



# HORIZONS

 Lake County  
Forest Preserves

*QUARTERLY* FALL 2024  
VOLUME 33, ISSUE 3





2



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8



12

*On the cover:* This staircase beckons you to visit your forest preserves this fall—including the Openlands Lakeshore Preserve at Fort Sheridan (Lake Forest). Here, the trees, sky and Lake Michigan combine to paint a picture-perfect autumn color palette.



*A MESSAGE from*

**ANGELO D. KYLE**  
PRESIDENT  
LAKE COUNTY FOREST PRESERVES  
AKYLE@LAKECOUNTYIL.GOV

MORE THAN 31,200 ACRES ARE PROTECTED BY THE LAKE COUNTY FOREST PRESERVES.

During the COVID-19 pandemic, we turned to nature like never before, seeking fresh air, safe gathering places and peaceful surroundings. In 2020, visits to forest preserves increased 70% over the previous year. Today, visitation remains 30–40% above pre-pandemic levels.

Whether you're a first-time visitor or one of the many who discovered a favorite new trail or view during those challenging months, you likely came to appreciate the Forest Preserves in a new way.

Why reflect on the fear, pain and loss of the past four years? Because it's crucial to pause and appreciate how the forest preserves helped us through. Now is the time to invest in them to ensure they remain healthy for future generations.

It's been 16 years since Lake County voters approved a referendum to preserve land, build new trails and preserves, and restore habitats for people, plants and wildlife. During that time, we extended the initial funding through grants and donations, maximizing the impact of your tax dollars. However, these funds are now depleted.

On November 5, voters will again decide whether or not to approve additional funding to help the Forest Preserves do more. In this issue, you'll learn how the proposed funding would be used and the benefits it would bring to people, wildlife and everyone's well-being. These include cleaner air and water, reduced flooding, new trail connections and more equitable access to the health benefits of spending time in nature—especially important in our digital age.

Thank you for taking time to understand this important issue and for your continued support.



LAKWOOD (WAUCONDA)



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# Preserve the Future



## Invest in Nature

Imagine strolling through a tranquil forest preserve where the air is crisp, the environment is serene and plants and wildlife thrive. It's the perfect place to find peace and connect with nature. The preserves improve the quality of life for residents, and everyone is welcome.

The potential expansion of these natural sanctuaries is now in the spotlight. Today, we manage more than 31,200 acres of protected areas and 200-plus miles of multiuse trails in Lake County. An upcoming referendum will help chart the future course of your forest preserves.

**On November 5, voters will decide on a \$155 million Forest Preserves referendum. If passed, the funding will allow us to build important trail connections, increase access for all, and improve water and air quality while reducing flooding through habitat restoration. We will also acquire more land to create new preserves and expand existing ones, for you and future generations to enjoy.**

The estimated property tax increase on a Lake County home valued at \$300,000 is just under \$33 per year or \$2.75 per month. Today, just 1.87% of property taxes collected in Lake County go to fund the Forest Preserves.

If the referendum is not approved, we will have limited ability to save more irreplaceable wildlife habitat and natural areas from development, complete planned trail connections, improve access to existing preserves and carry out critical habitat restoration on hundreds of acres.

A well-connected forest preserve system benefits visitors by providing safe routes for exploration and opportunities to improve physical and mental wellness. Nearly every resident is less than a 10-minute drive from a preserve.



**“If approved, the new funding would protect more land and expand the benefits the forest preserves provide to all of us.”**

**– Alex Ty Kovach, EXECUTIVE DIRECTOR**

# Progress and Possibility



The last time voters considered a Forest Preserves referendum was in 2008, when \$185 million in funding was approved.

## Milestones since 2008

**4,300+**

acres purchased.

**8**

new preserves opened.

**77**

miles of trails added.

**48,000**

native trees planted.

**5,775**

acres cleared of buckthorn and other invasive species.

With nearly all the dollars from the previous referendum expended or allocated, our board of commissioners has submitted a new question to Lake County voters for funding to continue enhancing and expanding your preserves. Proposed projects will ensure all areas of the county benefit.

## If voters approve the \$155 million on November 5, we will use:



**\$65 million** to acquire more land to add new preserves, create a wider network of healthy landscapes and add to existing preserves.



**\$30 million** to improve water and air quality and reduce flooding by restoring wetlands, prairies, savannas and forests.



**\$60 million** to build important trail connections, redevelop or open preserves, address maintenance needs and improve energy efficiency.

**What it Means** ➤ The additional property tax on a \$300,000 home would be less than \$33 a year or \$2.75 a month.

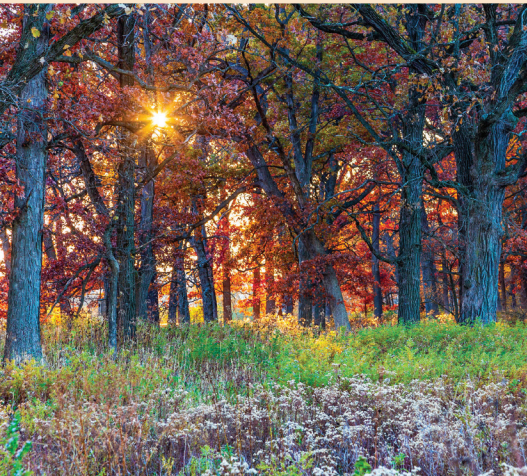
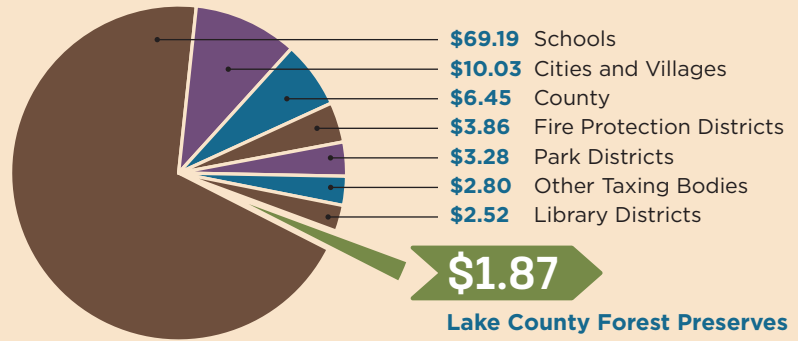


# Doing More with Less

Even as we expanded the number of preserves, built new trails, acquired more land and restored thousands of acres, **taxpayers pay less for the Forest Preserves today than they did 16 years ago.**

- In **2008**, the average homeowner paid **\$187.06**.
- In **2024**, the average homeowner paid **\$157.34**.

## Small Piece of the Pie Where \$100 of Your Property Taxes Go



## Rising Popularity

**Residents prioritize maintaining trails and preserves, as well as restoring and managing natural lands for native plants and wildlife. They also value the essential services nature provides, such as floodwater mitigation, cleaner air and water and carbon storage.**

Recently, an independent research firm conducted a countywide survey to understand public opinions about the forest preserves and gather suggestions for future improvements.

The survey found 78% of Lake County residents regularly use their forest preserves. During the COVID-19 pandemic, visitation

surged by 70%. Usage remains 30-40% higher than pre-pandemic levels, reflecting people's enjoyment of natural spaces.

Folks are increasingly relying on the preserves for physical, mental and emotional well-being. Popular activities include walking, cycling, picnicking, birding and fishing.

"The public regularly requests more trails and additional land," said President Angelo Kyle. "By balancing growth with careful stewardship of what we have, we can enhance recreational opportunities while protecting the ecological integrity of your preserves."

## Nature by the Numbers in Your Forest Preserves

**31,200+**  
acres of natural areas.

**200+**  
miles of trails to explore.

**64**  
sites protected and maintained.

**12,800**  
acres of wetlands to reduce flooding.

**28,850+**  
native plant and animal species in Lake County.

# Art for Everyone: Bob Ross®

On exhibit through  
January 20, 2025

Immerse yourself in soothing landscapes and happy little trees™ at a special exhibition featuring American artist Bob Ross® (1942–1995). The painter aimed to make art accessible to everyone through his TV program, *The Joy of Painting*®, which continues to air all over the world, uninterrupted since 1983.

The exhibit features 75 original works that display Ross' gentle approach to painting and philosophy of spreading happiness through art.

**DUNN** MUSEUM

LAKE COUNTY  
FOREST PRESERVES

1899 W. Winchester Road, Libertyville • 847-968-3400

[DUNNMUSEUM.ORG](http://DUNNMUSEUM.ORG)





*Free Senior Museum Admission in October*  
Senior admission to the Dunn Museum (Libertyville) is FREE during the month of October. Hours: [LCFPD.org/planyourvisit](https://www.lcfd.org/planyourvisit)

# PRESERVE NEWS

## Upgrades Forge Ahead at Lakewood

The initial phase of a comprehensive master plan is underway at Lakewood Forest Preserve (Wauconda). Improvements include:

- ✔ A new 1.6-mile accessible paved loop trail through woodlands, prairies, wetlands and around Taylor Lake.
- ✔ Upgrades to the regional Millennium Trail between the Route 176 and Fairfield Road underpass tunnels to improve accessibility and reduce maintenance.
- ✔ New and reconstructed interior roads, parking lots and toilets to provide convenient access to trails and amenities.
- ✔ A Children's Nature Play area designed to inspire imaginative play in a natural setting.
- ✔ A 9,800-square-foot net-zero energy maintenance facility.
- ✔ New electric, wells, water lines and septic systems.

View details: [LCFPD.org/lakewood-upgrades](https://www.lcfd.org/lakewood-upgrades)



## FORT SHERIDAN EXPANDS

Our Board of Commissioners approved the purchase of 18.2 acres to expand Fort Sheridan Forest Preserve (Lake Forest). The U.S. Department of the Navy sold the \$6 million property located on the east side of Patten Road in unincorporated Highwood, with closing this fall. The property is one contiguous parcel surrounded by forest preserves, so managing the landscape will be easier and more cost-effective. Find out more: [LCFPD.org/preserve-expands](https://www.lcfd.org/preserve-expands)



**Celebrating Growth and Achievement** | The National Association of County Park and Recreation Officials (NACPRO) honored Event Operations Manager Stephanie Bosack with its New Professional award. Nels Leutwiler, president of the Preservation Foundation, was honored with the Outstanding Volunteer award. NACPRO is comprised of about 120 park and special recreation districts from across the country. Read more: [LCFPD.org/awards-2024](https://www.lcfd.org/awards-2024)



## Science IN THE PRESERVES

This summer, Restoration Ecologist Dan Sandacz was ecstatic to find a bumble bee smaller than one's thumb. It was a federally endangered rusty patched bumble bee (*Bombus affinis*), flitting between the flowers of shrubby St. John's wort (*Hypericum prolificum*). It was another datapoint for our Plant-Pollinator Monitoring Program.

The program aims "to understand relationships between plants and pollinators to inform habitat restoration strategies in the forest preserves," Sandacz said. "Some flowering plants support a greater diversity of pollinators due to the nutrition they provide or the timing of their blooms."

In 2023, Sandacz and colleagues determined that bee balm (*Monarda fistulosa*) and prairie coreopsis (*Coreopsis palmata*), two sun-loving wildflower species, support "a high diversity of pollinators and are resilient to drought conditions." We've boosted seed production of both flowers at the Native Seed Nursery (Grayslake) to supply future restoration projects. Learn about conservation: [LCFPD.org/conservation](https://www.lcfd.org/conservation)

# FEATURED EVENTS



For a complete list of all events, descriptions, pricing and tickets:

Visit [LCFPD.org/calendar](https://LCFPD.org/calendar), call 847-968-3321 or scan the QR code shown on the left. In-person and virtual nature and history programs, school field trips and digital resources are available.

## EDUCATOR PICKS



We asked our skilled educators to choose their most-anticipated programs for the current season. View all programs and registration details at [LCFPD.org/calendar](https://LCFPD.org/calendar).

**October 2** Pollinators in Your Preserves

**October 12** Photography in the Forest Preserves: Fall Colors

**October 13** Ethel Untermyer Conservation Forum: 17 Years in the Making

**November 9** Mindful Time in Nature

## NATIVE LANDSCAPING

Discover engaging native landscaping programs designed to educate on the benefits and techniques of incorporating native plants in your home garden. View all native landscaping programs and registration details at [LCFPD.org/garden](https://LCFPD.org/garden).

**September 26, October 24** Native Gardener's Club: Ready, Set, Grow

**October 6** OAKtober Celebration: Native Tree and Shrub Sale

**November 5, 10** Starting Native Plants from Seed



## DUNN MUSEUM PROGRAMS



With a focus on local history, culture and natural environments, the Dunn Museum offers visitors of all ages an enriching and immersive experience. View all Museum programs and registration details at [LCFPD.org/dunn](https://LCFPD.org/dunn).

**October 6** Dunn Museum Sensory-Friendly Hour

**October 8** Art for Everyone: Bob Ross® Museum Tour

**November 16** Potawatomi Lifeways for Scouts

**November 16** Tales of Lake County's First African American Settler

## NATURE-THEMED

With the leaves falling and the seasons changing, it is a perfect time to connect with nature. Learn about wildlife or become more familiar with one of your many preserves. View all nature-themed programs and registration details at [LCFPD.org/calendar](https://LCFPD.org/calendar).

**October 3** Animal Skulls

**October 19** Birdwatching Hot Spots: Captain Daniel Wright Woods

**October 25, 26** Halloween Hikes

**November 23** Walk with a Naturalist: McDonald Woods





Have a question about Lake County history or nature? Our educators have the answer. Email: [AskAnEducator@LCFPD.org](mailto:AskAnEducator@LCFPD.org)



Observe Lake County's feathered friends at a birdwatching hotspot: [LCFPD.org/birding](http://LCFPD.org/birding)

Barred owl (*Strix varia*)

**RYERSON EDUCATION CENTER OPEN HOUSE: September 28 • 2-4 pm**  
Ryerson Conservation Area (Riverwoods)



Join us to celebrate the opening of the net-zero energy Ryerson Education Center. Learn how nature inspired the design and function of the building and how it is used to inspire learners. Drop in to meet the planning and environmental education team who played an integral role in the design and program development of the new space.

All ages. FREE. Learn more: [LCFPD.org/open-house](http://LCFPD.org/open-house)

**FESTIVAL DE CULTURA, COMIDA Y VIDA: September 29 • 2-6 pm**  
Nippersink Forest Preserve (Round Lake)

Experience a vibrant celebration of culture, food and life! Enjoy performances featuring a mariachi band, live music and other dynamic cultural showcases. Savor delicious offerings from local food vendors or bring your own picnic. Engage in bilingual education programs designed for both adults and children. Connect with organizations dedicated to supporting the Latino community in Lake County.

All ages. FREE. Leer en Español: [LCFPD.org/festival](http://LCFPD.org/festival)



**SEPTEMBERFEST: Wednesdays and Thursdays through October 31**  
Beer Garden at Independence Grove (Libertyville)



Kick back, relax and embrace autumn with live music and events, craft brews from Lake County breweries, lakeside fire pits with free firewood and s'mores kits available for purchase. New this year—order tasty bites or a light dinner delivered to your table at the Beer Garden, courtesy of Relish Café. Weather permitting.

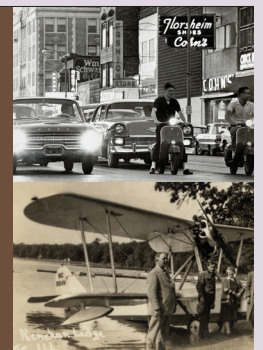
Find events at [LCFPD.org/septemberfest](http://LCFPD.org/septemberfest) and menu at [LCFPD.org/beer-menu](http://LCFPD.org/beer-menu).

**Save the Date! LAKE COUNTY HISTORY SYMPOSIUM: January 9 and 16, 2025 • 6:30-8:30 pm • Online**



Love history? The Dunn Museum will host the 10th annual Lake County History Symposium to bring together those interested in the history of Lake County. This year's theme, *Planes, Trains and Automobiles: Lake County Transportation*, will share local transportation stories.

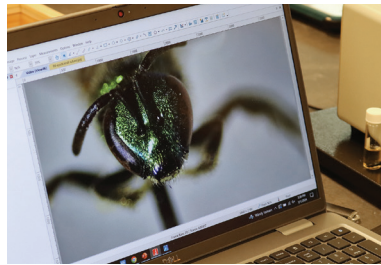
Professionals, students and enthusiastic historians are invited to submit proposals for presentations at the Symposium. Presentations can also be given by museums, historical societies and individuals. Submissions are accepted until **November 8**. Learn more: [LCFPD.org/symposium](http://LCFPD.org/symposium)





## Annual Fund Spotlight: New Natural Resources Laboratory

Thanks to a \$15,000 grant from the Preservation Foundation Annual Fund, the natural resources department has opened a dedicated laboratory focused on Lake County's native insects, fish and plants. The new space will bolster species monitoring programs, which are critical to making informed land management decisions.



Documenting species through specimen collections is a cornerstone of conservation and instrumental to the work of our natural resources team. Accurate identification is essential to understanding ecological interactions, population dynamics and species distribution. Collections provide a tangible reference.

Providing a high-quality space to document difficult-to-identify species enhances staff's conservation planning and ability to identify critical areas for protection. By establishing a dedicated lab, this strengthens our ability to document, study and preserve the region's rich biodiversity. To learn more or make a gift, visit [LCFPD.org/donate](http://LCFPD.org/donate).

## TAX-SMART WAYS TO SHINE GRATITUDE ON YOUR PRESERVES

Do you have an IRA or own appreciated stock? If so, we have a gift for you—an online platform that makes it easy to use these resources and give back to the Forest Preserves. Tax-smart gifts come with a series of advantages for you while making an immediate impact on Lake County's open space.

Take a few minutes this fall to save and give at the same time.

Scan the QR code or visit [LCFPD.org/freewill](http://LCFPD.org/freewill) to get started.



## An Evening with Joel Sartore Celebrates the Forest Preserves



On May 17, more than 220 guests joined us for *An Evening with Joel Sartore* and the public announcement of our \$20 million endowment campaign.

In addition to delighting guests with stories and photographs from his travels as a world-renowned photographer, Sartore highlighted the high level of biodiversity we enjoy in Lake County and the importance of the Forest Preserves' work to protect natural landscapes. Read more about the evening at [LCFPD.org/gala](http://LCFPD.org/gala).



Give online:  
[LCFPD.org/donate](http://LCFPD.org/donate)



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SUPPORT FOREST PRESERVES PROJECTS, PROGRAMS AND PLACES YOU ARE PASSIONATE ABOUT!

Since 2007, the Preservation Foundation has inspired individuals, corporations and foundations to support Forest Preserves projects, programs and places they are passionate about. Gifts of all sizes make a meaningful impact and help ensure Lake County is filled with beautiful, natural spaces everyone can enjoy.

*Your donations help extend and accelerate the work of the Forest Preserves!*



### CARE OF TRAILS AND PRESERVES

Help us care for more than 31,200 acres and 200+ miles of trails. Every day, members of our operations department tackle projects to ensure all 64 preserves are maintained, accessible and safe for the public.



## Accelerator Funds

**When you make a gift to one of our Accelerator Funds, you are providing flexible funding to test a new approach or accelerate an existing project.**

**You can support the aspect of our mission that is most meaningful to you and help us do more with each dollar.**

**Learn more: [LCFPD.org/accelerate](https://www.lcfd.org/accelerate)**

### NATURE AND HISTORY EDUCATION

From museum storytime to senior series walks, and Summer Adventures to native gardening workshops, our educators host hundreds of programs each year to educate and inspire a love of Lake County's natural lands and historic sites.

### HABITAT RESTORATION

We restore thousands of acres of habitat each year to ensure Lake County's woodlands, prairies, wetlands and water bodies are returned to ecological health, helping create resilient ecosystems.

### VOLUNTEER SUPPORT

Volunteers power every part of our mission by helping us restore and care for wildlife habitat, collect native seeds, lead education programs and more. Support their efforts across the forest preserves and help us grow this vital group of passionate, dedicated leaders.



Gifts of appreciated stocks or securities are easy to make and provide great tax benefits.



Maximize your support and minimize taxes through IRA distributions, retirement plan assets or life insurance.



Leave a legacy of generosity with an estate gift that helps meet your financial and philanthropic goals.

**LEARN MORE: [LCFPD.ORG/GIFT-PLANNING](https://www.lcfd.org/gift-planning)**



# Like to Hike?

## Experience Hike Lake County













Our annual fall walking program is a great way to enjoy time outdoors and reconnect with nature while exploring trails in preserves across the county.

### HOW IT WORKS:

- 1** Visit [LCFPD.org/HLC](https://LCFPD.org/HLC) to download a Travel Log to record each hike. One travel log can be submitted for up to five participants. Larger groups should submit additional travel logs. You'll also find trail maps, directions and upcoming guided hikes.
- 2** Walk at least seven of the 12 designated trails by **November 30**. Look for the Hike Lake County logo at the trailhead of each participating preserve to get started on the correct route. Bicycling and horseback riding do not count toward this program.
- 3** Submit your Travel Log by **January 31, 2025** to earn a free commemorative medallion.
  - Submit online: [LCFPD.org/HLC](https://LCFPD.org/HLC) or scan the QR code at the bottom right of this page.
  - Submit in person: General Offices (Libertyville) or Ryerson Welcome Center (Riverwoods).
  - Mail to: Lake County Forest Preserves, 1899 W. Winchester Road, Libertyville, IL 60048.

 **Dogs can join the fun!** The  icon indicates dog-friendly trails. Record your dog's name on the Travel Log when they complete a hike with you to receive a commemorative dog tag for their collar. Up to three dogs per participant.

 **NEW!** Find resources in Spanish online.  
**¡NUEVO!** Encuentre recursos en Español en línea.

2024 HIKE LAKE COUNTY TRAIL LOCATIONS	MILEAGE <i>*counts as two trails</i>
<b>Captain Daniel Wright Woods</b>  24830 St. Mary's Road, Mettawa, IL 60045	1.2
<b>Cuba Marsh</b>  24205 W. Cuba Road, Deer Park, IL 60010	1.5
<b>Fourth Lake</b>  19808 W. Grand Avenue, Lake Villa, IL 60046	1.9
<b>Fox River</b>  28500 W. Roberts Road, Port Barrington, IL 60010	2.2*
<b>Half Day</b>   24255 N. Highway 21, Vernon Hills, IL 60060	1.1
<b>Heron Creek</b>  22890 N. Old McHenry Road, Lake Zurich, IL 60047	1.9
<b>Lake Carina</b>   33919 Highway 21, Gurnee, IL 60031	1
<b>Lyons Woods</b>  10200 Blanchard Road, Waukegan, IL 60087	2*
<b>Raven Glen</b>  41080 N. U.S. Highway 45, Antioch, IL 60002	1.4
<b>Ryerson Conservation Area</b>  21950 N. Riverwoods Road, Riverwoods, IL 60015	2.1*
<b>Sedge Meadow</b>  15615 W. Wadsworth Road, Wadsworth, IL 60083	1.4
<b>Sun Lake</b>  22925 W. Grass Lake Road, Lake Villa, IL 60046	2.6*
<b>Wild Card-You Pick!</b>  Choose a 2-mile walk on any Lake County Forest Preserves trail.	2*

 Dog-friendly  Includes sections of trail not ADA-accessible



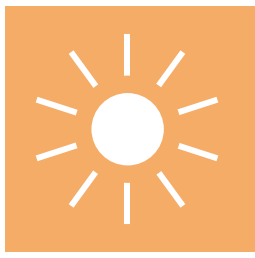
### Earn a Periodical Cicada Commemorative Medallion

Complete seven of this year's Hike Lake County trails and you'll receive a commemorative medallion. Choose between a hiking shield or a zipper pull/dog tag—while supplies last. Hiking sticks and Golden Guide Books are available for purchase at the Dunn Museum's (Libertyville) Gift Shop.





## Our Transition to Net-Zero Energy



The building looks as if it's always been there. As though the floodplain forests of Ryerson Conservation Area (Riverwoods) summoned the smoky green walls, floor-to-ceiling windows and sleek roof. But the new Ryerson Education Center (REC), opened spring 2024, is the culmination of three years of planning and an ambitious goal. Create a net-zero energy building that produces as much power as it consumes each year.



Photos: (Top to bottom, left side) Each classroom features vaulted ceilings and digital smart boards. • A 23.8-kilowatt system of rooftop solar panels is installed on the building. It's a similar size to home or small business construction. • The 900-square-foot North Shore Gas Outdoor Classroom is a three-season space.



The challenge: make all this function with limited energy.



**Photos:** (Top to bottom) The Ryerson Education Center is situated in a woodland clearing north of the preserve's entrance road. • Construction crews worked within limited space to protect the surrounding trees. • The 0.2-mile paved Kevin and Jean Froeter Learning Trail is fully accessible.

“We want to raise the bar and set the example for green buildings and environmental sustainability,” said Alex Ty Kovach, executive director of the Forest Preserves. “Our goal is that this new building will become a viable model of long-lasting, energy-efficient design.”

There are many approaches to achieve net-zero. The first thing you decide is where to build.

“When you’re looking at a net-zero building, the placement is extremely important,” said Landscape Architect Becky Mathis. She and Preserve Planner Greg Walenter managed the REC’s design and construction.

There are trade-offs to consider. Shade eases cooling needs, but also diminishes the voltage that rooftop solar panels generate.

“We wanted it in a site that was already disturbed with proximity to resources and utilities. The educators want to be out in the woods, because that’s where they’re teaching programs.”

### Location, Location ...

The project team selected a site on the north side of the preserve’s entrance road where two rustic, 1940s-era cabins had hosted education programs since 1972.

For decades within those walls, roughly 10,000 students per year had learned about local nature and history. The cabins were cramped and not fully accessible.

In 2022, we sold them to two local buyers who dismantled the cabins to reassemble them off-site.

That year, we hired Lake | Flato Architects to craft a worthy successor: a 2,900-square-foot education center. Lake | Flato is one of the most prestigious architectural firms in the U.S., producing sustainable designs since 1984.

Over the years, our team of educators had written a wish list for what a new building should offer.

Bigger, accessible teaching spaces. An outdoor classroom. Modern restrooms. Abundant windows. More storage.

“Don’t just think about how you used the cabins, because they only handled school groups. Think about hosting adult education classes or a small conference,” said Environmental Educator Eileen Davis.

## Better Buildings

Opening the REC’s front door is an event. Though it glides, the door feels substantial, like a watertight barrier on a ship.

This hints at the structure’s robust building envelope, composed of 16-inch-thick walls, foam insulation and an air barrier membrane.

“This is a continuous seal that starts underneath the concrete slab, rolls up into the walls and is connected all the way through the ceiling,” Walenter said.

The REC is eight times more airtight than commercial building codes established by the International Energy Conservation Code in 2018. When its energy recovery ventilator system isn’t running, the building leaks only 1% of the volume of interior air per hour.

This is remarkable in a building with large, undivided windows.

“You want to see nature as you’re teaching in that space. Usually, the weakest link in a building envelope is the windows.

“The key was getting that much glass in while balancing it with heating and cooling needs. They’re triple-paned and have a middle pane of bird-friendly glass,” said Walenter.

The center’s windows feature an ultraviolet pattern resembling dense branches.

It’s easy for birds to see and steer clear but mostly invisible to people. Worldwide, about a billion birds per year are estimated to die from collisions with glass.

“We’re the first Phius-certified building to ever integrate bird-friendly glass into triple-paned glass,” Mathis said.

The green siding is made of poly-ash. It’s used like wood, but made from more than 70% recycled materials, including fly ash, a coal byproduct.

Inside the foyer and classrooms, the walls and ceilings showcase logs milled from dead or dying oaks in the preserves. Water from the roof is channeled into a 4,000-gallon cistern underground. It supplies the toilets.

Including other site improvements such as a realigned entry road, dedicated bus parking and an accessible 0.2-mile paved loop trail, the project totaled \$6 million. Mathis thinks it will pay off.

“When you look at the lifespan of a building, only about 20% on average is spent on construction and 80% is spent on maintaining systems, heating it, cooling it.

“While we spent more upfront, we hope that energy savings will offset our investment in the building envelope after 12 years. As an organization with a 100-year vision, it makes sense for us to take the long view.”

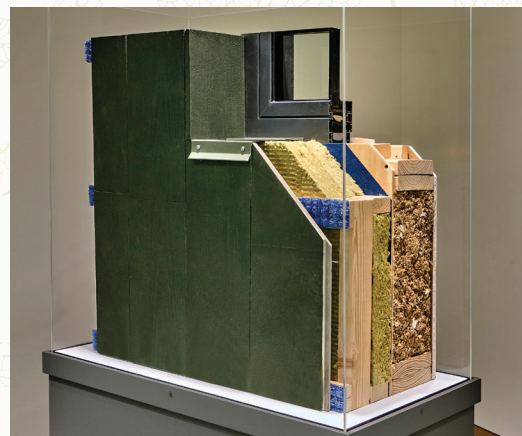
The REC isn’t the only energy-efficient structure at Ryerson.

Built in 2006, the Edward L. Ryerson Welcome Center employs sustainable material choices, use of natural light, geothermal heating and cooling and recycled rainwater.

It achieved certification as a Platinum LEED building from the U.S. Green Building Council, the highest possible level on its green building rating system.

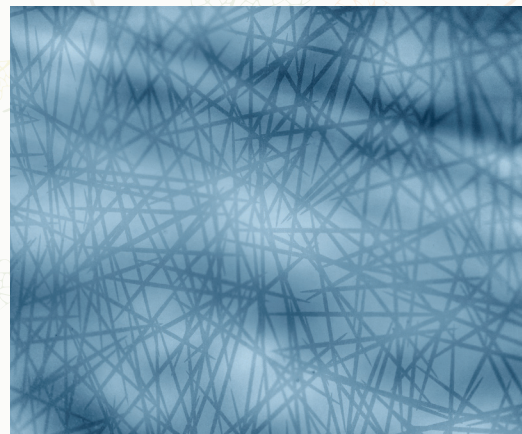
Our educators offer programs comparing the features of both buildings. “It allows us to see how technology has advanced and shows we continue to grow in the right direction,” said Director of Education Alyssa Firkus.

Field trips to learn about the building are available for grades 3–12. Visit [LCFPD.org/school](http://LCFPD.org/school).



**“As an organization with a 100-year vision, it makes sense for us to take the long view.”**

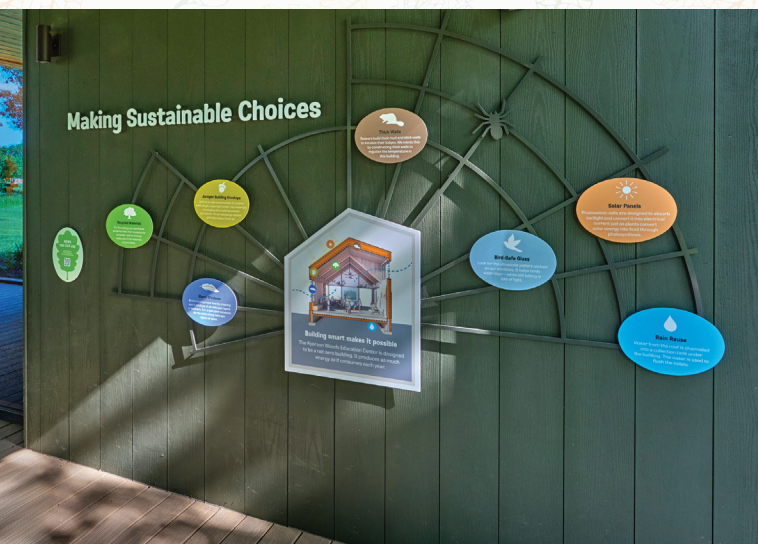
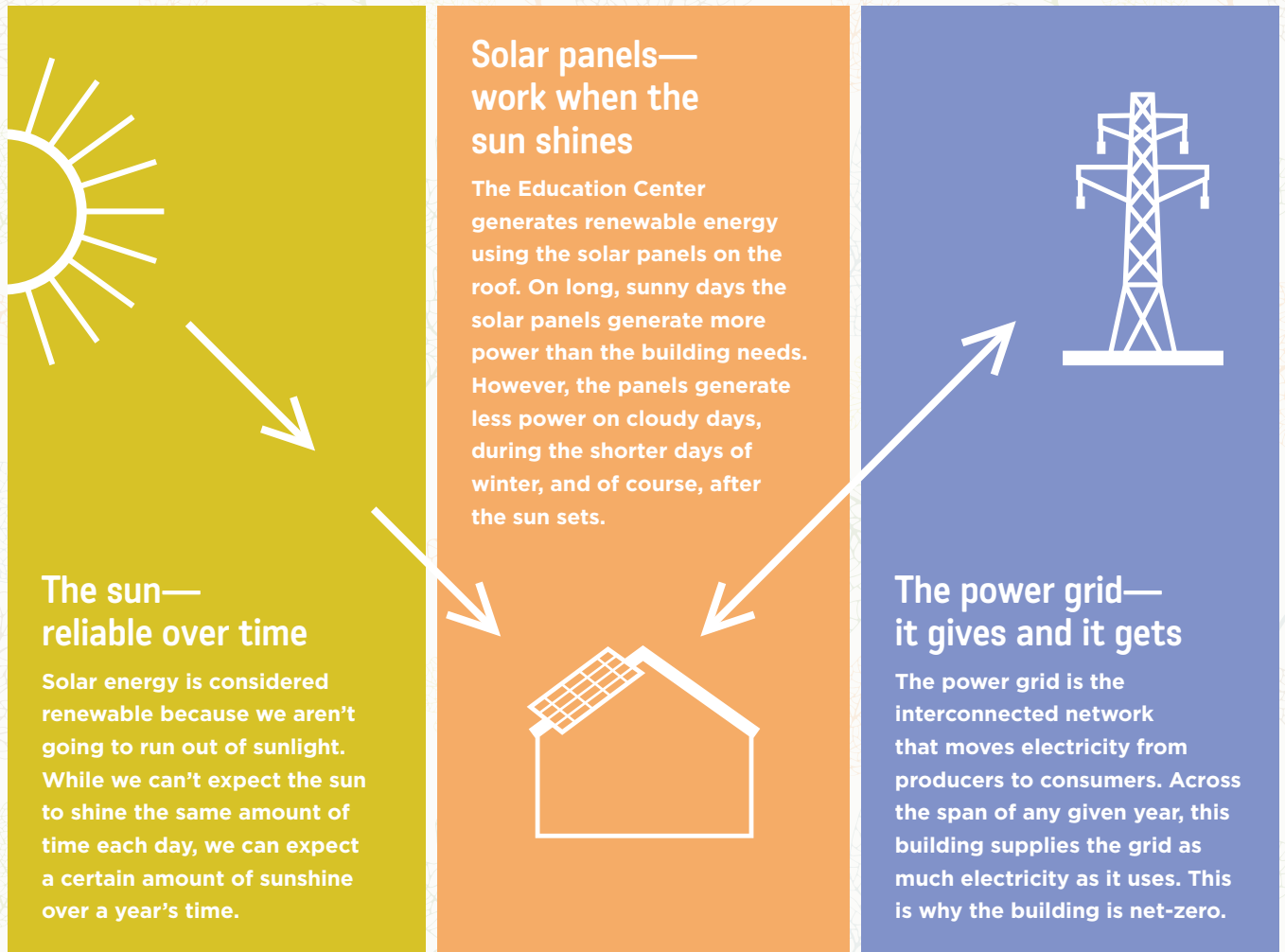
**– Becky Mathis  
LANDSCAPE ARCHITECT**



**Photos: (Top to bottom) The REC’s Medline Gallery foyer contains a real-time energy dashboard showing how the structure generates and uses energy. • A cutaway of the building envelope reveals mineral wool insulation. This water-resistant, fire-retardant material reduces heat flow. • The ultraviolet pattern embedded in the windows deters birds from flying into them.**

# The Idea Behind Net-Zero Energy

Three partners keep the balance. The sun, solar panels and the energy grid all work together. As long as the panels provide as much energy as the building uses in a year, it is considered net-zero.



**Photos:** (Left to right) An educational display near the REC's front door discusses the building's biomimicry features. • Participants in this summer's Boots of a Biologist education program were among the first to experience the REC's amenities.



**Above:** With so many trees surrounding the REC, birdwatching is made easier.

## Mother Nature's Lessons

The REC is the first net-zero energy public building in Lake County to receive certification from the Passive House Institute US (Phius).

"Passive building is a set of design principles for attaining a rigorous level of energy efficiency while also creating comfortable indoor living spaces," according to Phius.

Our educators are applying these innovative techniques, drawing inspiration from Mother Nature.

Just as oak trees provide acorns with watertight shells and beavers build mud-and-stick walls to insulate their lodges, the building's envelope protects its interior and regulates its temperature.

Birds create warm pockets of air between their feathers to minimize heat loss. The windows do the same between layers of glass.

Plants convert solar energy into food through photosynthesis. Solar panels convert it into electricity. These parallels represent biomimicry.

Biomimicry is the design and manufacturing of materials, buildings and systems based on biological processes and organisms.

Environmental Educator Jen Berlinghof hopes visitors will leave inspired to implement some of the REC's techniques at home, such as installing solar panels.

"How do you make something energy-efficient? You don't use as much and you figure out a way to make your own," she said. "That's the top thing people could do."

A second phase to add two more classrooms is planned but currently unfunded. It's estimated to cost about \$4 million, Mathis said.

The Education Center was funded by a grant from the Illinois Clean Energy Community Foundation, North Shore Gas, Abbott Laboratories, Medline Industries, Kevin and Jean Froeter, private donations and Lake County residents.

See more about the building and find ways to reduce your energy bill: [LCFPD.org/REC](http://LCFPD.org/REC)



Celebrate the REC's grand opening at a free open house from 2-4 pm, September 28. See page 7.



**GENERAL OFFICES**

1899 W. Winchester Road  
Libertyville, IL 60048  
847-367-6640 tel  
847-367-6649 fax  
For hours, visit our website.

**OPERATIONS AND PUBLIC SAFETY**

19808 W. Grand Ave.  
Lake Villa, IL 60046  
847-367-6640 tel (Operations)  
847-968-3404 tel (Public Safety)  
847-245-3735 fax  
For hours, visit our website.

***LCFPD.org***

911 emergency  
847-549-5200 nonemergency  
public safety issues



**FOX RIVER MARINA**

28500 W. Roberts Road  
Port Barrington, IL 60010  
847-381-0669  
*FoxRiverMarina.org*

*Boat Launch and Marina*  
For hours and fees, visit our website.

**GREENBELT CULTURAL CENTER**

1215 Green Bay Road  
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847-968-3477 Banquets, Meetings  
*Greenbelt@LCFPD.org*  
*GreenbeltCulturalCenter.org*  
Office hours by appointment only.

**BESS BOWER DUNN MUSEUM**

1899 W. Winchester Road  
Libertyville, IL 60048  
847-968-3400  
*Dunn@LCFPD.org*  
*DunnMuseum.org*  
*Gallery and Gift Shop*  
10 am–4:30 pm, Tuesday, Thursday, Saturday  
12–4:30 pm, Sunday  
For upcoming special hours, visit our website.

*First and Third Thursdays*  
On the first and third Thursdays of every month, enjoy FREE admission and programs from 5–8 pm.

Sponsored by: 

*General Admission*  
\$6 adults/\$10 nonresidents  
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Free, children ages 3 and under

**RYERSON CONSERVATION AREA**

21950 N. Riverwoods Road  
Riverwoods, IL 60015  
847-968-3320  
*LCFPD.org/ryerson*  
*Welcome Center*  
9 am–5 pm, Friday–Sunday  
Restrooms open daily from 9 am–5 pm.

**INDEPENDENCE GROVE**

16400 W. Buckley Road  
Libertyville, IL 60048  
847-968-3499 Main  
*IndependenceGrove@LCFPD.org*  
*IndependenceGrove.org*  
847-665-9211 Banquets, Meetings  
*Info@RelishEventsIG.com*  
*RelishEventsIG.com*

*Visitors Center*  
9 am–4:30 pm, unless otherwise posted.

*Beer Garden, Marina and Café*  
For seasonal hours, menus and fees, visit our website.

*North Bay Pavilion*  
For rental information, visit *LCFPD.org/NorthBay*.

*Parking Fee (spring–fall)*  
Lake County residents FREE.  
Vehicle window stickers allow entry without having to verify Lake County residency. Fee is \$5, available at the Visitors Center.  
Nonresidents  
\$6 per car Monday–Thursday  
\$12 per car Friday–Sunday and holidays

**THUNDERHAWK GOLF CLUB**

A Robert Trent Jones Jr. championship golf course.  
39700 N. Lewis Ave.  
Beach Park, IL 60099  
847-968-4295 Tee Times  
847-489-1931 Golf Outings  
*ThunderHawkGolfClub.org*  
847-968-3450 Banquets, Meetings  
*ThunderHawkEvents@LCFPD.org*  
Office hours by appointment only.

**BRAE LOCH GOLF CLUB**

33600 N. U.S. Hwy. 45  
Grayslake, IL 60030  
847-968-3444 Tee Times  
847-489-1931 Golf Outings  
*BraeLochGolfClub.org*

**COUNTRYSIDE GOLF CLUB**

Prairie and Traditional Courses  
20800 W. Hawley St.  
Mundelein, IL 60060  
847-968-3466 Tee Times  
847-489-1931 Golf Outings  
*CountrysideGolfClub.org*

**Gift Cards** | To purchase gift cards for the Bess Bower Dunn Museum, Independence Grove or golf, visit *LCFPD.org/giftcards*.

# Lake County Forest Preserves

More than 31,200 acres make up your Lake County Forest Preserves.

Most preserves are open 6:30 am-sunset, daily. If a preserve gate is open before 6:30 am, the preserve is considered open for use.

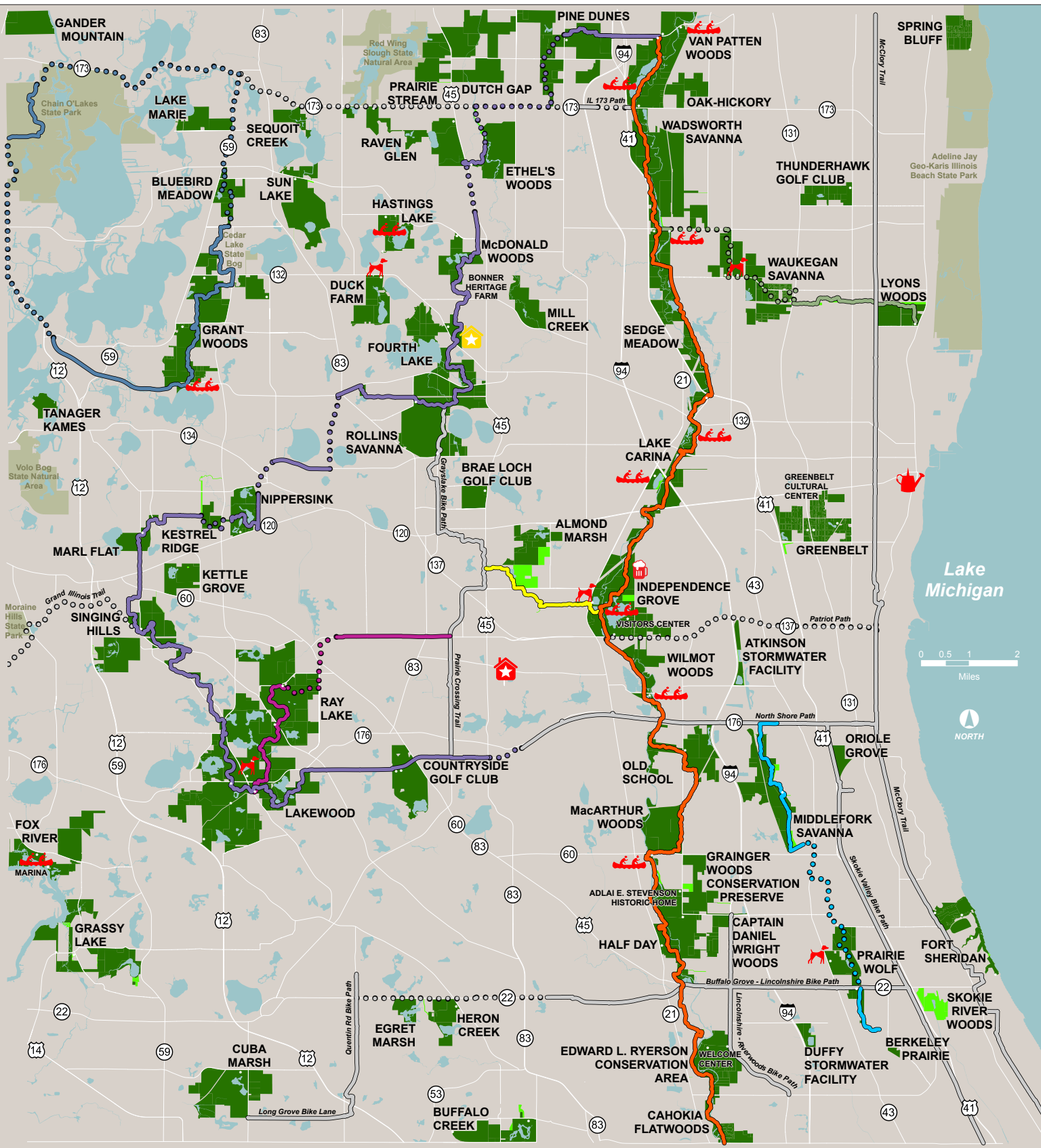
MAP CURRENT AS OF  
Monday, September 9, 2024

- FOREST PRESERVE  
Entrance/Parking
- FOREST PRESERVE EASEMENTS
- STATE LAND  
Illinois Department of Natural Resources
- CASEY TRAIL
- CHAIN O' LAKES BIKE PATH  
Planned Section
- DES PLAINES RIVER TRAIL (DPRT)

- DPRT TO LYONS WOODS  
Planned Section
- FORT HILL TRAIL  
Planned Section
- MIDDLEFORK GREENWAY  
Planned Section
- MILLENNIUM TRAIL  
Planned Section
- OTHER REGIONAL TRAILS  
Planned Section

- GENERAL OFFICES & DUNN MUSEUM
- OPERATIONS & PUBLIC SAFETY
- BEER GARDEN
- CANOE LAUNCH
- COMMUNITY GARDEN
- OFF-LEASH DOG AREA

**TRAIL MAP**  
Use our interactive trail map to navigate your adventure. To view the map, open the camera app on your phone and scan the QR code below.





LAKE COUNTY FOREST PRESERVES  
 GENERAL OFFICES  
 1899 WEST WINCHESTER ROAD  
 LIBERTYVILLE ILLINOIS 60048



PLEASE DELIVER PROMPTLY – TIME-SENSITIVE MATERIAL



# HORIZONS

SUBSCRIPTION SERVICES  
 847-968-3335  
[Horizons@LCFPD.org](mailto:Horizons@LCFPD.org)



THIS PUBLICATION IS PRODUCED USING 100% RECYCLED PAPER, ALLOWING US TO SAVE **93** MATURE TREES, **7,132 GALS** WATER, **13,395 LBS** GREENHOUSE GASES

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## SHELTER RENTALS AND PERMITS

Reservations for 2025 shelter rentals open on **Monday, October 21**. Annual permits for off-leash dog areas, horse trails and more go on sale **Monday, December 2**.

Make reservations or purchase permits online starting at 12:01 am on the corresponding dates above; by phone; or in person starting at 8 am.

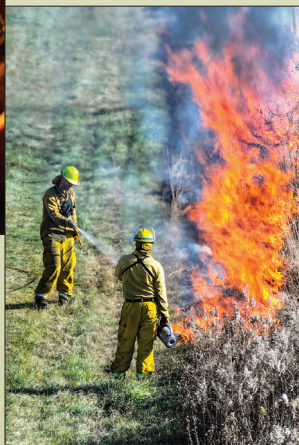
Details: [LCFPD.org/permits](https://LCFPD.org/permits)



Solar-lit trails are available Sunday, November 3 through Sunday, March 9, 2025 at Old School Forest Preserve (Mettawa) and the Winter Sports Area at Lakewood Forest Preserve (Wauconda). Regular preserve hours are 6:30 am-sunset. Illuminated trails and adjoining parking lots will remain open until 9 pm daily.

## ▲ INSTAGRAM PICK

Fiery red maple leaves rest in the shadow of the tree that grew them at Independence Grove Forest Preserve (Libertyville). Posted by @magesticsky / Judith Salstone.



## Receive Prescribed Burn Notifications

Fall, winter and spring are prescribed burn seasons in your preserves. To receive notifications by phone, text or email when a burn is happening near you or if you have special health concerns, complete a contact form at [LCFPD.org/burn-notice](https://LCFPD.org/burn-notice) or scan the QR code. Learn more: [LCFPD.org/burninfo](https://LCFPD.org/burninfo)

