

CONSERVE

VOLUME LVXIII • SUMMER/FALL 2021

WPC's Preserves: Nearby Nature for All

Western Pennsylvania
Conservancy



water, land, life.

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Cover Photo by Chuck Kozora: Wolf Creek Narrows Natural Area, Butler County

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The Western Pennsylvania Conservancy protects and restores exceptional places to provide our region with clean waters and healthy forests, wildlife and natural areas for the benefit of present and future generations. To date, the Conservancy has permanently protected more than 260,000 acres of natural lands. The Conservancy also creates green spaces and gardens, contributing to the vitality of our cities and towns, and preserves Fallingwater, a symbol of people living in harmony with nature.



Message from the President



This issue of Conserve focuses on the Western Pennsylvania Conservancy's preserves – the places the Conservancy owns, protects and shares with the public, and where all of us in Western Pennsylvania can get away into nature to hike and explore.

Since 1932, we've protected more than a quarter million acres of open space around Western Pennsylvania. We have transferred many of those properties to the state to become state parks, state forests and game lands, or to the federal government to become part of the Allegheny National Forest. But the Conservancy continues to own and manage more than 13,000 acres for the public to enjoy.

The largest of these properties is Bear Run Nature Reserve in the Laurel Highlands, the 5,000-acre forest setting around Fallingwater. Bear Run provides 28 miles of trails for the public to enjoy – from small loops for short walks to a long loop that can take most of a day to complete. Another popular destination is Toms Run Nature Reserve, our 350-acre property near Sewickley, which includes a three-mile trail loop. Bennett Branch Forest, in Elk and Clearfield counties, is our largest preserve in Pennsylvania's northern counties, with more than 1,400 acres to explore.

The Conservancy is always working on our preserves to improve their ecological conditions, remove invasive species and manage and protect wildlife habitat. We are fortunate that so many of our members participate in volunteer days on the preserves.

And we are always learning more about our preserves. This year we have been writing grant proposals for funds to better understand the early indigenous histories of the lands we have protected, and to be able to tell those stories better. Many of our preserves represent not just important natural history but cultural history as well.

And conditions on our preserves evolve. One change over the past decade has been the wide spread of the invasive hemlock woolly adelgid, causing the loss of hemlocks, the state tree, on many of our forest holdings. And we plant trees as well, to help bolster future native forests, and streamside trees, to cool the waters on streams that run through our preserves.

This year, we are celebrating the Conservancy's preserves with our campaign called 41 Places. The campaign is raising awareness of the places we own where Western Pennsylvania's residents and visitors can walk in the woods and get out in nature, and raising funds for these preserves and their ongoing management. During the pandemic, we have found that more and more people seek outdoor places to walk in fresh air, gather with family and friends or explore outdoor places where they haven't been before. We have been adding small parking lots, trails and other amenities to make our preserves even more accessible, while also providing ecological management to protect natural resources and habitats.

Thank you for all the support that you, our members and volunteers, bring to this organization. It is because of your support that we are able to own, protect, manage and share our special places around Western Pennsylvania.

Thomas D. Saunders

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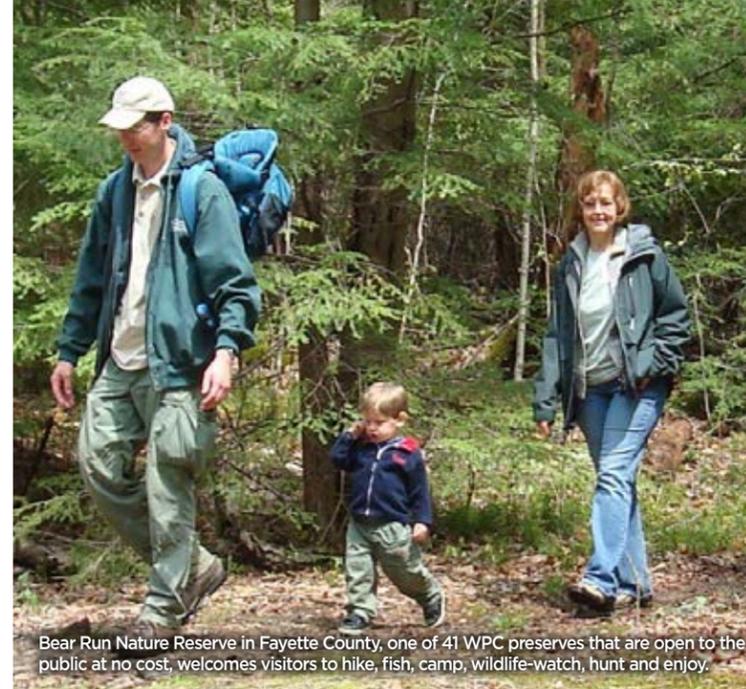
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Bear Run Nature Reserve in Fayette County, one of 41 WPC preserves that are open to the public at no cost, welcomes visitors to hike, fish, camp, wildlife-watch, hunt and enjoy.

Our Preserves: Part of WPC's Legacy of Helping People Connect to Nature

THERE HAVE BEEN TIMES OF GREAT UNCERTAINTY IN OUR COUNTRY BEFORE, INCLUDING THE WORST ECONOMIC DOWNTURN IN U.S. HISTORY, THE GREAT DEPRESSION. BUT IN 1932, DURING THAT TIME OF GREAT ADVERSITY, 12 BOLD COMMUNITY LEADERS ESTABLISHED AN ORGANIZATION TO FOCUS ON GREENING THE CITY OF PITTSBURGH, WHICH WOULD LATER BECOME THE WESTERN PENNSYLVANIA CONSERVANCY.

Those leaders soon expanded the mission to ensure land in Western Pennsylvania remained undeveloped so that native wildlife could thrive and people in cities and towns could have access to enjoy nature. In 1945, the Conservancy's first land protection project helped create McConnells Mill State Park in Lawrence County, one of 11 state parks the Conservancy has helped establish over the decades.

More than 75 years and a quarter million acres of conserved natural lands later, the Conservancy's work to protect our region's special places and natural history remains as relevant as ever. Recent research, one study in particular from the University of Maryland, shows that an increased number of people explored the great outdoors over the past year to overcome what the university's researchers labeled "quarantine fatigue."

During this current period of uncertainty, people need access to nature to experience and restore in it, providing even more reasons for the Conservancy to build on its long legacy of providing public lands through land protection projects. In fact in the last two years alone, WPC protected 4,660 acres and recently established new Conservancy-owned public preserves, LeBoeuf Wetlands and South Branch French Creek conservation areas, both in Erie County's important French Creek watershed. In addition to their ecological protection, these lands provide opportunities for people to connect

with nature by taking a relaxing walk or an invigorating hike, or enjoying other types of outdoor recreation. These special places are just two of the 13,500 conserved acres on 41 nature preserves the Conservancy owns and manages that are free and open to the public.

Our preserves protect and sustain ecologically significant lands and natural features including forests, streams, wild areas, wetlands and meadows in 16 counties. Exploring nature on WPC-owned preserves, such as Toms Run Nature Reserve in Allegheny County, Wolf Creek Narrows Natural Area in Butler County or Bennett Branch Forest in the PA Wilds, has never been more popular.

One of our first preserves, Bear Run Nature Reserve, opened to the public in the mid-1960s. Home to Fallingwater and now totaling more than 5,100 acres, the preserve is an exceptional place of biodiversity and natural beauty where native hardwood and hemlock forests and high-quality streams provide habitat for rare and native plants and animals. As part of a vast expanse of

forestland in Fayette and Somerset counties, the preserve supports wildlife such as black bear, bobcat, fisher and forest interior birds. Twenty-eight miles of hiking trails provide a remote and uninhabited wilderness escape for nature lovers of all interests.

The Conservancy first acquired 46 acres in Erie County in 1969 to create Wattsburg Fen Natural Area, which is an ecologically important patchwork of wetland types, including fens, marshes, peatlands and beaver ponds. Now at 292 acres, this preserve protects populations of rare bog orchids and other plant species, and a red-maple-black-ash swamp forest. This natural area is within the 1,250-square-mile French Creek watershed. Bear Run and Wattsburg Fen are just two excellent examples of the various types of important places the Conservancy owns and manages for public benefit.

Stewarding the Conservancy's preserves is of high importance, especially to safeguard the ecological integrity of these special places and share them with the public, says Shaun Fenlon, the Conservancy's vice president of land conservation. "As the current stewards of these lands, we know the care of our natural heritage, landscapes and ecosystems are vital in the face of the many threats to them, such as climate change and invasive species, and also for providing access to nature," he adds.

To further our conservation work, we are taking steps to better understand the earlier histories of our preserves in relation to the indigenous people of our region who inhabited Western Pennsylvania's land and river valleys for centuries. Through grant-funded efforts, we will apply the same thinking to state-owned properties we have protected. The Conservancy's board and staff believe that sharing this history is an important part of protecting and providing nature preserves and public lands. ■



Volunteers at Wolf Creek Narrows Natural Area in Butler County removed garlic mustard as part of ongoing invasive species management.



BEFORE

Land stewardship activities at Lake Pleasant Conservation Area in Erie County involved removing garbage and invasive plants (before) and planting native vegetation to restore this section of the preserve (after).



AFTER

Stewarding Our Lands Takes Time, Care and Funds

HAULING RUSTY WASHING MACHINES ACROSS MUDDY WETLANDS, CLEARING BRUSH AND DIGGING OUT INVASIVE PLANTS WASN'T THE TYPICAL WAY CAMERON COURTNEY AND HIS DELTA TAU DELTA FRATERNITY BROTHERS SPENT SATURDAY MORNINGS. NONE OF THE ROBERT MORRIS UNIVERSITY STUDENTS WERE ENVIRONMENTAL SCIENCE MAJORS, AND THEY USUALLY FULFILLED THEIR FRATERNITY'S COMMUNITY SERVICE HOURS IN LESS PHYSICALLY DEMANDING ROLES.

But when Conservancy Director of Land Stewardship Andy Zadnik contacted the brothers about volunteering to build a trail at Toms Run Nature Reserve in Allegheny County, they readily accepted. Cameron says, "It was very rewarding to clear trash and build the trails, and to see all the progress we'd made when the trails were finished. It was nice to work on something where the community can enjoy nature."

Cameron and his friends are just some of the many land stewardship volunteers who work beside Conservancy staff to keep our preserves natural and welcoming for everyone. Thanks to their efforts and our generous funders, the 369-acre Toms Run Nature Reserve now features a nearly 3.5-mile hiking loop through deciduous forest and

across streams, an ADA-accessible parking lot and path, and interpretive signage.

Andy notes that younger volunteers often have a sense of environmental justice, and hopes that the older generation passes its conservation ethic on to them. "I hope they learn from each other," he says. "We so much appreciate their commitment and camaraderie."

That commitment drives the Conservancy's land stewardship program to actively manage WPC's 41 preserves across the region. Managing the preserves, which host forests, waterways and wild areas where people can recreate and that wildlife call home, takes time, care and funds.

41 Places
Nature Near You Needs You

Because you need nature, the Western Pennsylvania Conservancy provides 41 places where you and nature can meet.

Keeping these preserves wild and natural doesn't just happen. It takes vigilance, hard work and the support of generous supporters like you.

With your help, through our 41 Places fundraising and awareness campaign, we can protect the places we all love for future generations of humans and wildlife. Please donate today.



The current pandemic has shown just how much people are looking for new places to hike and explore. Although we strive to keep our preserves predominantly wild and natural, we also provide at least basic access amenities, such as small parking areas and interpretive signage at many sites. We remove dump sites and unused buildings to restore sites to a more natural state while conserving important habitats for various species. To fund improvements on our 41 preserves, the Conservancy is encouraging members and others who visit our preserves to support our 41 Places campaign.

At Lake Pleasant Conservation Area in Erie County, we installed a universal access trail, boardwalk and canoe/kayak launch and are aggressively managing invasive plants and planting native vegetation. Containing what is regarded as northwestern Pennsylvania's most pristine glacial lake, the area includes 581 acres of wetlands and upland forest, providing opportunities for recreation, education and scientific research. With donor support, we plan to enhance public access and educational events by constructing a pavilion and rehabilitating several small parking areas.

At Wolf Creek Narrows Natural Area in Butler County, volunteers and staff manage 243 acres that include a 1.5-mile hiking trail, seasonal wetlands, scenic cliffs and a mature hardwood forest perfect for wildlife watching and wildflower viewing. Ongoing work includes invasive species management and trail maintenance. Planned improvements include a trail extension and additional parking area.

On other preserves, volunteers and staff are removing old, unused bridges, installing signage, restoring wetlands, painting structures, and expanding parking lots and trails, just to name a few improvements.

Andy notes that the extensive improvements on our preserves could not be accomplished without member and volunteer support.



Delta Tau Delta fraternity members from Robert Morris University volunteered to help build and maintain the trail at Toms Run Nature Reserve in Allegheny County.

"We need more local groups and connections with whom we can develop relationships for volunteering," says Andy, referring to groups like Delta Tau Delta. "And we encourage people who use our preserves to support our initiative so that these preserves will be protected and available for future generations." ■



LAKE PLEASANT: Stewarding an Ecological Treasure

Lake Pleasant in Erie County is the last remaining example of a pristine glacial lake in northwestern Pennsylvania.

WESTERN PENNSYLVANIA HAS AN ECOLOGICAL AND BIODIVERSITY GEM WITHIN ITS MIDST: FRENCH CREEK AND ITS WATERSHED. THIS NATURAL AND UNIQUE ECOSYSTEM IS 1,270 SQUARE MILES AND INCLUDES A VARIETY OF ENDANGERED FRESHWATER MUSSELS AND FISHES, AND RARE AND ENDANGERED PLANT SPECIES.

What makes this area so exceptional? Twenty thousand years ago, continental glaciers melted and gave way to nutrient rich soils and ample groundwater storage that today support lush and diverse vegetation and the creek's robust ecosystem. Plants found nowhere else in the region call the French Creek watershed home, which provides habitat for five species of federally endangered and threatened freshwater mussels and other mussel species, as well as numerous fish species of greatest conservation need in Pennsylvania. The watershed also hosts a variety of wetlands and the only remaining natural glacial lakes in the region, the crown jewel of which is the 64-acre Lake Pleasant.

These glacial lakes are spectacular historic relics, says Charles Bier, the Conservancy's senior director of conservation science, and protecting Lake Pleasant's surface waters, headstreams and floodplain continues to be a priority for the Conservancy.

Lake Pleasant is the best example of a pristine glacial lake among the eight glacial lakes in northwestern Pennsylvania. Charles says it is considered the best example of an undisturbed and biologically intact natural glacial lake in northwestern Pennsylvania and northeastern Ohio. The lake and adjacent wetlands support 37 plant and animal species of conservation concern. The Conservancy first began protecting the lake in 1990.

Explore Recreation on Lake Pleasant

Located approximately eight miles south of the City of Erie and I-90 in Venango, Green and Waterford townships in Erie County, the 582-acre Lake Pleasant Conservation Area is open to the public for boating, hiking and hunting. The conservation area includes the lake, most of the lake's shoreline, as well as wetlands, upland forests, old fields and reclaimed gravel mines.

In this wildlife watcher's paradise, visitors can expect to see the long, broad wings of bald eagles sailing ahead or swamp sparrows forging near the lake's waters. Beavers are abundant at the lake outlet and within numerous small wetlands. Only non-motorized boats, such as canoes and kayaks, are permitted on the lake, with convenient access from a boardwalk and boat launch. First-time visitors are encouraged to scan the QR code below or call 412-288-2777 to learn more before experiencing the lake.

Removing the Invaders

On an early August morning, Conservancy staff and a contractor, Ellery Troyer of Ecological Services Inc., take a few minutes to clean the bottom of their kayaks, slip on waders and secure life vests before a float on Lake Pleasant. Though a leisurely nature escape amidst the lake's beauty and wildlife would be preferred, the purpose of their excursion is hard work: Paddle to the southern shoreline to find patches of the invasive species narrow-leaved cattail and hand-treat as many as possible with an herbicide that will eventually kill the plant. Invasives are aggressively forming monocultures at the lake and threatening to replace native vegetation in the shrub fens where prairie sedge, golden ragwort and cuckooflower thrive.

Invasive cattail prefers high-quality natural areas such as at our Lake Pleasant and Wattsburg Fen Natural Area, and is unfortunately not the only invasive species jeopardizing



The Conservancy and its partners are working to remove invasive narrow-leaved and hybrid cattail that are spreading through the Lake Pleasant Conservation Area wetlands, including rare fen wetland communities, on the south end of the lake.

these important habitats. Thanks to a Great Lakes Regional Collaborative grant, we are concentrating efforts to treat and control invasive species with the ultimate goal to rid WPC's northwestern preserves of them.

Jeff Wagner, director of Pennsylvania Natural Heritage Program for the Conservancy, says managing the lake's invasive species is an ongoing effort that will take years. "We have a thorough knowledge of the lake's ecosystem and a management plan that includes regular treatment and monitoring. It's important that all nature-goers work to limit introduction of invasive species. For example, cleaning boats and kayaks before entering the lake is vital," he adds.

Once Jeff and the group arrive at the site, Ellery treats each cattail with a dyed herbicide that kills the plant within two weeks without harming the native vegetation or water quality. They'll be back again every two weeks, through early October, monitoring the treatment progress and considering other cattail patches to target. ■

Scan to learn more about the 582-acre Lake Pleasant Conservation Area in Erie County. To limit introducing invasive species, remember to clean your kayak or canoe prior to entering the lake.



DID YOU KNOW?

An anthropology professor at Gannon University in Erie verified that a bone found in the bottom of Lake Pleasant in 1991 was in fact the shoulder blade of a woolly mammoth, an ancestor to the elephant. Most woolly mammoths went extinct roughly 10,000 years ago as the climate warmed. Teeth, a jawbone and tusks were also discovered and extracted from the lake floor. Due to scratches on the bones and information from the excavation site, it is believed that Native Americans hunted and killed the mammoth and stored the remains in the lake for later retrieval.



Fall is a great time to explore the 3.6-mile trail at Bennett Branch Forest in Elk and Clearfield counties.

Discover Northern Woods Beauty at Bennett Branch Forest

Fall is the ideal time to experience 1,500-acre Bennett Branch Forest and the vibrant golds, reds and yellows of its northern hardwoods of American beech, northern red oak and maple. Visitors can hike this WPC preserve on a 3.6-mile round-trip trail that takes hikers through the forest, including beautiful hemlock groves.

Remote and tucked away in Elk and Clearfield counties bordering Moshannon State Forest, the forest also offers back-country camping, and mountain biking is permitted on designated trails.

Bennett Branch Forest is dissected with steep ravines, small tributary streams and the larger Cherry Run, which is a tributary of the Bennett Branch Sinnemahoning Creek. Visitors can sometimes see elk at the preserve and, in the winter, animal tracks that are left in the snow by the abundant wildlife.

The forest has a legacy of coal mining that has negatively impacted the soils and water quality. Cherry Run has been contaminated by mining for decades, but is now being remediated with treatment ponds that will improve water quality and restore the land. On some portions of the property, the former disturbed areas have been recently planted with a mix of hardwood trees, including a strain of blight-resistant American chestnut.

The property is also a demonstration of sustainable forestry practices. Matt Marusiak, the Conservancy's land protection manager who manages the preserve, explains the practice. "When assessing a harvest, we consider what's present and what is likely to grow in the future, and allow less-desirable trees to be removed first. We retain good quality trees for seed source and habitat, and to foster healthy forest regeneration. The remaining trees benefit a number of wildlife species and, over time, will grow into a mature forest stand."

When exploring the preserve, look for educational signage that describes the planned tree harvests. Also, one large area of the forest is being reserved as future old growth forest, and is restricted from active harvesting. ■



Bennett Branch Forest offers moderate hiking and excellent wildlife exploration. Scan to get directions to visit.



View from the Joshua C. Whetzel, Jr. Trail's scenic observation area, which overlooks the southern edge of the Town of Confluence, portions of the GAP Trail and the Casselman and Youghiogheny rivers in Somerset County

Laurel Highlands Preserves Offer a Broad Range of Nature Experiences

IT'S NO SECRET THAT THERE ARE SEVERAL BREATHTAKING AND IMPORTANT STATE-OWNED PUBLIC LANDS IN THE 3,000-SQUARE MILE LAUREL HIGHLANDS REGION – INCLUDING LAUREL HILL STATE PARK, STATE GAME LAND 111 AND OHIOPYLE STATE PARK. THESE AREAS ARE MORE POPULAR THAN EVER, AS VISITORS FROM ACROSS THE STATE AND BEYOND FLOCK TO THESE LANDS SEEKING RESPITE IN THEIR NATURAL BEAUTY AND RECREATIONAL AMENITIES.

But if you're looking for other spectacular places in the region that also have natural beauty, abundant wildlife and recreational opportunities – without the crowds – consider exploring some of the popular and lesser known WPC-owned preserves in the Laurel Highlands.

Since 1951, we have worked to conserve nearly 83,000 acres of ridges, valleys and farmland in the Laurel Highlands to permanently protect important biodiversity areas such as old-growth forests, riparian forests and rock outcrops. Contributing to a larger forested landscape, thousands of WPC-owned and -managed acres of forests and wetlands play an important role in filtering and storing water, and capturing and sequestering carbon to help lessen the effects of a changing climate.

Bear Run Nature Reserve

Bear Run Nature Reserve, a 5,110-acre natural area featuring mature hemlock forest and cold water streams, hosts more than 500 plant and 53 breeding bird species, and provides habitat for a variety of forest-dwelling and aquatic wildlife. Sightings of black bear, fisher and bobcat delight wildlife watchers. The reserve is scenic and, in the spring, various native wildflowers color the forest floor and line the trails. Bear Run is an ideal nature escape for families with young children, providing limitless opportunities for nature exploration and discovery.

The reserve protects several mountain streams within the Bear Run watershed and is home to Frank Lloyd Wright's architectural masterpiece, Fallingwater, which is on the World Heritage list. There have been many stewardship projects to improve the trails and signage, enhance for forest diversity and help rid the reserve of invasive species, such as hemlock woolly adelgid.

Location: Stewart and Springfield townships, Fayette County; Lower Turkeyfoot Township, Somerset County

Trail length and difficulty: Six designated trail loops that total 28.6 miles, with sections that range from easy to difficult

Activities: Hiking, wildlife watching, fishing, camping, hunting and nature exploration

Casselman River Conservation Area

At 644 acres, this conservation area is made up of six Conservancy-owned properties that border and help safeguard the stunning scenic views and plentiful wildlife along the Great Allegheny Passage Trail and the Casselman River in Somerset County.

The area protects several rare plant species found within various sections of the Casselman River floodplain, where dense vegetation, forests and wetlands help filter and store water, reducing flooding events.

One of the preserves that comprise the conservation area is the 40-acre Joshua C. Whetzel, Jr. Memorial Recreation Area, which opened to the public in 2019. Visitors are encouraged to explore the area's trail that starts behind the popular Lucky Dog Café and ascends a hillside to a scenic observation area overlooking the southern edge of Confluence, portions of the GAP trail and the Casselman and Youghiogheny rivers.

Location: Confluence Borough, Somerset County

Trail length and difficulty: up-and-back trail of .5 miles, a steady ascent and descent that ranges from moderate to difficult

Activities: Hiking, wildlife watching, scenic observation, nature exploration and hunting

Four Other Laurel Highlands Nature Preserves to Explore

The following Conservancy-owned preserves are open to the public for a variety of recreational uses. However, many of them are remote and rustic, with limited or no trail access and parking, and as such, are more suited for experienced hikers and explorers. If you are up for an off-the-beaten-path experience, these locations may be ideal for you.

Fayette County

Beaver Creek Natural Area: 211 acres

Somerset County

Whites Creek Valley Natural Area: 85 acres

Westmoreland County

Camp Run Woods: 20 acres

Marshall Preserve: 77 acres

Activities: Hiking, wildlife watching, fishing and hunting

Amelia Marren, whose responsibilities include managing Bear Run and other WPC preserves in the Laurel Highlands, is the newest member of the stewardship team, and manages these remote locations with the same conservation principles applied to all WPC preserves: to limit human disturbances, control invasive plants and help nature restore.

She notes, "It has been very interesting to learn the



There are 28 miles of trails at Bear Run Nature Reserve in Fayette County. More than 500 plant species have been found on the preserve.

environmental impacts that the Industrial Revolution had on the region, and how, since then, the Conservancy has played a large role in preserving land to restore forests and waterways."

Amelia, who also monitors land protected via conservation easements in the region, says her favorite task as a land steward is introducing other people to the land. "Whether it is volunteers or visitors, I love showing people the characteristics that make our preserves unique," she adds.

Before you trek to any of these four places, we encourage you to contact Amelia at 724-238-2492 or amarren@paconserve.org to learn more about these preserves and how to access them. ■



Hikers engage in nature at Bear Run Nature Reserve in Fayette County with WPC Senior Director of Conservation Science Charles Bier.



See Unique Features at Lesser-known Preserves

Dutch Hill Forest in Jefferson County features a spongy, sphagnum moss-covered forest with rhododendron bushes, mountain laurel thickets and boulders.

YOU MIGHT HAVE WALKED, HIKED, BIRDWATCHED OR FISHED ON SOME OF THE CONSERVANCY'S MORE POPULAR PRESERVES. BUT HAVE YOU CONSIDERED GOING "OFF THE BEATEN PATH" TO EXPLORE OUR LESSER-KNOWN PRESERVES? WE HAVE MORE THAN 13,000 ACRES OF LAND OPEN TO THE PUBLIC, FREE OF CHARGE. ALTHOUGH MANY OF THOSE ACRES COMPRISE WELL-KNOWN AREAS LIKE BEAR RUN NATURE RESERVE AND WOLF CREEK NARROWS NATURAL AREA, NATURE LOVERS AND OUTDOOR ENTHUSIASTS WILL ENJOY DISCOVERING UNIQUE NATURAL FEATURES ON OUR SMALLER OR LESSER-KNOWN PRESERVES.

Tryon-Weber Woods Natural Area

Visitors to Tryon-Weber Woods in Crawford County can traverse rolling woodland in the shade of trees that are a century and a half old. Named in 2016 as an exemplary forest by the Old-Growth Forest Network in recognition of its stand of mature, older-growth beech, red oak and sugar maple trees, Tryon-Weber Woods is often used for biological study by the University of Pittsburgh Pymatuning Laboratory of Ecology.

Only one trail leads into the property and it's accessible near the Conservancy sign located on a local unpaved road. A parking lot will be completed soon. The grove of old growth trees spreads across a small stream that has cut a deep valley in the soft glacial soils. Andy Zadnik, the Conservancy's director of land stewardship, says, "It is thought to be the last remaining mature stand of beech-maple forest in Western Pennsylvania and the eastern-most stand of this forest in the national range."

Dutch Hill Forest

At our 490-acre Dutch Hill Forest in Jefferson County, exploration begins at access points within an upland area rather than along the low floodplain of the Clarion River that borders the preserve to the north. "I think the coolest part of the preserve to explore is a hemlock palustrine forest, which is a type of wetland," Andy says. "It's not a deep-water swamp though, but a spongy, sphagnum moss-covered,

slightly dark forest full of hemlock, white pine and birch trees." Hikers can also follow old logging trails down hillsides past large boulders and rock outcroppings and through rhododendron and mountain laurel thickets to eventually meet the Clarion River.

Lowville Fen

Wetlands, wet peat soil and the architecture of one of nature's busiest rodents can be found at Lowville Fen, part of West Branch French Creek Conservation Area in Erie County. The preserve welcomes visitors with a small parking lot and a 1.1-mile loop trail. Charles Bier, the Conservancy's senior director of conservation science, says, "People can see some of the unique aspects of the area's soil if they go off the trail – taking care not to trample the vegetation, of course!" He adds that a side trail follows a power line down a slope to a wetland, or fen, where wet peat soil abounds. But visitors who opt to stay on the trail will be rewarded with a close-up view of a beaver dam across a tributary of West Branch French Creek (portions of the trail could be wet).

Plain Grove Fens Natural Area

Those looking for a peaceful place to explore with a mix of open fields, forest and stream will enjoy a visit to the 394-acre Plain Grove Fens Natural Area in Lawrence County. Visitors are asked to be respectful of the boundary of the active farmland at Plain Grove Fens, which is leased as part of the Conservancy's Farmland Access Initiative.

Jim Wesolowski, a Conservancy land steward volunteer for about 10 years, says Plain Grove Fens Natural Area is his favorite preserve due to its variety of environments and elevations. In addition to a beautiful mature forest, he notes, "A stream runs through the bottom, and you can walk through a floodplain and on a hillside and see different wildflowers and plants." Keep walking, he says, and "You'll run into the vernal pools, and if you are a birdwatcher you can check out the birds in the open fields, in the woods and in the lower flats."

Most of our preserves are open to the public year-round, free of charge. Find more information about these and all other WPC preserves on WaterLandLife.org or call 412-288-2777. ■



Plain Grove Fens Natural Area in Lawrence County offers a mix of open fields, forest and stream.

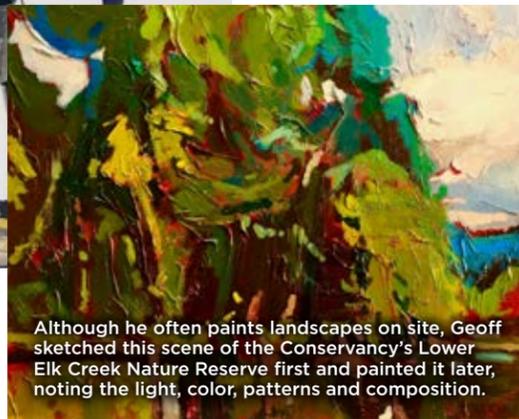


Wildlife observers will appreciate the engineering and architecture of this beaver dam at Lowville Fen in the West Branch French Creek Conservation Area.

Member Paints Preserves as Act of Reverence to Nature



Conservancy Board Member Geoff Dunn, a retired surgeon, paints landscapes in oil, often on WPC preserves near Erie, Pa. He says painting has broadened his understanding of environmental issues.



Although he often paints landscapes on site, Geoff sketched this scene of the Conservancy's Lower Elk Creek Nature Reserve first and painted it later, noting the light, color, patterns and composition.

SINCE HIS RETIREMENT AS A SURGEON AND PALLIATIVE CARE CONSULTANT AT UPMC HAMOT IN ERIE, GEOFF DUNN HAS SWAPPED SCALPEL FOR PAINTBRUSH, OPERATING TABLE FOR CANVAS AND HOURS SPENT PROVIDING CARE TO PATIENTS FOR TIME SPENT PAYING HOMAGE TO NATURE. HIS PASSION IS PAINTING PLEIN AIR, OR IMPRESSIONISTIC, OPEN AIR LANDSCAPES, IN OIL.

An Erie native and resident, Geoff is often drawn to and enjoys painting Western Pennsylvania Conservancy preserves, such as Lower Elk Creek Nature Reserve, and local state parks, including Presque Isle and Pymatuning.

Geoff joined the WPC board about 10 years ago, while on the board of the Erie Community Foundation. "I felt the

Conservancy had the capacity, scope, depth and skills to further environmental issues in this area," he says. He has effectively worked to unite the organizations in addressing environmental issues.

Meanwhile, his understanding of environmental issues has broadened, and a connection between painting and his work in medicine has deepened.

"Painting landscapes is an act of reverence toward nature," he says, much like caring for terminally ill patients is an act of reverence toward their lives. "Generally, people who landscape paint tend to be good stewards to the environment."

"When I started painting landscapes 20 years ago I wasn't as aware of the impact of invasive species," Geoff continues. Now, he sees phragmites encroaching on Lake Erie's coastal wetlands at Presque Isle and feels the urgency of managing this invasive non-native weed to restore native vegetation and the ecological community dependent upon it.

Observation through painting has made climate change very real to him. "I feel anticipatory bereavement. I see global collapse happening due to climate change. I see 20 percent of the trees at Presque Isle dead due to high water."

He notes parallels in surgery and painting. "You want no wasted strokes in surgery or painting. The size of the canvas is the size of your operative field. You need a plan when you dive in, but use your critical powers of observation to guide you and stick to what's relevant."

His eye for light, patterns and color serves him well, just as understanding his patients spiritually, physically, socially and emotionally provided him perspective. "There's always more going on than what you actually see," he says, noting that as he sat in the shadows at Elk Creek, "I was struck by the composition of the mass of trees with flowing water in the foreground, the slight bend in the creek, the blue sky in the distance."

A fourth-generation surgeon whose family all practiced at the same hospital in Erie (and where his wife, Ellen Dailey, currently practices), Geoff is writing a collective family memoir, focusing on the history of surgery in the United States beginning post-Civil War. His roots in the community run deep; his respect for the lake and the peninsula's wonderful biodiversity is strong.

"Painting is my way of saying to nature, 'My apologies for what whatever I've done to impair you,'" Geoff explains. "It's saying, 'I respect and love you.'"

Geoff Dunn exhibits his work in art galleries in Boston, New York and Erie. Please check out local galleries in Erie to see or purchase his work. ■

Volunteers Help Battle Invasive Plants on WPC's Preserves

AT EVERY WPC PRESERVE, THE CONSERVANCY'S STEWARDSHIP STAFF IS WORKING TO CONTROL INVASIVE PLANT SPECIES WITH THE GOAL OF ELIMINATING THEM FROM OUR PRESERVES' NATURAL AREAS, WETLANDS, TRAILS, STREAMSIDE HABITATS AND FORESTS.

By now, you are likely all too familiar with the common names of some of our region's most prolific invasive plants: bittersweet, barberry, vine honeysuckle, garlic mustard, multiflora rose, purple loosestrife and kudzu.

These species, brought to the Americas decades ago by early settlers and through various agricultural practices and the nursery industry, outgrow, crowd out and eventually kill native plants. Research shows when more invasive species are present, critical food resources and quality habitat for native birds, butterflies and other wildlife and pollinators are reduced.

Andrew Zadnik, the Conservancy's director of land stewardship, and his team regularly monitor the preserves and review each preserve's management plan. The plan provides a roadmap for how to reduce, control and to ultimately eliminate invasive plants.

Andy says, "Removing invasive plants conserves native plant diversity and creates a healthier ecosystem for many species of wildlife." He relies on the selfless generosity of Conservancy members and volunteers to help, and for nearly a decade, many individuals and various volunteer groups have answered the call.

Dedicated Volunteers are Making a Difference

Bad weather that included windy conditions and a hailstorm in early May didn't stop volunteers with the Bedford Countywide Action Plan's Conservation of Natural Areas Working Group from hiking the rocky cliffs of the Conservancy's Lutzville Cliffs Natural



Landowners Mike Jackson and Carolyn Hendricks, who have each permanently protected their properties through conservation easements with WPC, participate in a workday to remove invasive plants including bittersweet, honeysuckle and garlic mustard from WPC's Lutzville Cliffs Natural Area in Bedford County. Carolyn is also a WPC board member.

Area in Bedford County.

The undeterred volunteers were on a mission to remove as many invasive plants as possible, says Laura Jackson, a Conservancy member who helped coordinate the workday. "Considering the conditions, we were productive and hand-pulled bittersweet, barberry and garlic mustard from woodlands and a steeper section of the preserve."

The preserve is within a state-designated Natural Heritage Area because many species of concern, such as native plants of Canby's mountain-lover and Allegheny stonecrop only grow in the rare and limited limestone habitat. The preserve was established to protect these natural communities and allow the rare species to rebound and thrive.

Andy says with the help of volunteers, the Conservancy will continue monitoring these

aggressive invasive species at this natural area and refining management approaches in the future.

"While Lutzville Cliffs Natural Area is not an area for recreation, it is a unique and special habitat in our region that we hope to keep viable and healthy for years to come. Removing these unwelcomed species is a big step in helping the area remain special," he adds.

Are you interested in volunteering to remove invasive plants or do other tasks at WPC preserves? Contact Andy at azadnik@paconserve.org or 412-586-2318. ■



Scan to learn more about invasive plant species and how you can help control them, on a special section on WaterLandLife.org called Green Isn't Always Good.

Conservation Efforts Protect Region's Biodiversity



Observers at Wattsburg Fen Natural Area might get to see the bright geometric design of the imperiled Harlequin darter dragonfly.

WESTERN PENNSYLVANIA'S PLATEAUS, MOUNTAIN RIDGES, FORESTS, WETLANDS AND RIVERS ALL SUSTAIN NATIVE, RARE AND ENDANGERED PLANTS, ANIMALS AND ECOSYSTEMS, SOME OF WHICH ARE FOUND NOWHERE ELSE. FRENCH CREEK, FOR EXAMPLE, IS THE MOST BIOLOGICALLY DIVERSE STREAM OF ITS SIZE IN THE NORTHEASTERN UNITED STATES, WITH THE MOST SPECIES OF FRESHWATER MUSSELS AND NEARLY 90 SPECIES OF FISHES.

The Conservancy's Pennsylvania Natural Heritage Program (PNHP) staff uses a scientific approach to prioritize the protection of certain landscapes and waterways, and consequently the region's diversity of species and ecosystems, called its biodiversity.

Our PNHP staff and GIS specialists contributed to a study led by NatureServe to create a fine-scale, high-resolution Map of Biodiversity Importance that pinpoints the places that matter most for sustaining our nation's biodiversity. NatureServe is the authoritative source for biodiversity data throughout North America and more than 50 years of inventory data support the study.

Charles Bier, the Conservancy's senior director of conservation science, explains that biogeography – the way life is organized on the land and in the water in patterns – helps define what areas the Conservancy protects. "When different parts of the landscape represent different bedrocks and soils, you get different biodiversity," he says. "We deliberately seek out and protect species and habitats that are rare or have limited biogeographical representation, so

that the biodiversity we conserve differs from that already protected."

The Conservancy has protected more than 262,000 acres, including greenspaces, forests and wetlands, many of which have similar biodiversity. However, some preserves host species not found on other protected places. The following areas are examples of places that host special diverse species due to their unique geological nature.

Lake Pleasant Conservation Area

"Lake Pleasant is a biodiversity gem," Charles says. The rare pristine glacial lake in Erie County, rich in limestone from glacial deposits, has intact wetlands and fewer invasive species than other lakes, setting the stage for habitat for rare and unique natural communities. Thirty-seven species of special concern, including 16 Pennsylvania endangered species, call Lake Pleasant and adjacent wetlands home. Species of concern include the pudgy Wilson's snipe, the colorful northern bluet damselfly and numerous types of fishes, pondweeds, sedges and other plants.

The calcium-rich soil of the forests supports diverse plant life and hosts the globally rare West Virginia white butterfly. On the hilltop is a small patch of hemlock, mixed hardwood palustrine forest, a rare type in Pennsylvania.



The hognose snake has adapted to the soils and environmental conditions of the shale hills and valleys, where its diet consists largely of toads.

Wattsburg Fen Natural Area

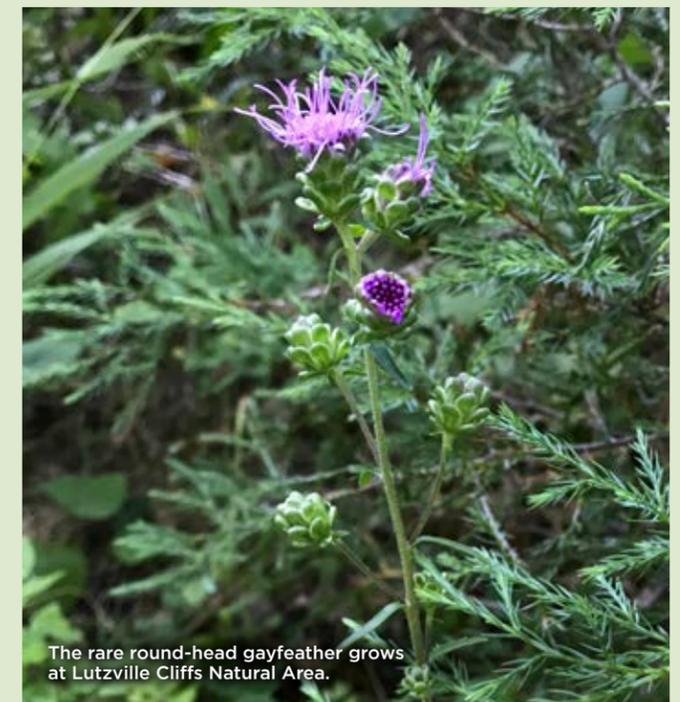
A diverse complex of wetlands, Wattsburg Fen in Erie County is home to the alder-leaved buckthorn, inland sedge, golden ragwort shrub fen natural community, which supports several species of concern. There are small, dense thickets of willow and alder, and groves of larch, white pine and hemlock growing on a mat of sphagnum.

Visitors enjoy a diverse array of wildlife including beavers, whose ponds are frequented by great blue herons, green herons and several species of ducks. Quiet observers might witness the appearance of the vulnerable Baltimore checkerspot butterfly, with its striking black, orange and white checkered pattern.

Sideling Hill Creek Conservation Area

One of WPC's most significant biodiversity conservation efforts is the 375-acre Sideling Hill Creek Conservation Area in Bedford and Fulton counties. It protects a globally rare shale barrens habitat containing several rare plants. Shale barrens, found in the Central Appalachian Mountains from Pennsylvania to Virginia, support plant and animal species that have adapted to this challenging, hot, dry, open woodland habitat and are found nowhere else.

The area features a red cedar, mixed hardwood rich shale woodland. It also features the Virginia pine, mixed hardwood shale woodland hardwood community types, with trees such as red cedar. Shale-barren evening primrose, shale-barren ragwort and Kate's-mountain clover have adapted to the ecosystem's harsh conditions and are found only in such habitats. Sideling Hill Creek itself is home to populations of rare freshwater mussels.



The rare round-head gayfeather grows at Lutzville Cliffs Natural Area.

Lutzville Cliffs Natural Area

Many millennia of cutting action by the Juniata River created limestone-rich rock outcrops and slopes above the river's Raystown Branch, an area in Bedford County called Lutzville Cliffs. This low-elevation landscape supports two extremely rare species in Pennsylvania, the globally vulnerable spreading rockcress and the globally imperiled Canby's mountain-lover.

Yellow oak and northern prickly-ash grow on the limy slopes here and are members of rare yellow oak, redbud woodland community around the cliff. Other limestone-loving plants are also present, including purple cliff-brake fern. ■



Dr. Becky Thomas' Slippery Rock University students gather after exploring and conducting macroinvertebrate sampling in Wolf Creek at Wolf Creek Narrows Natural Area in Butler County.

Teaching and Learning From Nature

DR. BECKY THOMAS SAYS WPC'S WOLF CREEK NARROWS NATURAL AREA IN BUTLER COUNTY AND CONSERVATION HAVE A SPECIAL PLACE IN HER HEART – AND ON HER SYLLABUS.

The Slippery Rock University assistant professor of parks, conservation and recreational therapy has used the natural area as her outdoor classroom and observation lab for student-led science experiments and exploration. She knows that teaching concepts as a subject-matter expert is not enough to help students expand learning opportunities, critical thinking skills and real-world experiences.

"These types of educational outcomes are critical today more than ever, especially in the natural sciences, and it's great to have one of the best examples of native habitat and biodiversity right in our backyard from which to teach and learn," says Dr. Thomas.

Located just minutes from the university, the Conservancy's 243-acre Wolf Creek Narrows Natural Area features the high-quality Wolf Creek stream and its associated active floodplain and streambank. The mature northern hardwood forest and scenic cliffs make the 1.5-mile loop trail footpath a picturesque nature trek. It is also a popular spring destination to see colorful masses of wildflowers.

Like with many other WPC-owned preserves, such as Toms Run Nature Reserve and the Helen B. Katz Natural Area, the beautiful and ecologically important landscape doubles as a living classroom.

As part of the university's educational mission, Dr. Thomas

integrates service learning, collaborative learning and research-intensive learning into the courses, while working with community partners like the Conservancy so that students have opportunities to gain practical and applied experiences.

This past summer, she led graduate students who were interested in careers in recreation and conservation to research assignments at the preserve. Through these assignments they considered issues, strategies, opportunities and recommendations for balancing public use, access and conservation of publicly accessible, privately owned natural areas.

Her students were able to be socially distant while learning and observing how visitors experienced the preserve and

had access to the Conservancy's education, conservation and stewardship staff members throughout their projects.

"It was a meaningful opportunity for my students to engage with professional staff in places and in the careers where they aspire to be. Through this project, my students learned more about the benefits of natural areas and how they can help make meaningful change in people's connection with the natural world. And that's so important," she adds.



Students use a mesh net to catch and examine invertebrates and other organisms floating within the free-flowing Wolf Creek.

Over a course of several months, through research and exploring the natural area, students provided recommendations and ideas to the Conservancy for signage, accessibility improvements and volunteer engagement.

"Good community-based research projects identify a need and help solve a problem," says Danielle Forchette, education coordinator for the Conservancy, who was among the staff working collaboratively with Dr. Thomas' students. "This is a prime example of how we want to help foster curiosity about the natural environment and future careers in conservation."

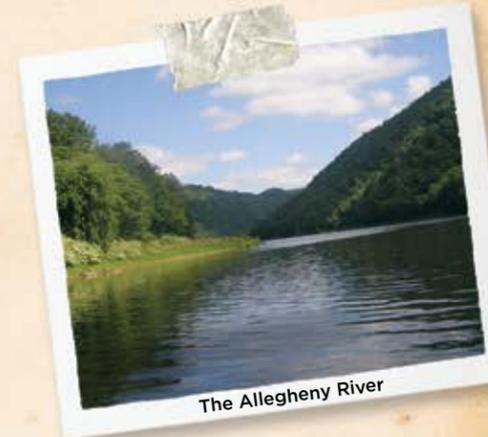
In past years, Dr. Thomas' aquatic ecology lab students used Wolf Creek Narrows several times for research projects and observation. She is pleased to now expand her education partnership with the Conservancy and sees it as a great personal and professional benefit.

"I am most passionate about leveraging interdisciplinary perspectives to advance solutions to conservation and natural resource management challenges," explains Dr. Thomas, "This passion stems from a childhood of playing outside and turning over rocks to find salamanders. I have always had a deep love of nature and wildlife, and I hope through my work I can influence the next generation of conservation stewards in a positive way."

To learn more about the Conservancy's conservation education initiatives or to use a preserve as an outdoor classroom, contact Danielle Forchette at 412-586-2344 or dforchette@paconserve.org. ■

The Liquid of Life

field notes
by Charles Bier



I am standing on the cobble bank of an amazing river in Tionesta, Forest County...the Allegheny, or as named by the Algonquian people, "Welhik-heny," meaning beautiful stream. I am transfixed by the ceaselessly flowing, life-giving water. Sounds of the gathering crowd behind me fade away from my senses as I am mesmerized by the current. Staring at a single spot, I am struck by the continuous flow and massive volume of clean, clear and shimmering water; it goes on and on and on, endlessly, some of it evaporating to the atmosphere, blown around the globe only to return to the river with the next snowmelt.

I turn around to address the Conservancy members sliding canoes to the water's edge and gathering for the float. I try to share with them the crystallization of my moment of wonder and reverence with Welhik-heny. Eyes light up on a few faces, but not others. Perhaps once we arrive at WPC's Hoch Island and stop to wade into the wonderland with glass-bottom buckets to look at aquatic life, they too will become dumbstruck with the result of two hydrogens bonded to a single oxygen.

I think the protection of aquatic habitats has been one of the most rewarding, yet challenging, aspects of conservation. Rewarding because so much of biodiversity, and some of the most imperiled, is not on the land, but in springs, brooks, rivers, vernal pools and natural lakes. Challenging because water moves, it cycles, and some of it is underground. It belongs to no one and it belongs to everyone. When a gathering of water becomes large enough, it is no longer contained within a property; the property boundaries stop at the water's edge. This forces us to devise creative conservation measures and to enter the realm of community engagement.

I grew up adjacent to the lower Allegheny River. I fished its deep, murky, polluted waters and glassy surface. The river always seemed aloof. It was not until I needed to learn about freshwater mussels and the fish called "darters" that the water world invited me in. The globally important French Creek became my classroom and laboratory. I made my first glass-bottom bucket and never looked up again. The first time I looked through a bucket and saw the fake minnow lure extended and flapping along the margin of a female lampmussel's shell, I was destined to help protect aquatic habitats. But how? The riffles, runs, pools and bed of French Creek, a small river, belong to the public. And French Creek's watershed encompasses 790,400 acres, is 117 miles long and includes towns and important agricultural lands!

Riverine ecologists tell us that it is important to keep streams free of dams, channel modifications and altered banks, and that functioning floodplains, adjacent wetlands, islands and riparian zones are some of the most important features of healthy river ecosystems. This approach has guided the Conservancy's protection. From its headwaters at the West Branch French Creek Conservation Area and the South Branch, past Venango Riffle, Cussewago Creek and Shaw's Landing, to the recently protected Canal's End Islands near the river's mouth, WPC has built a portfolio of 64 properties providing 5,657 acres of protection in the French Creek Watershed, so far.

I hope you are able to visit French Creek, or some of the other streams WPC is working to protect. If you do, please take time to wade in and look around. And if you get in touch, I can send plans for making a glass-bottom bucket that will help open up the aquatic world for you, too. Enjoy! ■



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**note to printer:
FSC placement**

Peregrine Falcon Removed from Threatened Species List

And You Helped Make it Possible - Thank You

The conservation community celebrated when Pennsylvania removed peregrine falcons from its threatened species list in September. In 1989, Conservancy staff observed a pair of peregrines hunting around Pittsburgh's skyscrapers and launched the effort to save the bird from extinction. Thanks to the support of our loyal donors and many partners, the state's peregrine falcon population has rebounded.

The birds took flight in the hearts and imaginations of Conservancy supporters, who gave generously to support our work of partnering with the Pittsburgh building owners to create suitable nesting sites for the peregrines, first atop the Gulf Tower in Downtown Pittsburgh and later on the University of Pittsburgh's Cathedral of Learning.

Pennsylvania now has at least 73 pairs of peregrines, with 10 of those being from the Pittsburgh region. The Conservancy is pleased to have played a role in this majestic and fascinating bird's local resurgence, and we thank our many generous members who support our work of conserving and protecting the special natural places, green spaces, local rivers and streams where wildlife can thrive.

Learn more about the conservation of the peregrine falcon at WaterLandLife.org.

STAY INFORMED!

Please share your email with us to stay up-to-date about hikes and other special events – and to get our monthly e-newsletter – throughout the year. Email kpatrignani@paconserve.org to add your email address.

Be assured that we will not share or exchange your email address.

A peregrine falcon in downtown Pittsburgh.