



River Bend
NATURE CENTER

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River Bend

NATURE CENTER

Fall 2017, Volume 38, Issue 3

Helping people discover, enjoy, understand, and preserve the incredible natural world that surrounds us.

Program Highlights

See Insert for complete listings.

September
2 — Bagels & Birds
13—Restoration Club—*Native Seed Collection*
20 — O.W.L.S. Luncheon
23—Animal Ambassadors
25—Homeschool Science Day

October
7— Bagels & Birds
11—Restoration Club
15—Fall Colors Walk
18—O.W.L.S. Luncheon
21—Animal Ambassadors
23—Homeschool Science Day

November
4— Bagels & Birds
8—Restoration Club
15—O.W.L.S. Luncheon
18—Animal Ambassadors
18—Turkey Talk
20—Homeschool Science Day

December
2— Bagels & Birds
9—Animal Ambassadors
11—Homeschool Science Day
13—Restoration Club
20—O.W.L.S. Luncheon

Director's Desk By Breanna Wheeler, Executive Director

Nature is essential for our health across the lifespan

Have you heard of forest bathing? No, it's not falling into a pond in the forest as a couple of visiting students in a program experienced this summer at River Bend. Forest bathing is soaking up the benefits that engaging your senses in forest settings or green spaces can bring you and it has become popular as a form of medicine in East Asian countries. Similar to this, getting outside and spending time in nature is gaining a following across the US because of the measurable impact that a few minutes of immersion in nature has for both our psychological well-being and physical health.

A few examples are the National Parks system which has rolled out Parks Rx, a partnership with medical communities to provide prescriptions from medical providers for time in nature. Even the Harvard Business Review published a recent article encouraging business leaders to encourage employees to get outside to increase productivity.

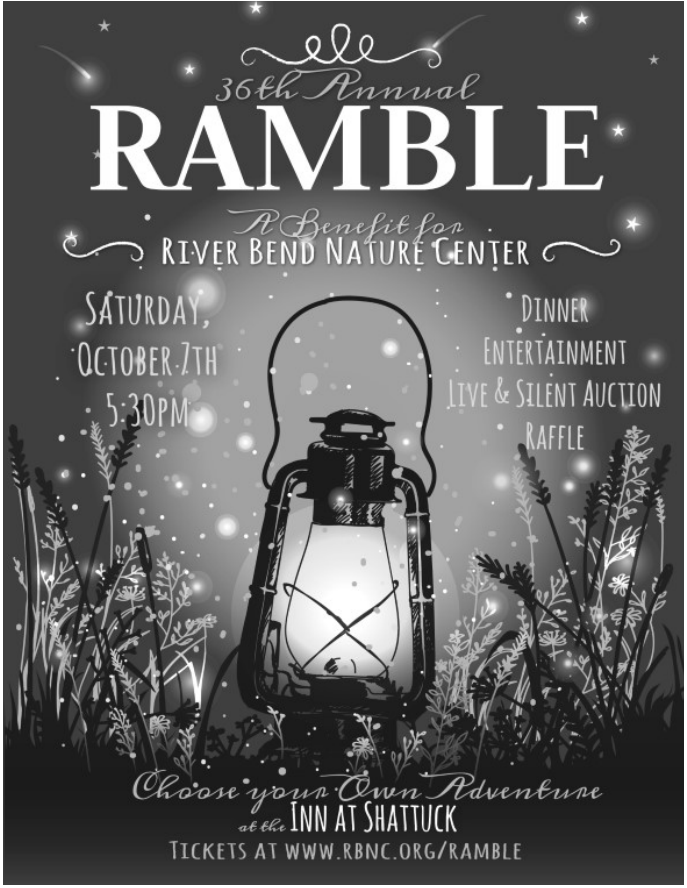
What's the big deal? What are various studies showing? That time in nature:

- Reduces stress and lowers heart rate and blood pressure,
- Boosts the immune system to combat colds, flu, and infections,
- Fights depression and anxiety especially when combined with exercise,
- Improves self-esteem and mood, short term memory and cognitive function, ability to focus, and creativity,
- Restores mental energy and reduces fatigue,
- Protects vision in children, and it
- May lower risk of cancer by stimulating production of anti-cancer proteins and lower the risk of early death by decreasing obesity and diabetes incidence.

Wouldn't you agree that these findings are a solid case for incorporating nature and the outdoors in your life? Benefits are enhanced when spending time in nature with both green space and blue space (presence of water) and when exercising in these environments.

The community of Faribault and surrounding region has an incredible resource at River Bend Nature Center to take advantage of the benefits that these studies show. With green and blue spaces in the forests, prairies, wetlands and the Straight River and opportunities from lower activity levels of driving through to sitting on a bench to more physically exerting activities like walking, running, biking, skiing and snowshoeing, benefits abound.

We can be proud of the commitment of a group of people almost 40 years ago who saw the opportunity and worked together to secure this place for future generations. We should not take for granted that we have "nature nearby" – a place to access green and blue spaces with so much health and wellness potential for individuals and the community as a whole. If you have not visited River Bend Nature Center, come get your dose of nature. It's safe, affordable (no entrance fees but memberships are encouraged) and accessible with offerings for all ages and abilities to improve health while exploring natural settings and learning through programs.



River Bend Nature Center

1000 Rustad Rd—PO Box 186
Faribault, MN 55021

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Cindy Clayton, Administrative Coordinator
Stephanie Rathsack, Interim Naturalist

Temporary Staff

Abigail Barten, Environmental Educator
Leah Weston, Environmental Educator

Bats, Bones, and Bonfires

By Stephanie Rathsack, Naturalist

It's hard to believe that we're already saying farewell to summer, and welcoming in the autumn season. And while summer is filled with fun and sunshine, we look forward to fall every year—not only for all the school groups visiting, but also for one of our biggest events of the year: Bats, Bones, & Bonfires. This is a fun Halloween festival event for the entire family. All ages will enjoy our non-scary activities and entertainment, and everyone is encouraged to wear their costumes! This year, look forward to time-honored favorites such as arts and crafts, live animals, games, face painting, s'mores by the fire, a giant leaf pile, and more! The event will be held at the nature center on Saturday, October 28th from 2:00—6:00 pm—mark your calendars and continue to check our website for more information.

Interested in becoming more involved? Consider volunteering at Bats, Bones, & Bonfires this year! In the past we have seen over a thousand participants during the course of the event, and a festival of this scale requires a lot of helping hands. Whether you're interested in helping to prep and plan, or in helping the day-of, there's something for everyone. Please contact Stephanie Rathsack at rathsack@rbnc.org with your interest.



Tails of the Trails

With Jason Pecore, Land and Facility Assistant

As I travel the trails of River Bend there is always so much to appreciate and enjoy in nature. I had to stop on Dairy Lane Bridge to take in the wonder and beauty of a rainbow over the river.

Of course there is a lot of work to be done to care for 743 acres. One of the things I have been working on is removing wild parsnips from around the trails. I have made good progress, but there is still much to be done in this area, and would welcome any assistance. If you are interested, please call River Bend.



Thank you Volunteers!

We really appreciate all of the volunteers that help and support us in various ways. Together, we are able to grow and improve River Bend Nature Center.

Check out the upcoming volunteer opportunities

Contact Stephanie Rathsack at rathsack@rbnc.org for more information.

Building Host/Greeter – Greet and welcome visitors, learn about their interests and introduce them to opportunities at River Bend Nature Center from programs to memberships and volunteering. Volunteers are also trained to answer phone calls, and common questions. Common hours would include weekends/weekdays with timeslots of 2-8 hours available.

Volunteer Naturalist – With the school year fast approaching, we are getting exciting to fill our team of volunteer naturalists (VolNats)! Share your enthusiasm and insights with students by leading hikes, catching pond critters, and more while also expanding your own knowledge. Prior experience is not necessary, all training is provided for each offered program. Volunteers must be 16 years of age or older. Must also pass a background check.

Interested in being a VolNat with programs & activities for the public? Contact us with your interest.

Animal Care – Assist with the day-to-day care of our resident Animal Ambassadors. Tasks include changing water, feeding, cleaning cages, and exercising animals. No experience is required, all training is provided. Volunteers must be at least 12 years old.

Special Events – River Bend holds several special events each year with many opportunities for volunteers. On Saturday October 28th from 2:00—6:00 pm we will host our largest special event, the annual fall festival Bats, Bones, & Bonfires. This fun event will offer a multitude of volunteer opportunities, included but not limited to: planning/preparation, set-up, ticket selling, food preparation/serving, parking, leading games and activities, and much more.



Thank you Camp Assistants

This year we were joined by Madi, Evan, Ainsley, Kathleen, Eli, and Amber to help run (figuratively and literally) the camps we had at River Bend this summer. They did everything from tying shoes and wiping noses to hiding alongside the kids in a crowd favorite game "camouflage." These young ladies and gentleman are some of Faribault's finest, and we are sincerely fortunate that they CHOOSE to spend their summers here at River Bend. They give us more helping hands and allow us to have more one-on-one connection with the kids that make our camps so great! Thank you camp assistants, for making Summer 2017 one of the best in the books! We love you!



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Generosity Spotlight

Thank you to all members and donors whose generous support helps River Bend in its mission to help people discover, enjoy, understand, and preserve the incredible natural world that surrounds us.



Quad/Graphics in Waseca, MN has generously agreed to print and bind the River Bend quarterly newsletter.

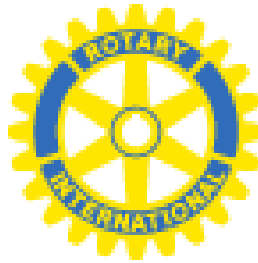
This savings for River Bend is greatly appreciated.

Thank you Quad/Graphics!

[Quad/Graphics] commitment to innovation – our restless pursuit of a better way – helps your company perform in today's rapidly changing media landscape.

Joel Quadracci Chairman, President & CEO, Quad/Graphics

Each week at their meetings, the **Faribault Rotary Club** collects "happy dollars" from attendees and then donates the money to local nonprofit organizations. Thank you for choosing River Bend as one of the recipients. The donation is one that will be featured at Ramble to help fund youth educational programs that River Bend Nature Center offers.



The 'Little-known Danger' for Deer

By Stephanie Rathsack, Naturalist

With shortening days, migrating birds, and cooler temperatures, signs of fall are all around us. Another sign is the ever-increasing presence of whitetail deer. Fall is the peak season of the rut—or breeding season—and deer activity will noticeably increase during the next few months as bucks and does alike work to create the next generation. But with this seasonal change, also comes a little-known danger: feeding the deer. With more sightings, comes more sympathy, and it's easy to understand why seeing a deer nibbling on twigs and "looking hungry" would invoke the desire to help. Unfortunately, this is the root of the problem, and deer are literally being "killed by kindness" through these actions. Wherever deer occur, more often than not, they are in close proximity to humans. And whether it be through an act of kindness, or to give them an alternative to eating out of your garden, feeding deer is not recommended at any time of the year, and can have deadly consequences.

It's not natural – Deer would not normally consume large amounts of corn or bird seed in the wild, and their diet fluctuates with the seasons—consuming less-nutritious woody browse in the winter, and green vegetation in the summer. Adding high-energy food like corn in the winter is simply not natural. And, just like humans, too much of anything can be detrimental to health. In the case of deer, they are ruminants (like cows and sheep) which means their four-chambered stomach has microorganisms inside it that aid in digestion. These organisms take time to get used to new food, and when a deer consumes something new and in large amounts, it can fatally shock their system, resulting in one of two "corn toxicities". According to the DNR, "corn toxicity is a general term related to two diseases which can affect white-tailed deer. Both diseases occur acutely and result in the rapid death of animals in otherwise good physical condition. These diseases are acidosis (grain overload) and enterotoxaemia (overeating disease)". With both diseases, death will normally occur within 24 to 72 hours after the consumption of the grain.

Proximity to humans – Why did the deer cross the road? To get to the corn on the other side. Being drawn in by food, deer may ignore dangers that would normally drive them away. Hunting is carefully monitored by the DNR, but feeding deer may skew herd numbers and draw more individuals into areas where hunting is not permitted—resulting in overpopulation. Alternatively, deer may be drawn into areas where hunting IS conducted, and individuals may be targeted outside their natural home range. Feeding results in other dangers as well, including some to humans. When food is offered to deer, it is often in an area where there are people—the main concern in this situation pertains to collisions with cars, as deer will be nearer to human buildings and roads than they would be naturally—resulting in increased death of deer as well as people as the deer move to cross busy roads.



Proximity to other deer – When feeding deer, the idea may or may not be to draw them close for observation. This is a common backyard practice, such as leaving out a large feeding tray in the winter. These "deer buffets" are interesting to watch as they often will attract multiple deer, but the danger lies in numbers. Deer are herd animals by nature, but their willingness to group together fluctuates with the seasons, and never results in "large herds". When food is scarce, and a new source appears (such as in your backyard), unnaturally large groups of deer may come to the site. And just like with people, overcrowding can lead to multiple problems, such as skewed social interactions where fights among individuals may break out when otherwise they would not occur. More dangerous than fights though are the diseases that can spread rapidly when individuals are too close together. Lyme disease (which can be spread to humans) is borne by the "deer tick" which will feed on humans and deer alike. In addition to lyme disease, there are a number of deer diseases that cannot be transferred to humans: chronic wasting disease, lung worm, mange, hemorrhagic disease, among others. Close proximity within large herds speeds the transfer of these diseases with deadly results.

Thank you 2017 Ramble Sponsors and Donors!

Platinum



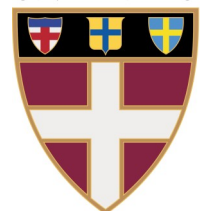
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Gold



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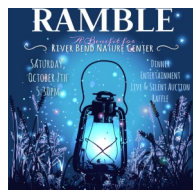


Donors



News & Notes

36th Annual Ramble



“Choose Your Own Adventure” to benefit River Bend Nature Center on October 7th, at The Inn at Shattuck.

- Live & Silent Auctions
 - * Year of pedicures—Sunset Salon
 - * 2 passes - State Farm Fanbulance
 - * Restored Prairie Tour—Dr. Dick & Nancie Huston
 - * Hand-crafted 3 chamber compost bin
 - * Various RBNC needs
- Wall of Wine & Wall of Beer raffle
- J-P Douglas Piano Entertainment
- Fireside Music
- Photo Booth
- Meet RBNC Animal Ambassadors
- Make your Buckthorn Walking Stick
- Make your Prairie Seed Mixture
- Connect with old & new friends
- Help RBNC as we prepare for the next 40 years

The staff at River Bend looks forward to seeing you there!

Give to the Max

Please remember RBNC this giving season from Give to the Max Day, Thursday, November 16, 2017 through the end of the year. RBNC is a 501(c)3 non-profit organization and your donations are tax-deductible. Sending or dropping off a check is the preferred method to avoid processing fees, though we are also able to accept online credit card donations at our website or through Give to the Max.

With the 40th Anniversary looming, we are re-committing to our mission and raising funds to address the critical staff infrastructure needed to expand outreach and volunteer opportunities as well as improvements to natural resources and of course, special celebratory activities! Through all of these things, we hope to ignite and reignite interest in involvement at RBNC building a strong foundation for the next 40 years. Thank you for your support.

40th Anniversary Update

The plan for celebrating the 40th Anniversary at RBNC is coming together and we intend to have the preliminary ideas together by mid-September. Some of those include guest speakers related to RBNC mission, music and movies, monarch butterfly themed activities, activities that have to do with a ‘40’ theme, and celebration of our history. The Anniversary celebration will kick off during 2018 Heritage Days and will continue through 2019 Heritage Days. Please contact us to get involved!

Summer Camps

Our summer camps at River Bend are not only the highlight of summer vacation for kids, but for our staff! This year we had 23 camps, and 202 children that attended those camps in total. Topics ran anywhere from the tiniest creepy crawlies that live and thrive in your backyard, to the largest and most elusive specimen roaming Minnesota....Big Foot. From golf cart rides to the waterfall for sketches and water bug hunts, to zip-lining and rock climbing, to River Bend’s Wilderness Games camp that involves archery, outdoor survival skills and nitty gritty team work; we make summer come alive before their very eyes! So make sure to sign up for our Summer 2018 Camps before the spots are taken, they go fast for a reason!



2017 Deer Management Hunt, River Bend will not be holding a deer hunt this fall. While we had submitted an application to the MN DNR to be approved for a special hunt early in 2017, a decision had not yet been made regarding a 2017 hunt at the nature center. Due to a very successful harvest during the 2016 hunt, our staff and board of directors have decided that we will continue to monitor our population this year, and revisit the possibility of a management hunt in 2018. If you have additional questions you may reach us at rbncinfo@rbnc.org.

Phenology Update

With summer coming to a close you would think there would be less to see in the woods at River Bend. Actually, it is the opposite according to Tom Boevers, who comes to RBNC often and reports on seasonal changes. Tom said there is plenty to watch especially when fall migration begins. The mass groups of the red-winged black birds are on the move and starting to gather. Along with the warblers and some shore birds such as the sand piper are coming through some areas. You can also see changes in vegetation. Be on the lookout for the large Sulphur Mushroom, or sometimes known as chicken-in-the-woods mushroom, and the large white puffball mushrooms. The prickly ash are full of the bright red berries and some of their berries are popping open revealing their jet black seeds.

Here are more changes that others have seen...

July: Painted turtles basking in the sunshine on logs at Turtle Pond.

Wood frogs hiding in the forest leaf litter to stay cool during hot days.

Monarchs laying individual eggs on the undersides of milkweed leaves.

Gray tree frogs hiding under leaves.

Mulberries ripening and being devoured by birds and humans alike.

Wild turkeys actively “visiting” the interpretive center.

Male Luna Moth found near building.

August:

Whitetail deer bucks showing large velvet covered antlers as they begin to prepare for the rut.

Red foxes roaming along Rustad road.

Great black wasps, an important pollinator species, buzzing around the rain garden.

Parasitic dodder plant in bloom.

A near total solar eclipse on August 21st.

Naturalist Notebook

Text by Sydney Dean, Summer Educator

Illustrated by Moe Brand

Mudpuppies

(*Necturus maculosus*)

Grab your snorkels and fins! You are invited to visit the murky riverbeds of Southeastern Minnesota to discover a slimy and elusive creature: the mudpuppy salamander. Salamanders are a type of amphibian: a classification of animals with more differences from any other type of animal. Amphibians breathe air not only through nostrils, lungs, and/or gills but also through their permeable skin. Water can also be transported from streams, pools of water, and rain through their skin. For this reason, it is crucial that these animals exist in areas with clean air and water. The mudpuppy salamander begins as an egg, living for 1-2 months in a clutch surrounded by 30-200 brothers and sisters and under its mother’s guardianship. No, whining over leg room is not tolerated. Their nest lays under a log or flat rock, in still, shallow waters. A female will breed with a male in the fall, lay eggs in the spring, and guard the egg mass until they hatch. This is because the mudpuppy eggs and hatchlings do not secrete toxic substances to ward off predators, like other salamander species may. Hatchlings are small (usually just under 1 inch long) with external gills, a characteristic trait of larval salamanders. What is not characteristic of most salamander species is the retention of these external gills into adulthood. Generally, a salamander will remain in a larval state until they have reached a body weight or encounter environmental stressors which

plunge them through metamorphosis and into an adult body form. Adult salamanders have more developed legs, are missing wide, flat tails for swimming, and have developed

internal respiratory systems (lungs) instead of gills. Mudpuppies are a unique salamander as they do not metamorphosize; instead they retain their larval features (such as their external gills) through adulthood. This phenomenon is known as paedomorphosis, and is due to a lack of or irregular function of the thyroid gland. This is just fine for the mudpuppy, as they are entirely aquatic. During the day, mudpuppies enjoy resting under logs, rocks, and other burrows. At night, they emerge from their shelters and hunt for anything they can catch to eat: small fish, bugs, smaller mudpuppies, etc. Being one of the largest species of salamander, one would think these creatures would be easily spotted by predators (water snakes, large turtles, bigger mudpuppies), however, as they grow, they become a gray-brown color; blending perfectly with gravel and sand at the bottom of even the clearest rivers. While mud puppies have not been actively reported in Rice County, they have been well-reported in Goodhue, Dodge and Le Sueur counties. So keep your snorkel masks clear and keep your eye out for large “rocks” with red, swaying gills.

