

MISSISSIPPI RIVER NEWS

SPRING / SUMMER 2021



Finding Inspiration on the River

Katie Nyberg, Executive Director, Mississippi Park Connection
Craig Hansen, Interim Superintendent, Mississippi National River and Recreation Area

Over the last year we have been talking a lot about resilience; the ability to weather the storm and to spring back stronger and wiser than before. We are inspired by the inherent resilience of the earth when spring buds and birds return each year or an endangered species emerges in a surprising location, like Blanchard's cricket frog in Inver Grove Heights. The trees inside the climate change research plots at Crosby Farm Regional Park are thriving in their first year, giving hope for future forests. Our volunteers are eager to resume habitat restoration along the river this season. And you, this resilient river community, continue to find connection to yourself and to each other on the river.

This spring, 3rd-5th grade students will be able to interact with park rangers in person again in our new schoolyard-visits program. The park's seasonal calendar is full with in-person activities,

where the community can gather once again with park rangers and connect with each other by recreating in nature. Mississippi River Paddle Share proved to be a popular social distancing activity that returns this summer with a brand-new route in the river gorge from Bohemian Flats Park to the Lake Street Bridge. Public tours will resume at St. Anthony Falls Lock and Dam. Picnic For The Park returns in August with an opportunity for the river community to come together to celebrate and support our mission.

Our habitat restoration events and volunteer crews are in full swing, helping the river's ecosystems adapt to the effects of climate change. Our volunteers continue to amaze us with their dedication to improving the park landscape and connecting people to the river.

The National Park Service is searching for a new superintendent of the Mississippi National River and Recreation Area, ushering in a new era of leadership for this special park. Meanwhile, Craig Hansen is acting as interim superintendent, running day-to-day operations and providing guidance on longer term strategies.

We have always been committed to establishing and strengthening partnerships that embrace the changing needs of our constituents and the environment. We are ever inspired and grateful for you and your fervent enthusiasm for this river.



The Golden Swamp Warbler

Sharon Stiteler, Park Ranger, Mississippi National River and Recreation Area

One of the brightest birds found in the park's corridor is the prothonotary warbler, which used to be known as the "golden swamp warbler" and is featured on this newsletter's front cover. For whatever reason, ornithologists preferred an obscure word for yellow robes worn by papal clerks, known as prothonotaries. The dandy yellow American goldfinch shows up at bird feeders, but to truly understand "gold" as a color is to see the prothonotary warbler as it flits through the understory of floodplain forest on sky blue wings.



Photo by Sharon Stiteler

The prothonotary breeds in the southern portion of the eastern United States, but there's a population that follows the Mississippi River as far north as this park's corridor. These insectivores seek out flooded bottomland forests and use the sorts of dead trees that any self-respecting chickadee would ignore for sturdier trunks. Prothonotaries are one of two warbler species in the United States that use nest cavities. Because their soft beaks are ill-suited for carving out a hole in wood, they rely on old, unused chickadee and woodpecker cavities. In some parts of their breeding range, they will even use nest boxes properly placed in a floodplain forest.

A male will arrive on territory and select several cavities, leaving a calling card of moss. If a female accepts his territory, she will select a moss-lined cavity and continue to build the nest. Their bouncy, high-pitched, rapid "tweet, tweet, tweet, tweet" is most active in June and July at the Vermillion River Bottoms in Hastings. Some years the birds push further upriver, and nesting sites have been documented near Crosby Farm Regional Park and Minnesota Valley National Wildlife Refuge.

The park's Vermillion River Bottoms paddles are a fantastic way to spot these golden gems in the floodplain forest.

APRIL 2021 - SEPTEMBER 2021

EVENT CALENDAR

○ APRIL

- 21 New Volunteer Orientation @ Virtual Event
- 22 Celebrate Earth Day @ Virtual Event
- 24 Saint Paul Citywide Spring Cleanup @ Indian Mounds Regional Park
- 24 Junior Ranger Day @ Mississippi River Visitor Center

○ MAY

- 1-8 SpringForwardMN Fundraiser @ GiveMN.org
- 29 St. Anthony Falls Lock and Dam Season Opener
- 29 Mississippi River Paddle Share Season Opener @ paddleshare.org

○ JUNE

- 5, 12, 26 Paddle With A Ranger @ Vermillion River Bottoms
- 8 Park After Dark @ Coldwater Spring
- 10, 17, 28 Paddle With A Ranger @ Pickerel Lake
- 24 Paddle With A Ranger @ Minneapolis Heron Rookery
- 26 Volunteer Event @ Grey Cloud Dunes SNA

○ JULY

- 8 Paddle With A Ranger @ Minneapolis Heron Rookery
- 10, 17 Paddle With A Ranger @ Vermillion River Bottoms
- 13 Park After Dark @ Coldwater Spring
- 26 Paddle With A Ranger @ Pickerel Lake

○ AUGUST

- 5, 9 Paddle With A Ranger @ Pickerel Lake
- 7, 21 Paddle With A Ranger @ Vermillion River Bottoms
- 14 Bike With A Ranger @ Hastings
- 31 Picnic For The Park Annual Fundraiser @ Harriet Island

○ SEPTEMBER

- 25 National Public Lands Day @ TBD

Go on a Family Tree Walk at the Mississippi River Visitor Center every Friday - Sunday from April 16 - June 13. Tune in to Coffee With A Ranger every Friday at 10 AM on Facebook Live. Visit the National Park Service booth at the MN State Fair. All events are subject to change, so please check our full calendar for up-to-date information and to register at www.parkconnection.org/events. We hope to see you out on the river!

To be added or removed from the mailing list, please contact info@parkconnection.org or 651-291-8164.

To contact the Mississippi National River and Recreation Area, call 651-293-0200 or visit nps.gov/miss

Photos in this newsletter courtesy of the National Park Service and Mississippi Park Connection, unless otherwise noted.

Endangered Frog Emerges

Gary S. Casper, Great Lakes Ecological Services LLC

In 2014 we began annually monitoring frogs utilizing bioacoustic methods with the Mississippi National River and Recreation Area. Upon analyzing the sounds recorded near Pigs Eye Lake, we were surprised to discover a Minnesota Endangered Species, the Blanchard's cricket frog (*Acris blanchardi*) calling from an industrial backwater. Subsequent annual surveys in cooperation with the Minnesota DNR and Macalester College, and funded by the National Park Service, targeted similar habitats of floodplain backwaters downstream from the confluence with the Minnesota River. The species was absent from many sites sampled but we have now found it at 12 sites. Most sites have only a few calling males, sometimes not persisting over multiple years. At least one more robust population, however, persists in Inver Grove Heights.

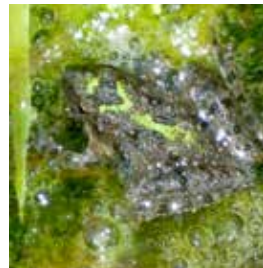


Photo by Gary Casper

It was surprising to find an endangered frog in urban backwaters. Blanchard's cricket frog began declining decades ago and was not being reported from the annual statewide frog and toad survey in this region. The fact that it has persisted under the radar in the Twin Cities metro area is encouraging. These frogs need winter hibernating sites that are frost free. They occupy floodplain habitats that provide slow backwaters or isolated pools only occasionally flooded, with native vegetation. Expanding protected riparian green space, controlling introduced species, maintaining and enhancing native shoreline and floodplain vegetation, improving water quality, and testing populations for disease would all improve habitat for this species. It is also important that we continue monitoring to better understand where to prioritize habitat preservation, and to track how these frogs are doing. Volunteers can assist this effort by submitting any observations to [HerpMapper.org](https://www.HerpMapper.org).

— PICNIC — FOR THE PARK

A Fundraiser for Mississippi Park Connection

SAVE THE DATE
AUGUST 31 @ HARRIET ISLAND



Rolling Up Our Sleeves

Mike Curran, 2020-21 Minnesota GreenCorps Member

When we think of the term “climate adaptation,” our minds might drift to sea walls constructed around New York City, or raised sidewalks in Miami Beach. Further inland, the urban forests along this winding national park face their own climate change challenges, as habitat once considered suitable to native tree populations becomes inhospitable to many. In response, park volunteers have, quite literally, taken adaptation into their own hands.

Our Plant For The Future campaign established 15,000 native trees and shrubs throughout the national park in response to emerald ash borer. Volunteers also planted some climate-adapted trees, such as disease-resistant elm and yellow poplar (pictured on the front cover). In total, 64 tree species were planted over five years. This diversity will make the Mississippi River’s urban forests more resilient to changing conditions and emerging diseases. Climate adaptation has become a central motivator to all of our restoration efforts—and what better way to tell the story of Minnesota’s changing climate than through the trees themselves?

A good place to start is with the bur oak, a tree commonly found in Minnesota’s prairies and savannas. Fortunately, these familiar friends are projected to do well in a more variable climate, due in part to their tolerance to a range of soils, from the most saturated to those exposed to prolonged drought. A great location to see young bur oaks is at Coldwater Spring, where the Coldwater Crew has been working for a decade to regenerate an oak savanna.

Hackberry is another highly tolerant species that volunteers have planted up and down the river. Though most often found in the floodplain, hackberries have gained popularity in urban landscapes given their ability to thrive in poorer soils. Since 2017,



Volunteers plant future-adapted trees at Pig’s Eye Regional Park.

volunteers have planted more than 1,300 trees, including dozens of hackberries, at Saint Paul’s Pig’s Eye Regional Park.

A newer arrival is the American sycamore, which might call to mind the forests of the southeastern United States. However, as Minnesota’s iconic winters lose their edge, this rapidly growing species will take root along the Mississippi River. This past fall, volunteers assisted the sycamore’s northern migration by establishing dozens at Settler’s Island in Cottage Grove.

All of these trees figure into the Adaptive Silviculture for Climate Change research site at Crosby Farm Regional Park, where more than 300 volunteers gathered last May to plant 1,200 trees, setting in motion a 20-year study of various adaptation strategies. One year in and the vast majority of these future-adapted trees survived their first Minnesota winter thanks to the Crosby Crew—a group of volunteers who look after the study site.

No matter which part of the river you live closest to, our 2021 planting season will introduce thousands more future-adapted trees to this national park. With your help, we’ll ensure these trees find solid footing in our transforming river valley ecosystems.

Funding for this project was provided by the Wildlife Conservation Society, and the Minnesota Environment and Natural Resources Trust Fund as recommended by the Legislative-Citizen Commission on Minnesota Resources (LCCMR).

Ways to Get Involved



PARTICIPATE

Explore the history, culture, and ecology of the Mississippi River through recreational activities, art events, virtual programming, educational programs, PaddleShare.org, and visitor centers.

Sign up for our e-newsletters to stay informed!



SUPPORT

Gifts support youth education, habitat restoration, and community programs in the national park while strengthening your commitment to preserve, protect, and enjoy the Mississippi River.

\$1,000

St. Anthony Falls Level

\$60

Family

\$35

Individual



ACTIVATE

Volunteers of all kinds are a crucial component in park operations, educational programs, and habitat restoration. Volunteering is a fun and rewarding way to connect to your community while providing the public with a connection to the river.

parkconnection.org/volunteer

Strength in Numbers

Callie Sacarelos, Communications and Marketing Coordinator,
Mississippi Park Connection

Create a sense of community and bond through collective action by volunteering for the river with your colleagues! Coworkers can connect with each other and their natural surroundings while working together to enhance ecosystems for the health of the river, plant flowers and grasses, pick up litter, and take coworker selfies with the Mississippi River as a beautiful backdrop.

Can't rally the team? Several corporate giving programs allow you to make a donation through your company for hours worked as an individual. Many national park volunteer opportunities are open for you to volunteer on your own. Simply report your volunteer hours and your company will make a donation. Short on time? Many companies match individual employee contributions, doubling or even tripling the impact of your gift to the river. Workplace giving is an easy and convenient way to make a tax-deductible gift through a simple payroll deduction. Companies can also join a circle of corporate leaders by sponsoring one of our events or the St. Anthony Falls Visitor Center.



What Happened To The Trees?

Nancy Duncan, Natural Resource Program Manager,
Mississippi National River and Recreation Area

As a result of the fur trade, many areas of the country saw beaver disappear from the landscape during the 1800's. Recognizing their value, states successfully reintroduced them and they are once again flourishing. When most of us think of beaver, we think of them building dams and lodges, creating ponds where they raise their kits. Along a river the size of the Mississippi, however, they tend to build dens in the river bank that begin below water, and then angle upward, extending under tree roots into a dry central chamber a foot or two above the water line, generally with several entrances.

Today, beaver are thriving on the upper Mississippi and their impact on floodplain forest trees, particularly cottonwood, in this stretch of river, is not well understood. Studies have found that cottonwood trees have not been successfully reproducing within the Mississippi River floodplain for decades and may ultimately disappear from the upper river corridor. Cottonwoods are an iconic floodplain species whose sturdy branches are a preferred spot for nesting bald eagles, supporting 80% of eagle nests along the river. Cottonwoods also help with bank stability, improve water quality, provide wildlife habitat, store carbon, and filter air pollution. The need to figure out how to restore successful regeneration of cottonwoods is becoming increasingly important.

Beaver along the upper Mississippi River have no significant predators, and populations seem to be increasing as a result. Beaver engineer the landscape to create an ecosystem favorable for their own living requirements, similar to what we do as humans. While habitat created by their activities can be beneficial to aquatic and terrestrial wildlife, it can radically change area vegetation. Each

year the average beaver family is reported to cut at least a ton of wood within approximately 300 feet of their pond or den. Land managers up and down the river corridor are being challenged by beaver destruction of restoration projects, once saplings grow large enough to provide a good food source. Currently, we don't know how extensive beaver harvest is on floodplain forest trees or if beaver play a major role in hindering establishment of mature trees along the river. This stretch of the Mississippi stands to lose about half a million trees due to emerald ash borer. Understanding the dynamics between beaver and floodplain forest regeneration is critical to determining how to best manage the floodplain forest so these species can successfully coexist.

The Mississippi National River and Recreation Area and its partners are submitting requests for funding to evaluate beaver impacts on floodplain forest and forest regeneration in this stretch of the river corridor. One of our bio-techs will also be studying beaver populations this summer and may need volunteers to help track beaver activity along shorelines. Sign up for our volunteer newsletter to stay informed of these volunteer opportunities.

A plot of nearly 50 cottonwoods, planted with Mississippi Park Connection and volunteers at North Mississippi Regional Park in 2014 to restore an area impacted by a tornado, was recently destroyed by beaver in a matter of days, despite having been enclosed in fence.



DAYTON

RAMSEY



MISSISSIPPI NATIONAL RIVER AND RECREATION AREA

SITES ALONG THE RIVER

- 1 Mississippi Gateway Regional Park
- 2 Coon Rapids Dam Regional Park
- 3 River Park
- 4 Manomin County Park
- 5 North Mississippi Regional Park
- 6 Mississippi Watershed Management Org.
- 7 Boom Island Park
- 8 Upper St. Anthony Falls Lock and Dam Visitor Center open during summer months
- 9 Stone Arch Bridge
- 10 Mill Ruins Park
- 11 Bohemian Flats Park
- 12 Minnehaha Regional Park
- 13 Coldwater Spring
- 14 Historic Fort Snelling at Bdote
- 15 Fort Snelling State Park
- 16 Hidden Falls-Crosby Farm Regional Park
- 17 Pickerel Lake
- 18 Lilydale-Harriet Island Regional Park
- 19 Mississippi River Visitor Center Located at the Science Museum of Minnesota
- 20 Bruce Vento Nature Sanctuary
- 21 Lions Levee Park
- 22 Pine Bend Bluffs SNA
- 23 Grey Cloud Dunes SNA
- 24 Spring Lake Park Reserve
- 25 Hastings Riverfront
- 26 Great River Road Visitor and Learning Center (WI)

ICONS

- Mississippi River Paddle Share Stations
Rent a kayak at www.paddleshare.org
- Ranger On Call Stations
Audio tours, www.rangeroncall.com

