



# MISSISQUOI MATTERS

NEWSLETTER OF THE FRIENDS OF  
MISSISQUOI NATIONAL WILDLIFE REFUGE

Winter, 2020 - 2021



## Winter Activities Schedule at Missisquoi National Wildlife Refuge

*29 Tabor Rd.  
Swanton, VT 05488*

### Create Your Own Fun at the Refuge

**Monday thru Sunday, dawn to dusk, until further notice**

As I'm sure you are aware, Covid-19 continues to play havoc with the activity schedule at the refuge. The Visitor's Center is still closed until further notice. The monthly Bird Monitoring Walks are on hiatus but it is possible they may resume later this winter.

In a normal year, winter at the refuge is a wonderful time of year. Don't let the coronavirus stop you from enjoying our wonderful refuge. All trails are open (subject to periodic closures for various hunting seasons) and waiting for you to enjoy. **Be sure to read the "Seasonal Trail Closures and Advisories" on page 4 of the newsletter.** The Black Creek/Maquam Creek trail is closed to hunting and is a good choice during the various deer hunting seasons. Take a drive down Tabor Road and bird the grasslands on either side of the road. There is often a lot of raptor activity there. Trail use has been heavy during the pandemic so be sure to stay safe and to respect the habitat. Keep dogs on leash (and scoop their poops). Maintain at least a 6 ft. social distance from other trail users.

Make your own fun and make new discoveries!

### Save the date and mark your calendars for an evening of Bird Tales, Thursday, February 11th, at 7:00PM

An evening of Bird Tales will come to you virtually this year. We are planning another great night of avian stories from Vermont's fields and forests, and this year you will be able to join us from the comfort of your own home via Zoom. Check our website (<http://friendsofmissisquoi.org/calendar/>) as the date draws closer for details on how you can get access to this popular event.

**If and when events are scheduled, they will be posted on the Friends website as soon as dates are known. To check for any schedule changes or additions, visit the Friends website at [www.friendsofmissisquoi.org](http://www.friendsofmissisquoi.org) and click on "Calendar".**

**For more information about the refuge, visit [www.fws.gov/refuge/missisquoi/](http://www.fws.gov/refuge/missisquoi/)**

## **Refuge Managers Update - November, 2020**



### **Wrapping Up an Unprecedented Field Season**

As fall turns into early winter, I have been reflecting on the strange and dif-

ferent spring, summer and fall we have had at Missisquoi NWR. As you read this, I am sure you are thinking of all the changes that have taken place due to COVID-19 since April and what may be in store for us this winter. At the refuge, the beginning of the pandemic shut down all refuge operations, save those that were necessary for the safety of our visitors and infrastructure. This meant that all field biology was on hold and stayed that way until the first week of June.

Even with the permission to conduct fieldwork, safety precautions limited our ability to do some activities and changed the way we did others. That said, our staff was able to do a variety of important field surveys and habitat management projects, including regular breeding surveys for herons, osprey and black terns and overseeing a variety of invasive species monitoring and control operations.

Thanks again to the Friends of Missisquoi NWR, we were able to leverage refuge funding and staffing to control invasives on about 96 acres of floodplain forest and grassland habitat and survey and control water chestnut on 589 acres of wetland habitat. This was made possible by a grant to the Friends from the Lake Champlain Basin Program for \$8,000.00. In addition, the Friends provided the refuge with an additional \$2,000.00 for invasive species control. Using this money the refuge was able to hire

*by Ken Sturm, Refuge Manager, Missisquoi NWR*

contractors to complete the work. Thank you to the Friends of Missisquoi for prioritizing this difficult management effort and supporting the biological integrity of the refuge!

Sadly, most of the refuge's publicly facing programs and opportunities have had to take a pause during the pandemic. The refuge visitor's center is still closed and we are monitoring the situation to find a time when we can safely open the facility again for public use. However, even if we are able to open the center it is likely things will look very different in regards to use of the interpretive area, bathrooms, and the classroom. We are working with other refuges in our region as well as taking the guidance from the Vermont Health Department on ways to mitigate risk to the public and staff when we do re-open. I also hope that we can find creative ways to conduct outreach events both on and off the refuge in the coming year which will ensure the safety of the public and still provide an interesting connection to the wildlife the Missisquoi NWR manages and protects.

In the meantime, use the refuge trails which will remain open during the pandemic. We have seen all of our trails and boat ramps receive plenty of use since the spring and we hope that our communities continue to see the refuge as a resource not just for wildlife but also for themselves. As EO Wilson said: "Just being surrounded by bountiful nature rejuvenates and inspires us." I hope the refuge can rejuvenate and inspire our community as it struggles through this difficult time.

# Tales of a Turtle Trapper

by Judy Sefchick, Wildlife Biologist, Missisquoi NWR



Just when I thought the Vermont field season *couldn't* get any shorter, the spring of 2020 arrived. As the river thawed, I eagerly awaited the return to my 'three-season office' (known to some as a boat!). For me, being in-

doors is never easy or desirable. After all, a field biologist is most alive when outside! Unfortunately, the warm spring air this year also brought Covid-19. Who could have imagined that two blissful late-March days on the Missisquoi would be the last until June?

As the death and destruction of a global pandemic wreaked havoc on life as we know it, the U.S. Fish and Wildlife Service placed 'non-essential' staff on mandatory telework. Feeling grateful to have a job, I tried to view this as a rare opportunity to tackle a backlog of biological paperwork. Truthfully, I did get loads of work done. That is, despite having an alarming revelation regarding my own vulnerability. Before this, I had never thought about how incredibly easy it is to torment a wildlife biologist. I no longer felt safe. It was an awful realization that anyone could inflict agony, at any given time--just by thwarting fieldwork (please *do not* try this at home)!

Thank goodness for Team Turtle! Not only did contract herpetologists Jim Andrews and Kate Kelly skillfully conduct the 2020 spotted turtle Inventory at the refuge, they kindly filled in as my eyes and ears to the refuge when I simply could not be there. Oh, the tales that the turtle trappers told to a thoroughly troubled biologist who was clearly 'on the edge'!

With perfect turtle basking conditions in April, Team Turtle took to the water, binoculars in hand, with hopes of spotting a spotted. From April 30th to June 1st the turtle team transformed into elite athletes, paddling near and far, to deploy eighteen live traps of three different types in suitable refuge habitats. These trappers had all kinds of tricks up their life vests; they even bribed Missisquoi's

turtles with once-in-a-lifetime *sardine-in-soy-oil* snacks as bait!

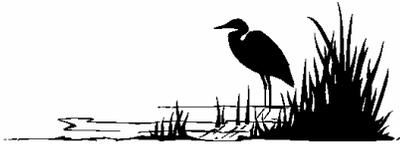
Although Team Turtle did not find Spotted Turtles on the refuge, they shared a plethora of other interesting observations. It's hard to choose a personal favorite, but the short video clip of two male bullfrogs sumo wrestling to settle a territorial dispute may be mine. The brutal force and violence of large flabby frogs flailing is something that I had never seen (and never want to see again!). Also topping the list was a photo of a snapping turtle with an incredible 18-inch shell. Kayakers beware of things that go *bump* in the day; this baby only has another half-inch to grow before it ties the state record!

I hate to admit it, but I was unaware that the central mudminnow occurred on the refuge. Apparently their game of hide-and-seek, by concealing themselves in mud, and burrowing in sediment during dry spells worked! There was also an



unsolved mystery: *Who or what* is making those small, surgically precise holes in traps and bait bags? It was their perspectives, however, that served as reminders not to take anything for granted. While the refuge has seemingly endless leopard frogs, and healthy populations of blue-spotted salamanders, that is not the case throughout Vermont. Robust and diverse reptile and amphibian populations require wetlands, of course, but connection to quality edge, and upland (above the high water line) habitats are also of vital importance.

This Thanksgiving, not only does my gratitude extend to the marshes, fields, and forests of Missisquoi NWR, but also to Team Turtle, whose weekly updates and photos were literally my saving grace.



## Missisquoi Matters

is the quarterly newsletter of the Friends of Missisquoi National Wildlife Refuge, Inc., a non-profit 501(c)(3) organization, dedicated to promoting a better awareness, appreciation, conservation, and responsible utilization of the

Missisquoi National Wildlife Refuge.

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

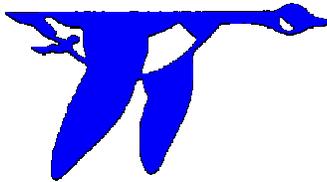
E-mail: [info@friendsofmissisquoi.org](mailto:info@friendsofmissisquoi.org)

Newsletter edited by Al Crist

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**The MNWR Visitor Center is  
closed until further notice**

## Missisquoi NWR Seasonal Trail Closures & Advisories

### Jeep Trail

#### Closed:

April 1- August 1 (Nesting Season Closure)

Youth deer weekend: Oct. 24 - 25

Muzzleloader Season: Dec. 5 - 13

#### Trail Advisory:

Waterfowl Season: Oct. 10 - Dec. 8

### Discovery Trail

#### Closed:

Youth deer weekend: Oct. 24 - 25

Regular deer season: Nov. 14 - 29

Muzzleloader Season: Dec. 5 - 13

#### Trail Advisory:

Archery Season: Oct. 1 - Nov 13 & Nov. 30 - Dec. 15

Small Game Season: Sept. 1-Dec. 31

### Old Railroad Passage Trail

#### Closed:

Youth deer weekend: Oct. 24 - 25

Regular deer season: Nov. 14 - 29

Muzzleloader Season: Dec. 5 - 13

#### Trail Advisory:

Archery Season: Oct. 1 - Nov 13 & Nov. 30 - Dec. 15

Small Game Season: Sept. 1-Dec. 31

### Stephen J. Young Marsh Trail

#### Closed:

Youth deer weekend: Oct. 24 - 25

Regular deer season: Nov. 14 - 29

Muzzleloader Season: Dec. 5 - 13

#### Trail Advisory

Archery Season: Oct. 1 - Nov 13 & Nov. 30 - Dec. 15

Small Game Season: Sept. 1-Dec. 31

The "**Trail Advisory**" is a notification that the area is currently open to hunting and visitors may proceed with caution. Trails will be posted to advise hikers that the area is open to hunting.

The **Black Creek/Maquam Creek Trail** area is closed to hunting and is a great choice for those not wishing to hike in an area which may have hunters.

## **Tracking American Woodcock in the Northeast**

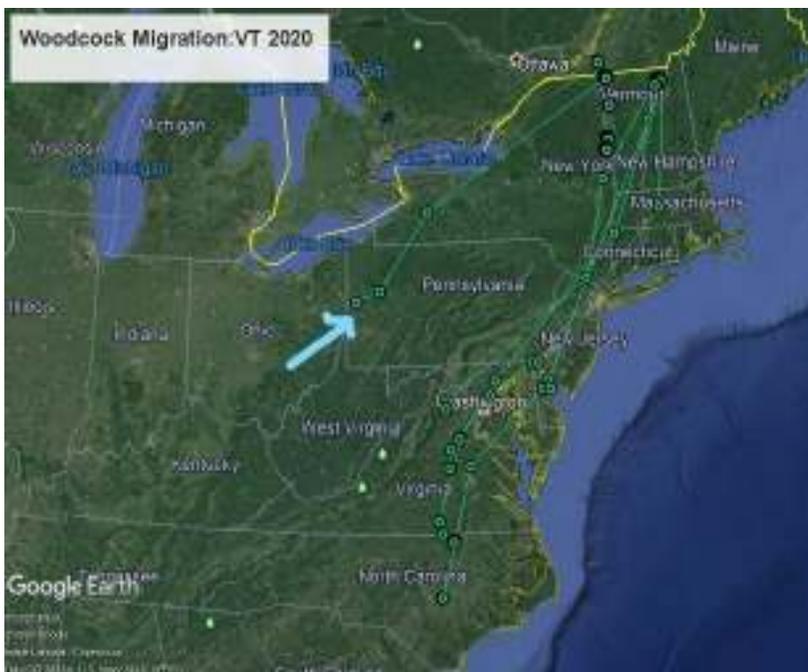
American woodcock are a small game bird that ranges from the Atlantic to the Central Flyway in the United States. This species uses a variety of habitats during their annual life cycle that include early successional habitat (think young forests), grasslands, and woodlands. They are a remarkable little bird often referred to as the “upland cousin of shorebirds”, “timberdoodle” and “bogsucker”. They are also a bird in decline throughout their range, which is suspected to be related to the loss of habitat quality and quantity.

This year the Missisquoi NWR collaborated with the Silvio O. Conte National Fish and Wildlife Refuge, Vermont Fish and Wildlife Department, Audubon Vermont, the U.S. Forest Service, and the University of Maine to bring the state of Vermont into a broad woodcock migration study. The study is led by the University of Maine, and with its many partners, is trying to



understand how the conditions woodcock experience during migration may influence their population declines. For example, information on where and how long woodcock stop during migration can be used to develop conservation strategies to protect and manage habitat for this species along their migration corridor.

Thanks to the Friends of Missisquoi NWR, one GPS unit was purchased and placed on a captured woodcock this September at Missisquoi. Several other GPS units were placed on woodcock captured at Missisquoi NWR as well as Silvio O. Conte National Fish and Wildlife Refuge and a Nature Conservancy Preserve in south central Vermont. These units provide point locations of where woodcock are during their migration from Vermont to their wintering grounds in the southern United States.



Currently the Friend’s woodcock was last spotted in western Pennsylvania just north of Pittsburg (blue arrow on map). Interestingly, this bird took a westerly migration route as compared to the birds banded in the northeastern part of the state that flew south more or less along the Connecticut River drainage and east of the Appalachian Mountains. As more information comes in, we will be able to see how long it takes for a woodcock from Missisquoi and northern Vermont to arrive at the wintering grounds. More importantly, biologists and land managers will be able to use this information to understand the habitats of American Woodcock and work to conserve areas that are important for their safe migration.

## Home on the Refuge?

As many of you already know, the Missisquoi National Wildlife Refuge is an ecological gem in north-ern-most Vermont. It was established to provide a resting and feeding area for migratory waterfowl, and as a general wildlife refuge pursuant to the Migratory Bird conservation Act of 1929. It spans a whopping 7,240 acres.

The refuge encompasses the Missisquoi River Delta, the largest wetland complex in the Lake Champlain Basin, and a stopover for migratory birds in the Atlantic Flyway with more than 20,000 ducks converging each fall. It also provides habitat for a variety of state listed rare species such as the threat-ened spiny softshell turtle and the only nesting location for state endangered black terns. Because of the refuge's rich biological resources and regional significance, it was designated the United States' 36th Ramsar Wetland of International Importance in 2013. It houses several of Vermont's most notable archaeological sites and is being nominated for the National Register of Historic Places. In addition to the aforementioned special attributes, myriad environmental, archaeological, and research opportunities remain untapped in this sanctuary.

Research teams, summer interns, and volunteer groups that support refuge programs require housing if their stay at the refuge is more than a single day. In fact, organizations like Vermont Youth Conserva-tion Corp, Americorps, Student Conservation Association, and others typically make housing a prerequi-site to placement. Because the refuge offers no housing, the Refuge itself, the scientific and archaeologi-cal communities, not to mention the local economy, consistently miss out.

Given this need, the Friends of Missisquoi are researching options to construct a four seasons living facility adjacent to the current MNWR Headquarters on Tabor Road. If you're interested in being part of this exciting development on the Refuge, please let us know! If you'd like to become involved, contact us at [housing@friendsofmissisquoi.org](mailto:housing@friendsofmissisquoi.org)

## Big Sit Results

Team "Missisquoi Marsh Mellows" took to the field on a beautiful Sunday, October 11th. The team took control of the observation platform at Stephen J. Young Marsh at Missisquoi NWR. The sitting was long and hard, and socially distanced as well. 33 species were sighted.

Here are the species seen during the sit (\* = new species seen for the Missisquoi Big Sit) :



- |                           |                              |                            |
|---------------------------|------------------------------|----------------------------|
| 1. American crow          | 12. Cooper's hawk            | 23. red-tailed hawk        |
| 2. American goldfinch     | 13. dark-eyed junco*         | 24. red-winged blackbird   |
| 3. American robin         | 14. double-crested cormorant | 25. rusty blackbird        |
| 4. American woodcock      | 15. downy woodpecker         | 26. sharp-shinned hawk     |
| 5. bald eagle             | 16. hairy woodpecker         | 27. song sparrow           |
| 6. black-capped chickadee | 17. Lincoln's sparrow*       | 28. swamp sparrow          |
| 7. blue jay               | 18. mallard                  | 29. turkey vulture         |
| 8. blue-headed vireo*     | 19. mourning dove            | 30. white-throated sparrow |
| 9. Canada goose           | 20. northern cardinal*       | 31. wild turkey            |
| 10. common grackle        | 21. northern harrier         | 32. wood duck              |
| 11. common raven          | 22. pileated woodpecker      | 33. yellow-rumped warbler  |

## **Vernal Pool Monitoring Project**

Dear Friends of Missisquoi,

My name is Kevin and I coordinate the Vermont Center for Ecostudies Vernal Pool Monitoring Project. This is a long term effort to monitor vernal pools throughout the state. Our citizen scientists track amphibian phenology and their pool's hydroperiod through four yearly visits, a water temperature logger, and an automated audio recorder.

This season I'm focusing on expanding our network of monitored pools to better cover all of Vermont's landscape. I would love to recruit and train some community scientists in the towns surrounding Missisquoi to monitor a few pools as that's an area that is currently underrepresented in our project. Additionally, there's the chance, however small, of rediscovering boreal chorus frogs in Vermont.

I was hoping that some of your members may be interested in participating in this study since vernal pools impact the health of a watershed, and using the temperature logger and automated audio recorder we aim to detect future shifts in climate and phenology. No experience is required, it's family-friendly, and a great way to learn about vernal pool ecosystems.



Any help that you can offer regarding potential leads for interested monitors in the Alburgh-Highgate-Fairfield area would be greatly appreciated. Monitors include everyone from families with young children to retired researchers, so the only requirement is an eagerness to learn and explore.

On a semi-related note, we have also released the VT Vernal Pools Atlas where users can submit unmapped vernal pools or field-confirm remote sensed pools. Many of the remote sensed potential pools in Franklin County have yet to be field confirmed, so I thought that may be of interest to the Missisquoi community as well. It can be a one time thing where someone stumbles across a pool, but some people have gotten addicted to the scavenger-hunt nature of it.

### **Kevin Tolan**

Vernal Pool Monitoring / Grassland Bird Outreach Coordinator

Vermont Center for Ecostudies

email: [ktolan@vtecostudies.org](mailto:ktolan@vtecostudies.org)

(802) 649-1431 x205



# Refuge Update - September & November, 2020

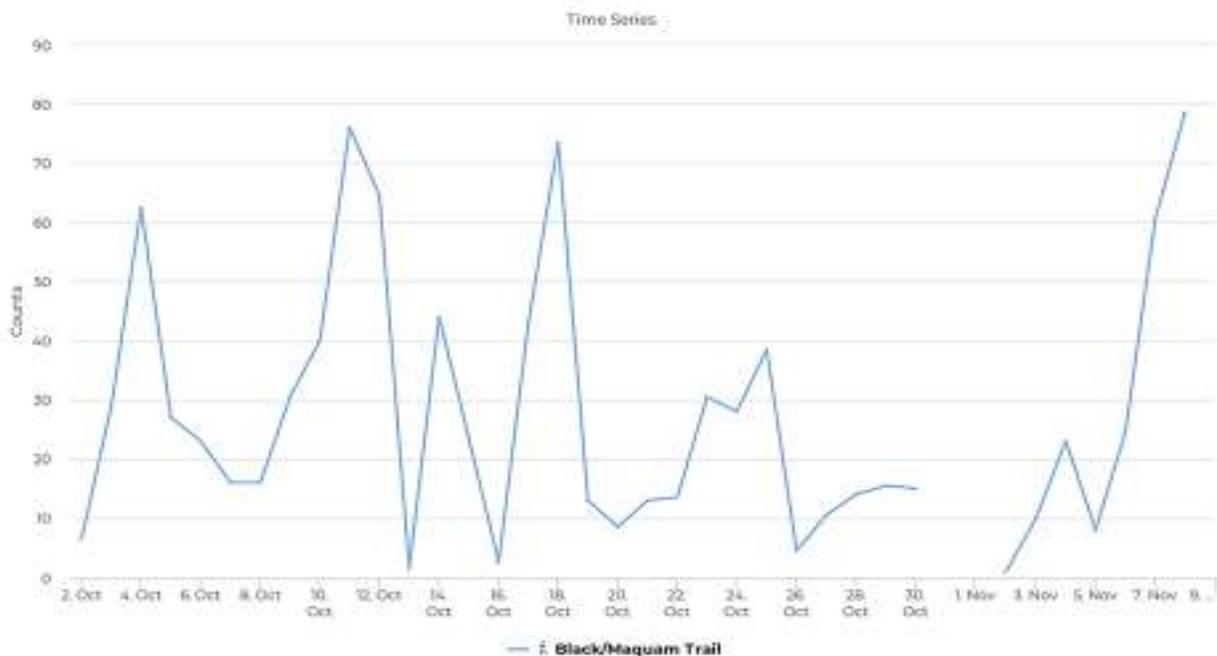
At every bi-monthly Friends of Missisquoi board meeting, Ken Sturm, refuge manager, gives the board members a “refuge update”. Here are the highlights from our September and November Zoom meetings.

## Biology:

- The state botanist and natural community ecologist visited the refuge to review the oak islands and pitch pine communities in the bog.
- Working with VT Fish & Wildlife Dept. & the US Fish & Wildlife Service Lake Champlain (Partner’s Office) to develop a test on woody plant regeneration on the river island – converting herbaceous into woody habitat. Contracted with the Intervale Native Plant Nursery to plant a section of this site in October.
- Contractors treated 70 acres in the floodplain for yellow iris and hit patches of knotweed and Phragmites along the river.
- Working with the State and University of Maine, US Forest Service, VT Fish & Wildlife Dept., and Audubon Vermont, staff captured and tagged woodcock on the refuge. Seven were captured and fitted with gps collars. Friend’s woodcock went to Canada for a while and last record is near Buffalo, NY. (see article on page 5)

## Public Use

- Ken developed a remote learning plan for the Jr. Waterfowl training this year. Sent out to 28 families. Program was well received and families were glad that the program was not cancelled.
- Visitor’s Center continues to be closed. Discussions regionally on what it will take to safely re-open. We may consider limited hours this winter depending on the covid statistics statewide and within Franklin County.
- Installed two new interpretive panels for the Stephen J. Young Marsh kiosk.
- Ken is working on migrating the refuge website to a new platform.
- Installed two new trail counters – one on Black/Maquam and one on Stephen Young Marsh. Trails continue to be heavily used. Visitor data for the Black/Maquam Trail is below:



## Other

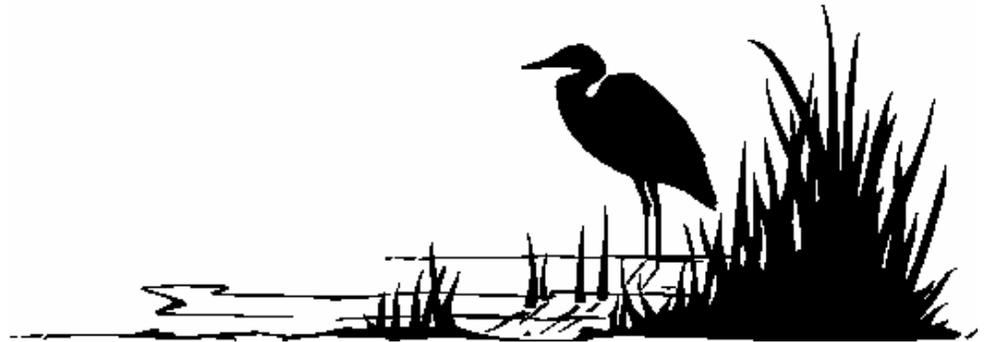
- Louie’s Landing Boat Ramp mussel survey occurred in mid-July. Only a few rare mussels were found and they were relocated.
- Getting close to two land acquisitions to add approximately 11.5 acres to the refuge.

**FRIENDS OF MISSISQUOI NATIONAL WILDLIFE REFUGE  
BI-MONTHLY BOARD MEETING**

**Wednesday, January 13th, 2021 at 6:30 pm by Zoom**

**email [info@friendsofmissisquoi.org](mailto:info@friendsofmissisquoi.org) if you'd like to attend via Zoom**

Members are always welcome & encouraged to attend. Next board meeting is March 10th at 6:30 pm



Please tell us how to serve you better - The Friends of Missisquoi NWR Board is eager to know more about the kind of programs, outings, or activities you would like to have offered on or about the refuge. Please email your suggestions and comments to [info@friendsofmissisquoi.org](mailto:info@friendsofmissisquoi.org). Thanks!

**Yes!** I want to support the Friends of Missisquoi National Wildlife Refuge and its programs with my membership. My dues include a subscription to Missisquoi Matters and a 10% discount on items at the Friends Gift Shop. Enclosed is my contribution of:

**Membership Level**

- \$10 Student
- \$15 Individual
- \$20 Family / Classroom
- \$50 Supporting
- \$100 Steward
- \$250 Life / Business
- \$1000 Patron

Would you like to receive your newsletter by postal mail or by email? Please circle one:

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(Your email address will not be shared with any other organization. We would like to be able to contact members regarding last minute changes to Friends activities and events.)