dragonflies and damselflies, vascular plants, fish, mollusks and birds. The breadth of these surveys reflects C-JAG's biological importance for neotropical waterfowl and resident birds. From 2020-21, biologists Larry Roshe, Judy Semroc and Greg Cudworth documented 191 bird species, and of these, 43 state listed birds were found to nest on site. The state rare West Virginia white butterfly



northern blue damselfly, harleguin darner dragonfly, northern brook lamprey, and four-toed salamander.

location for this sedge. Other plant rarities include hobblebush (Viburnum lantanoides), tower mustard (Turritis glabra), simple willowherb (Epilobium strictum), woodland horsetail (Equisetum sylvaticum), Engelmann's quillwort (Isoetes engelmannii), shining ladies'-tresses orchid (Spiranthes lucida), Pennsylvania hawthorn (Crataegus pennsylvanica), and Fuller's bristleberry (Rubus fulleri).

flora and fauna."

Four-toed Salamander

It's a unique opportunity to survey this large area every 10 years.

- Rick Gardner

West Virginia White Butterfly

was discovered for the first time at the facility by Judy Semroc in spring 2021. Other rare animals documented include

On the plant side, the "mega" rarity of C-JAG is handsome sedge (Carex *formosa*). The discovery of this plant in 2010 was only the second time it had been found in Ohio. Two other populations were discovered a few years later by Brian Riley, Natural Resources Manager for the OHARNG. This is Ohio's only known

About 1,100 species and varieties of vascular plants have been documented to date. "Since the botanical surveys began in the early 1990s, the facility has gone through a lot of succession and the abundance of most plant species has changed with it," says Chief Botanist Rick Gardner.

Surveys of reptiles, amphibians, butterflies, moths and plants will be completed in 2022. The final results will be presented to the OHARNG to help inform and guide future management of its natural resources. We appreciate the opportunity to collaborate with the Ohio Army National Guard and look forward to completing our fourth decennial survey at this unique natural area and facility next year.





When the Scenic Rivers Program initiated a darter reintroduction project in 2020, it was more than just moving fish from river to river – it was a

Fish Reintroduction Project

「WO DARTERS, TWO YEARS IN

distribution makes them harder to collect in larger numbers as well.

river to river – it was a commitment to years of effort and the protection of Ohio's rich natural heritage.

In collaboration with The Ohio State University's Stream and River Ecology (STRIVE) Lab, supported through funding from the Division of Wildlife, reintroduction efforts continued this year with additional Bluebreast darters (Etheostoma camurum) and Variegate darters (Etheostoma variatum) moved from the Big Darby Creek to the Stillwater State Scenic and Recreational River in Miami and Montgomery Counties. Scenic Rivers Program staff and STRIVE fish biologist Brian Zimmerman set a goal of catching and moving 200 fish of each species to three selected areas in the Stillwater River to ensure viable darter populations in the future. That goal was reached for Bluebreast darters by the end of September, while reaching the goal for Variegate darters proved more difficult. Project biologists believe the Variegate darters simply do not exist in the same densities as the Bluebreast darters, and their wider

Each fall, Scenic Rivers Program and STRIVE staff will collaboratively survey fish populations at the relocation sites to understand survival rates and whether reproduction is occurring. To acquire this data, darters are caught with nets and measurements of their size, weight and overall health are selectively taken to determine average growth rates. They are also scanned for color-coded tags added during the original capture last year. Several tagged fish were caught during surveys this fall, indicating that relocated fish had survived through their first year. The capture of several young Bluebreast darters also indicated that reproduction is occurring, and their reintroduction is on the road to success.

As we learn from this and each new reintroduction project, we have the opportunity to expand this important work into additional rivers and lands throughout Ohio. By doing this, we ensure future generations may enjoy our natural resources, no matter how quickly they dart or small they may be.



Rare Species

Best Rare Plant Finds A NEW FERN IN 2021

Ohio continues to reveal its botanical secrets, as 2021 provided us with plenty of incredible rare plant finds across the state, including new native species for Ohio. Finding new species and populations of rare plants is not only rewarding for the discoverers and exciting for the botanical community, it is critically important for their protection. It gives us the opportunity to survey, monitor and target efforts to protect them and ensures a more accurate understanding of the species' status as a whole across its range. The following represents just some of this year's discoveries.



HAIRY LIP FERN

(*Myriopteris lanosa*) found in Lawrence County by Shaun Pogacnik and Josh Copen.

One of the most significant finds in recent years is the hairy lip fern (*Myriopteris lanosa*). This small but charming fern had never been located in the state before. It was found growing in several small patches along cliff edges of a sandstone ridgetop overlooking the Ohio River.

2021 NUMBERS

SMALL-FLOWERED SCORPION-WEED

(*Phacelia dubia*) found in Knox County by Knox County Parks' volunteers Janet Chandler and Beth Waller. It is the second known population in Ohio.



RARE PLANT POPULATIONS MONITORED:

541

RECORDS ENTERED INTO THE OHIO NATURAL HERITAGE DATABASE:

1,027





YELLOWISH-WHITE BLADDERWORT (*Utricularia ochrolecua*) found new to Ohio.



PRIMROSE-LEAVED VIOLET (*Viola primulifolia*) found in Scioto County by John Howard and Cheryl Carpenter. This is the 7th extant population.





BUTTERCUP
(Ranunculus ambigens)
found in Geauga
County by Greg
Snowden. This is
only the 3rd
extant and largest
population in
the state.

PLANTAIN-LEAVED

Rare Plant Finds BY COUNTY



ROCK HARLEQUIN (*Capnoides sempervirens*), Endangered, found by Maureen Bogdanski.



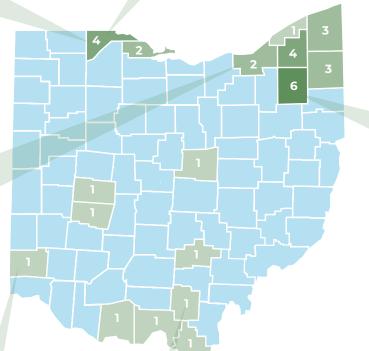
NODDING SEDGE (*Carex gynandra*), Endangered, found by Ryan Schroeder and Maureen Bogdanski.



LOVELY SHADBUSH (*Amelanchier amabilis*), New State Record, found by John Reinier.



TIMID SEDGE (*Carex timida*), Threatened, found by Daniel Boone and Brian Wise.



#- new finds per county

PINK DOT LICHEN

(*Dibaeis absoluta*) Threatened, found by Bob Klips, Bill Schumacher, Rick Gardner, Brian Gara, John Howard, Amelia Harris and James Palus.





BUNCHBERRY (*Cornus canadensis*), Threatened, found by Mike Toth.



COVILLE'S SCORPION-WEED (Phacelia colvillei), Endangered, found by Trey Scott and Autumn Coffey.

Education & Outreach

As any native plant enthusiast would attest, the Ohio Botanical Symposium (OBS) is one of ODNR's most anticipated and popular

Virtual Botanical Symposium

A HUGE SUCCESS

Other guest speakers were Jim McCormac, Kellen Calinger-Yoak and DNAP's own Andrew Lane Gibson,

events. This biennial symposium has been selling out for the last decade and the move to virtual this year only intensified the interest. Setting a new record for this 16th symposium, over 1,200 people registered, while attendance from all parts of the United States, plus Canada

and even Europe, proved another first!

Though the symposium was half the length of the traditional in-person symposium, it was just as informative and dynamic. The keynote speaker was Jennifer Ceska, an ecologist/botanist at the State Botanical Garden of Georgia. Jennifer was the inspiration and driving force for the development of an alliance focused on conserving Georgia's rare plants. The Georgia Plant Conservation Alliance has been very successful, and its framework has been modeled in other states and will be explored for use in Ohio as well.

Documentary filmmaker Meg Hanrahan talked about her Emmy-nominated documentary, A Force for Nature: Lucy Braun, about the world-renowned Ohio botanist.

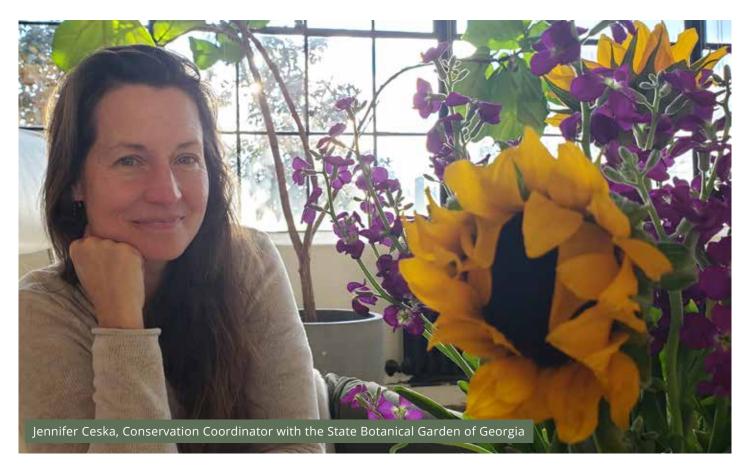
who gave the popular Best Plant Discoveries of Ohio talk.

Our long-time partners, The Nature Conservancy in Ohio and The Ohio State University, were a huge help with the virtual symposium, and we thank everyone who participated. The next OBS is planned for March 2023 and will be in-person with a virtual option.

Save the Date:

2022 Ohio Rivers
SYMPOSIUM

FRIDAY, MARCH 25, 2022 25





OHIO NATIVE SPRING WILDFLOWER CHECKLIST

Each new year, you can keep track of your spring wildflower sightings with the new Spring Wildflower Checklist published in late spring 2021. The list includes

the common wildflowers you might find in woods or open meadows from March to the end of May, plus a few rarities. Plants are grouped by flower color and species are listed alphabetically by common name. Plants that are rare and state listed are indicated too. The beautiful artwork was generously donated by Ohio artist Ann Geise.

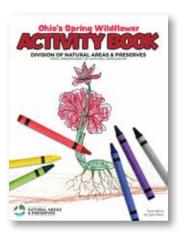
Three separate versions of the checklist are available online at Native Plants

Lists | Ohio Department of Natural Resources (ohiodnr. gov) and individual pages with photos and information for each plant can be found at Flowering Plants | Ohio Department of Natural Resources (ohiodnr.gov). We hope this list is helpful and fun for all ages and interest levels.



OHIO'S SPRING WILDFLOWER ACTIVITY BOOK

This spring, the Division created a new children's activity book featuring some of Ohio's most popular and interesting spring wildflowers. Each page includes



a beautiful drawing for coloring, a word scramble and flower facts. Because every child may not have the opportunity to smell a skunk cabbage while visiting a State Nature Preserve, we are working to provide resources that make learning about nature fun and accessible. The downloadable activity book can be found on our webpage.

Special thanks go to Northeast Stream Quality Monitoring Coordinator Ryan Moss for creating the one-of-a-kind illustrations and Aleeah Gardner, youngest daughter of State Botanist Rick Gardner, for coloring the front cover.

The best way to learn about nature is by witnessing the wonder and complexity of our natural world firsthand. Maybe it is that strange purple flower that always appears in late winter or that particular bird song you only hear in the woods - there is always something to discover in our State Nature Preserves.

An exciting new interpretive sign project is underway that will further enhance the visitor experience, with informative signs being

New Interpretive TRAIL SIGNS



created and installed at preserves around the state. These signs will showcase DNAP's updated look and feel, while helping visitors understand the significance of the site and some of the most abundant or unusual plants and animals they might encounter. New trail maps include trail names, mileage and points of interest. An exciting new section will include fun facts that encourage our young explorers to look and listen to the world around them.



The Ohio Department of Natural Resources Conservation Teen Advisory Council (conTAC)

Conservation-minded Teens

TAKE TO THE WATER

Students learned about Ohio's 15 wild, scenic and recreational rivers, what the citizen-

provides a unique opportunity for high school student leaders from diverse backgrounds across Ohio to work together and contribute ideas to enhance ODNRs youth outreach and program efforts. As part of this effort, conTAC members meet each month and learn a variety of subjects from different divisions within ODNR. This year, one of the meetings was focused on the Scenic Rivers Program.

science Stream Quality Monitoring (SQM) program does, why monitoring water quality is so important, and ultimately how we can all enjoy our public waters. Students also had the opportunity to canoe on Punderson Lake with Scenic Rivers staff and learn the fundamentals of canoeing and paddling safety.







The first set of signs was installed this fall, with more planned in the years to come. Projects like these are made possible through the funds we receive from the sale of Nature Preserves and Scenic Rivers license plates, the tax check off program and generous donors like you.

New trailhead shelters and signs were installed at Eagle Creek State Nature Preserve in Portage County and Irwin Prairie State Nature Preserve in Lucas County this summer.





Ohio Department of Natural Resources Division of Natural Areas & Preserves 2045 Morse Rd., Building H-3 Columbus, Ohio 43229-6693



To Ohio's Nature Preserves and Scenic Rivers

Remember Us At Tax Time

Make a donation to "Nature Preserves/Scenic Rivers" on line 26c of the 1040 Individual Income Tax return this year. These tax-deductible donations are a major source of funding for the Division of Natural Areas and Preserves and provide a convenient way to support natural areas conservation and your favorite preserves and scenic rivers.

Purchase a Nature Preserves or Scenic Rivers License Plate

Funding from this program provides education and interpretive programming, signage and materials for those visiting and interested in Nature Preserves and Scenic Rivers.

Donate By Mail

Send check or money order made payable to "ODNR Division of Natural Areas and Preserves" to: ODNR Division of Natural Areas and Preserves, 2045 Morse Road, Bldg. H-3, Columbus, OH 43229.











Donate Online

Scan QR code or visit **naturepreserves.ohiodnr.**gov to donate by credit or debit card.