



**Together** we are now invested in nature.  
**And it's working!** As biodiversity  
is plummeting around the globe,  
it's **rising** at MNP!



# from the EXECUTIVE DIRECTOR



**2019** was a year of powerful realization and proof that the land at MNP is healing and species are thriving. With your help, MNP recorded our 200th bird species. We planted over 3,500 trees. We empowered over 10,000 individuals to **think globally, but act locally.** Our 30 acres of wetlands held over 27 million gallons of stormwater during each rain event. And so much more ...

Our 444 acres had a **huge impact** in 2019, but our work is far from complete. MNP is proof that **nature is resilient.** So much is possible when we **prioritize nature** and come together to invest in the natural world that helps us all thrive.

**Thank you for all you do** for nature, at MNP and in your community. Your commitment has global impact! – *Kristin Gies, Executive Director*



“Fortunately, nature is amazingly resilient: places we have destroyed, given time and help, can once again support life, and endangered species can be given a second chance.” – *Jane Goodall*

## at a GLANCE



habitat restoration



wildlife research and monitoring



environmental education



recreation

- **April** | Several controlled burns were conducted to manage our prairies.
- **May** | 3,500 tree seedlings were planted by student volunteers.
- **October** | 65 container trees were planted.
- **November** | Trinity Creek was transformed from a channelized ditch into a meandering stream.
- **November** | A new wind turbine was installed with the ability of creating over 10,000kW of energy for MNP.
- **December** | The emu barn was removed to begin the process of a 14-acre restoration project.

- **The total bird species count increased to 201.** By comparison, 68 species were recorded between 2004-2007 and 132 species in 2012. • Sandhill cranes were found nesting for first time in Paul's Pond with two fledglings. • A returning pair of Great-horned owls are nesting on the property with two fledglings.
- Two tiger salamander larvae were discovered in Harvey's Woods pond; one adult was found under a snake board near Charlie's Woods.
- Students from local universities conducting various research were hosted.

- Various environmental education experiences were provided to 10,583 individuals.
- 2,608 students came to MNP for free field trips. 53% of those students came from underserved schools in the City of Milwaukee.
- An additional 58 students were taught by MNP Inc. staff in their own classrooms.
- Community programs engaged 5,790 adults and families.

- Approximately 40,000 individuals used the preserve for passive recreation.
- **February** | About 1,500 people attended the 8th Annual **Winter Frolic.**



# habitat RESTORATION



MNP began habitat restoration activities in 2004, starting with a minimal amount of habitat: 22 acres of woodlands and 1.5 acres of wetlands. Over 400 acres were in agriculture or building envelopes. Since 2004, MNP Inc. has progressively reclaimed sections of the property from agriculture, **removed invasive species**, spread native grass and flower seed, removed man-made structures (e.g. buildings, fences, sub-surface drain tiles), and **planted tens of thousands of trees and shrubs**.

As of 2019, 250 acres are actively managed to either sustain or establish three habitat types historically common to the Milwaukee area: 1 mesic, hardwood forest, 2 tallgrass, mesic prairie, and 3 wetlands (permanent ponds, ephemeral ponds, creeks). MNP Inc.'s master site plan calls for most of the property to become a maple-beech-basswood forest and wetlands. After starting with only 1.5 acres of wetlands, the Preserve now features over 30 acres of wetlands.

This year, MNP Inc. took on another land restoration project: restoring the remaining section of Trinity Creek channel back to its historical location. In the Spring of 2020, staff and volunteers will complete the planting portion of the project by establishing native plants along its banks as well as native trees, shrubs and prairie plants in open areas.

The stages of restoration 1 began with excavation that connects the new stream bed to the restored stream channel. 2 The old channelized ditch was then filled in allowing the water to enter the new stream channel. This new channel features meanders, logs and rock structures which will catch sediment and prevent it from flowing down stream. 3 Biodegradable erosion mats made from straw and coconut fiber were then laid along the stream bank to stabilize the loose soil. 4 A cover crop of wheat and rye is planted to prevent erosion before native plants can be established.

Through donations and a grant, a new wind turbine was installed in November that will generate over 10,000kW of power for MNP. The wind turbine, along with solar panels,

will help generate green energy to power the Pieper Power Education Center.

In May, 3,500 tree seedlings were planted by staff, volunteers, and school groups. These seedlings were either hand-planted or planted using a tree planter. In September, MNP Inc. staff and volunteers planted 65 container trees and shrubs.

Throughout the summer, MNP Inc. staff, interns, students and volunteers focused their efforts on removing non-native, invasive species from the property, such as sweet clover, garlic mustard, buckthorn, crown vetch, cattail, purple loosestrife, and more.



# WILDLIFE *research and monitoring*



Research and monitoring on Mequon Nature Preserve allows for MNP staff to gauge the restoration efforts. The preserve acts as a **444-acre outdoor laboratory** where research and monitoring efforts from various universities, staff and volunteers can coincide to help tell the story of how ecological restoration can be achieved while assuring the greatest biological impact.

Since MNP's inception, staff and volunteers have been monitoring various wildlife species to gauge population trends as more land goes into restoration. Monitoring efforts for salamander larva within the property's ephemeral ponds found three Tiger salamander larvae confirming that breeding is occurring on the property.

Bird species are also monitored closely due to their transient nature. Birds have the ability to select potential habitat, and if found not suitable, can leave the area. In 2019, MNP exceeded the 200 mark of total bird species witnessed on the property since its inception, with 201 different bird species. This year also marked the highest recorded bird species witnessed in one year with a total of 165. The tree swallow fledgling total was 152, up 57% from last year.

While staff and volunteers contribute to the wildlife monitoring on the property, MNP also allows various universities to conduct research on the property. Students from UW-Milwaukee conducted tree inventories in Elton's woods and Mary's Grove. Students from Wisconsin Lutheran College participated in two research projects. One group researched the survivability of planted seedlings comparing the hand planted seedlings to the seedlings planted with a transplanter. The other group compared soil health between different aged prairies and farm fields. MSOE collected data from our ground water wells to measure ground water levels and compare them over time.

All of this data will be used to help guide our future restoration efforts to ensure we make the best possible decisions when healing the land.



## environmental EDUCATION



The purpose of MNP Inc.'s land-based science program is twofold: 1) develop scientific thinking skills and 2) create a population empathetic to the natural world. The program targets K-12 underserved students who live in the City of Milwaukee. Because of their limited exposure to the natural world, they may lack a meaningful understanding of its beauty, complexity and fragility. MNP Inc.'s goal is to have students leave knowing **the importance of being good environmental stewards.**



Students participate in outdoor, hands-on activities through which they develop critical thinking skills ranging from observation to synthesis and analysis. Students learn ecological concepts that become building blocks for understanding more complex science concepts in the future. Sixteen course offerings include wetland function, invasive species in Wisconsin, aquatic organisms, animal tracking, plant community succession, amphibian adaptation, owl pellets, bird behavior, tree anatomy, monarch butterfly migration, and renewable energy. The complete course catalogue can be found at [mequonnaturepreserve.org/education/field-trips/](http://mequonnaturepreserve.org/education/field-trips/).

Staff and Antonia Fellows (volunteer teachers) focus on two or three core concepts during a lesson and evaluate students' understanding at the end of the day. MNP Inc. also gives post-visit evaluation forms to receive feedback from school staff regarding quality of the program and staff performance.



When students arrive for their field trips, they gather in the PieperPower Education Center (PPEC) auditorium where they are introduced to the concept of sustainability and how sustainable features are in place within and outside of the PPEC to reduce its environmental impact. After the introduction, students receive the necessary tools, equipment and gear related to their daily lesson, which takes place in the Preserve's 444-acre outdoor classroom. Lessons often include a land restoration activity such as planting trees, shrubs and flowers; removing invasive vegetation; collecting seeds and nuts to plant the following spring; tracking wildlife; and monitoring water quality and vegetation. After 1-2 hours outdoors, students return to the PPEC for lunch, discussion and a project.



Outfitting children for outdoor experiences is important to ensure a positive experience for students. As such, MNP Inc. provides mud boots, winter boots, winter jackets, hats, gloves, ponchos, snowshoes, butterfly nets and other materials needed to carry out the lesson. Students who lack a winter jacket, hat or gloves, are invited to keep the items they borrowed during the lesson.

The education center and most of Mequon Nature Preserve's trails are ADA accessible. Several outdoor learning stations are located near the education center and used according to students' needs. To remove barriers to access environmental education programming, MNP Inc. does not charge fees to schools or students. In addition, MNP Inc. funds transportation for City of Milwaukee schools.



# UNIQUE programs and resources

## Reaching Schools and Student-focused Entities

MNP opens its doors to any and all students from throughout the region. To remove financial barriers that may prohibit kids from getting outdoors, MNP Inc. does not charge a fee for students to participate in environmental education programming. MNP Inc. has also learned that almost all schools it serves from the City of Milwaukee have no budget for field trip transportation. In response, MNP Inc. offers to pay transportation costs for any school within the boundaries of Milwaukee Public Schools (MPS).

**Programming and transportation costs incurred by MNP Inc. are funded solely by generous donations from foundations and individual donors.**

## 2019 MNP Educational Contact List

	School Student Contact						All Other Ed Contacts			
	Green	Yellow	Blue	Red	Orange	Purple	Light Blue	Light Green	Light Purple	Light Yellow
Jan	121	53	68	14	0	0	58	45	5	243
Feb	37	37	0	0	0	0	2550	65	0	2652
Mar	95	35	60	0	0	0	100	0	0	195
Apr	289	201	88	0	50	0	105	200	48	692
May	574	460	114	0	0	0	410	550	58	1592
Jun	257	189	68	0	0	0	182	677	15	1131
July	59	39	20	0	0	0	66	202	65	392
Aug	194	0	194	0	0	8	575	240	86	1103
Sep	174	0	174	24	0	0	110	0	0	308
Oct	506	161	345	0	0	0	733	100	294	1633
Nov	213	190	23	0	0	0	110	0	0	323
Dec	89	29	60	0	0	0	160	10	60	319
	2608	1394	1214	38	50	8	5159	2089	631	10583

- Total pre K-12 students on-site field trips
- Pre K-12 from City of MKE
- Pre K-12 from outside City of MKE
- College Students for Env. Ed. on-site
- Classroom visits (Pre K-College) off-site in MKE
- Classroom visits (Pre K-College) off-site outside of MKE
- Adult Education on-site
- Adult Education off-site
- Indirect Education, volunteers, interns, story times, on-site
- Monthly total

The map shows local schools served at no charge. The yellow markers represent City of Milwaukee schools, who also enjoyed field trips at no charge, but with transportation costs covered by MNP, Inc. This map does not account for multiple visits over the same year as many schools do; each is only counted once to display MNP's geographic reach.

- ★ Mequon Nature Preserve
- Pre K-12 from City of MKE
- Pre K-12 from outside City of MKE



The **Water Passport Program** partnership with **Milwaukee Metropolitan Sewerage District (MMSD)** continued in 2019 with 158 students completing the full program. This multi-visit experience is designed to cultivate water resource awareness and action among students within the Lake Michigan watershed. The Program includes three experiences: 1) in-classroom instruction about watersheds, 2) testing water quality as it enters and exits a wetland system at MNP, and 3) a visit to MMSD's Jones Island Water Reclamation Facility to learn how wastewater is treated before being returned to Lake Michigan.

MNP Inc. hosted its **7th Summer Camp** in partnership with **Milwaukee Public School's First Nations Studies (FNS)** program. Sixteen students from throughout the Milwaukee area came to MNP daily for two weeks to learn about Native American traditions, stories, and language, as well as connections to the land, water, and wildlife. The camp theme was "Culture, Nature and Water" and was offered at no cost to the students. Food and transportation were also free. MNP Inc. and FNS received grants to offset the costs of the camp. Next year MNP plans to expand upon the program with a two-week middle school camp and one-week high school camp focused on college preparation.



The **Zoological Society of Milwaukee's Animal Connections Continuum** aims to help youth develop empathy towards others and animals by fostering self and social awareness. At Mequon Nature Preserve, in cooperation with the Zoological Society, three Greater Milwaukee schools took part in nature programs both in and outdoors. Students from each school had the opportunity to hike the land, engage in water quality testing, and have an animal encounter with many of the reptiles, amphibians, and crustaceans that call MNP home. MNP is proud to be a member of this partnership and host this annual three to five-day event.



**Conservation Dog Tilia** continues her scent detection work and training. Her story and the work she is doing has been shared with people from all over the country this year. Tilia was the focus of speaking engagements at environmental conferences in Minnesota, northern Wisconsin and Pittsburg, PA. She also has been featured in the Milwaukee Journal Sentinel, CBS 58 Milwaukee and CBS 3 Duluth. She can detect the scent of two species important to land conservation: non-native, invasive wild parsnip and native, eastern tiger salamanders. Over time, she could be trained on upwards of 20 different scents. For more information on Tilia, visit: [mequonnaturepreserve.org/about/tilia/](http://mequonnaturepreserve.org/about/tilia/).

MNP Inc. launched **Wisconsin's first nature preserve app**. As the world becomes more digital and less natural, MNP Inc. took the opportunity to merge virtual and tangible through an educational app about land restoration and conservation. Highlights include species lists by location, the history of habitat restoration at the site, and push-notifications at unique locations. Thanks to We Energies, the James E. Dutton Foundation, and THIEL Design. The app is free to download today!



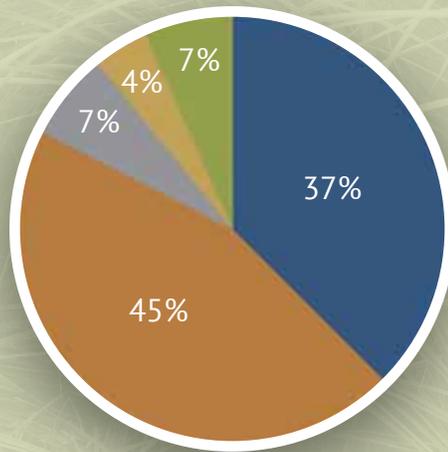
About 200 acres of MNP's land is still active with **agricultural lessees**. Fondy Food Center leases 40 acres of agricultural field adjacent to MNP Inc.'s farm. This non-profit agency connects Greater Milwaukee to local, fresh food while supporting small-scale farmers. The land is divided into a mosaic of one-acre parcels which farmers use to grow food for themselves and to sell through Fondy Food Center. For more information visit [fondymarket.org](http://fondymarket.org).

Dr. Michael Schläppi, a microbiologist from Marquette University, began researching the possibility of growing rice in Wisconsin on a commercial scale. After years of studying more than 200 rice varieties from around the world, Dr. Schläppi uncovered a variety that comes from a region in Russia that has a similar climate to Wisconsin. This project is the first of its kind in Wisconsin. The remaining agricultural fields are leased to a local farmer. He uses best management practices to reduce soil erosion and negative effects on water quality.

# financial HIGHLIGHTS

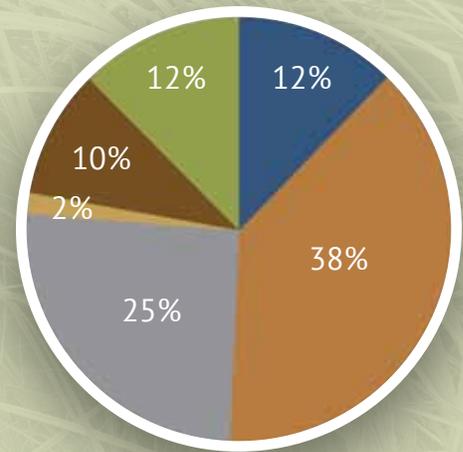
MNP Inc.'s unaudited financial statement for fiscal year 2019 reports \$712,100 in expenses and \$743,289 in revenue. MNP Inc. carries out a comprehensive fundraising program to finance its operations and capital projects. MNP Inc. also raises funds for its endowment fund housed at the Greater Milwaukee Foundation (GMF). The endowment fund and a designated donor's endowment fund together total \$2.4 million.

**Expenses**  
\$712,100



- Education
- Restoration
- Fundraising
- Buildings
- Administration

**Revenue**  
\$743,289



- Foundation
- Individuals
- Endowment
- Federal Grants
- Building Rental
- Corporate

## Governance and Staff

An eleven-member board governs MNP, Inc. The directors include Fredrick Geilfuss (president), Christine Nuernberg (secretary/treasurer), David Scritsmier (vice-president), James Bell, Sigrid Dynek, Clayton Frazer, Beth Hellman, Bary Morgan, Nathan Otero, Kevin Shafer, Lee Szymborski, and one vacancy remains.

In 2019, the board employed six full-time and one part-time staff including Kristin Gies (executive director), Mary Osmundsen (director of development), Cory Gritzmacher (director of restoration and operations), Nick Gall (research and restoration technician), Amanda Neimon (restoration and development technician) and Jamie Schiesel (education and restoration technician). Kristin Gies sits on the Association of Nature Center Administrators' national scholarship and leadership committee, is a member of the Wisconsin Urban Forestry Council and chair of the forestry awards committee.

**Over 1,000 volunteers** learned land restoration techniques and monitoring, removed invasive species, and assisted with field trips throughout the year.

Mequon Nature Preserve | 8200 W. County Line Road | Mequon, WI 53097 | 262-242-8055

[www.mequonnaturepreserve.org](http://www.mequonnaturepreserve.org)