



# MISSISQUOI MATTERS

NEWSLETTER OF THE FRIENDS OF  
MISSISQUOI NATIONAL WILDLIFE REFUGE

Spring, 2021



## Spring Activities Schedule at Missisquoi NWR 29 Tabor Road, Swanton, VT 05488

### World Migratory Bird Day Sing, Fly, Soar — Like a Bird!

***After a one year Covid hiatus,  
World Migratory Bird Day is back at Missisquoi  
NWR and it has turned into a multi-day event!***

**Thursday, May 13th** - Did you know the Bald Eagle was removed from the List of Threatened and Endangered Species? Do you want to learn more about this species in Vermont? We will host Margaret Fowle, conservation biologist with Audubon Vermont, who will be educating us about these majestic birds on the refuge and throughout the state. This will be a Zoom virtual presentation. Get free admission at: <https://www.eventbrite.com/e/all-about-eagles-tickets-143497756653>

**Friday, May 14th** - Do you want to know what birds you are likely to find on the refuge? Do you want to know the easiest ways to identify them and in what habitats they can be found? In preparation of a great weekend of spring birds descending on the refuge, enjoy this presentation by Maeve Kim and sharpen your skills before you head out to participate in our weekend challenge. This will be a Zoom virtual presentation. Get free admission at: <https://www.eventbrite.com/e/birding-missisquoi-tickets-143503505849>

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## Spring Activities Schedule continued

### **Saturday and Sunday, May 15th and 16th - Missisquoi's World Migratory Bird Day "Big Weekend Challenge"**

Last year our annual World Migratory Bird Day festivities were canceled due to COVID-19. Sadly, we lost a year of our long-term data. This year, we're adapting and changing the way we usually hold our event, and we really need your help. Instead of guided group walks and boat excursions, we are introducing our "Big Weekend Challenge". We invite you to come and help us document the birds present on the refuge. Here's how to participate:

1. Register for our weekend of birding here so we know you are coming:

<https://forms.gle/fye6yC1CNMSZqvTn6>

2. Visit the refuge trails and/or waterways anytime from sunrise to sunset on Saturday and Sunday. For a map of trails and water access points please visit:

<https://www.fws.gov/WorkArea/DownloadAsset.aspx?id=2147616885> \*\*\*Please note the Jeep Trail will be closed at this time of year, but Mac's Bend Road will be open for walking.

Record all your bird sightings via eBird and share your lists with our eBird account (MNWRBirdDay) which allows us to have a record of your data.

The more you bird and contribute, the better our data will be. To get you motivated, the Friends of Missisquoi NWR will be awarding a number of prizes for different categories of participation, so the more time you spend looking and recording (and the more data you collect for WMBD), the more chances you have to win. Don't forget to bring your camera along to qualify you for some of the photography prizes! Our goal will be to see if we can beat our record of 113 species for WMBD.

If you are unfamiliar with eBird, please visit this video for a great tutorial on how to submit your sightings right from your smart phone: <https://www.youtube.com/watch?v=bvYYeDd05TQ>

Come out and enjoy Missisquoi NWR as the birds return to the refuge and help make this a successful weekend of data collection. As you participate as a citizen scientist for the refuge, please be sure to follow all current COVID-19 guidelines, stay on the open trails and waterways, and be careful not to venture into any of the restricted areas.

Note: Depending on current COVID-19 guidelines in May, we are considering hosting a limited participant group paddle on Saturday afternoon and a limited participant beginner's bird walk on Sunday morning. If you think you might be interested in either of these small group events, please email [info@friendsofmissisquoi.org](mailto:info@friendsofmissisquoi.org) with your contact information and interest.

### **Green Up Day at the Refuge**

**Friday, April 30th, 9 am to noon**



### **Seeking Volunteers to Join Refuge Staff for our annual Refuge Green Up Day.**

Meet at Louie's Landing parking lot/boat ramp off of Route 78 at 9 am. We will have bags, gloves, and safety vests for picking up trash along refuge roads and parking lots. We will be observing Covid-19 safety precautions including mandatory mask wearing and social distancing.



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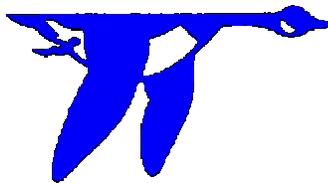
[www.friendsofmissisquoi.org](http://www.friendsofmissisquoi.org)

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Newsletter edited by Al Crist

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

## and even more Spring Activities!

### 2021 *Art at the Refuge* opening May 15th

The Friends of Missisquoi will again be hosting our annual art show, *Art at the Refuge*, beginning the weekend of World Migratory Bird Day (after sadly canceling it last year due to COVID).

We are excited that the art show is back this year, but we have modified it to allow for flexibility to keep everyone safe. The show will be presented as an online gallery so viewers will be able to enjoy the artwork even if the Refuge building is closed. As usual, our focus will be birds and their habitats, and will include birds that spend some time on the Refuge, including birds that breed, migrate through, or irrupt into the area.

In addition to being able to view each *Art at the Refuge* entry, information about each artist will be included, as well as noting which artworks are available for sale. To purchase artwork, on-line viewers should contact the artist directly. Contact information for artists will be posted.

**The show will open on Saturday, May 15th. To view the show, go to [www.friendsofmissisquoi.org/artshow](http://www.friendsofmissisquoi.org/artshow).**

### *Information for Artists*

Entry fee for the show is the price of a Friends membership (\$15), and there are no commissions on sales. See application for details, or email Carol Yarnell at [artshow@friendsofmissisquoi.org](mailto:artshow@friendsofmissisquoi.org) for more information.

Dates of show: May 15 through July 16, 2021

Applications will soon be available at:

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

**If and when new Refuge 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 [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 - February, 2021



As I write this update, winter is definitely here. With multiple snowstorms, and some really cold temperatures, we are firmly in the grip of a classic Vermont winter. For the refuge staff, wintertime is a time for reflection of the past field season and planning for the next one. While covid-19 hampered our ability to conduct many of the refuge's annual spring surveys, we are hopeful that these will be performed in 2021. Having endured nearly an entire year of living with the restrictions on safely conducting work, I believe that the 2021 field season will be less interrupted.

What I did not say was that the 2021 field season will be normal. Not by a long shot. Many projects will be accomplished, but will include the precautions we have been taking since last year to be sure our refuge staff and volunteers stay safe.

This coming year we hope to continue our work to inventory the refuge for pollinators, particularly native bees. As some may be aware, the Vermont Center for Ecostudies has developed a statewide native bee inventory which the refuge will participate in this field season. See:

[\(https://vtecostudies.org/blog/get-the-buzz-on-the-new-vermont-wild-bee-survey/\)](https://vtecostudies.org/blog/get-the-buzz-on-the-new-vermont-wild-bee-survey/)

Previous work on bumblebees in 2018 documented 12 different species using the refuge, including four rare species. One of these, the Fernald's Cuckoo, had not been

*by Ken Sturm, Refuge Manager, Missisquoi NWR*

found in Vermont since 1963!

We hope that inventories this year will further our knowledge of how refuge habitats, particularly managed grasslands support native bee species in our state. Ultimately this information will help the refuge develop comprehensive habitat management plans to support migratory birds and other rare species such as the pollinator community.



**Fernald's Cuckoo** - photo by Leif Richardson

In other news, the refuge grew by 14 acres this year! Two parcels on the southwest side of the Maquam Bog were acquired from willing sellers after several years of hard work. These properties will be included in this year's native bee inventory to help guide future habitat management decisions. While 14 acres may not sound like a large gain, it is always a cause to celebrate when any National Wildlife Refuge can protect more land for wildlife. It is also heartening to know there are landowners who are willing to work with the U.S. Fish and Wildlife Service and ensure their property is protected forever. We thank the families who worked with us to protect this new addition to the Missisquoi NWR!



## Vermont Lady Beetle Atlas

### Volunteer for the 2021 Season

Have you heard the news? Last summer the Vermont Center for Ecostudies launched the *Vermont Lady Beetle Atlas* and they're looking for volunteers for the 2021 season! Previous research has found 35 native lady beetles in Vermont. Unfortunately, 12 of these species have not been seen since the 1970's. The Missisquoi National Wildlife Refuge is hoping to have interested volunteers participate in a refuge inventory of lady beetles this summer.

The atlas has identified "priority survey blocks" throughout the state, one of which includes the Black and Maquam Trail. However, coordinators for the survey encourage casual visitors to the refuge or dedicated lady beetle survey volunteers, to document lady beetles on all the refuge trails. To find out more about how to get involved see this website : <https://val.vtecostudies.org/projects/lady-beetle-atlas/participate/>

A virtual training for survey participants will take place on **March 19, 2021, from 6-7 p.m.** Anyone wishing to take the training should email refuge biologist, Judy Sefchick ([judy\\_sefchick@fws.gov](mailto:judy_sefchick@fws.gov)), **by 3 p.m. on March 18, 2021.** By participating in this important inventory, we not only help provide information on the current status of lady beetles in the state, but also document species on the Missisquoi National Wildlife Refuge. Who knows, maybe you will be the one to discover one of the 12 missing species on the refuge!



A sampling of the Lady Beetle species recorded so far in the *Vermont Lady Beetle Atlas*  
L to R: Three-banded Lady Beetle, Spotted Lady Beetle, Fourteen-spotted Lady Beetle,  
Four-spotted Spurleg Lady Beetle, Seven-spotted Lady Beetle, Twice-stabbed Lady  
Beetle, Eye-spotted Lady Beetle.

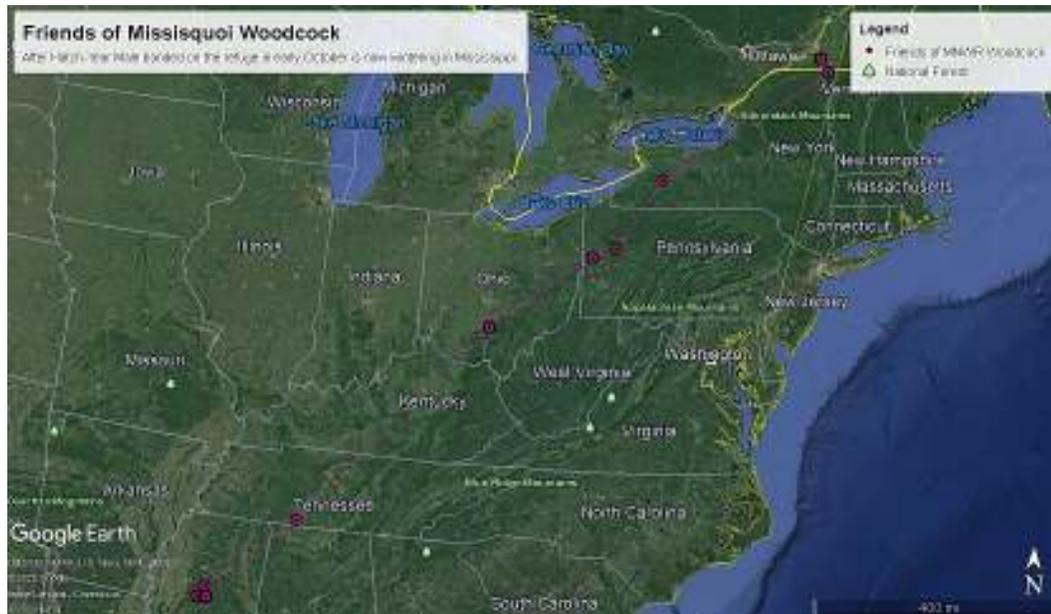
# American Woodcock Migration Project

by Ken Sturm, Refuge Manager, Missisquoi NWR

In the last newsletter, I introduced a project led by the University of Maine, and with its many partners, to understand how the conditions American woodcock experience during migration influence their population. As you may recall, the Friends of Missisquoi NWR purchased one of the GPS collars in order to participate in the collection of valuable migration data. The Friend's bird, an after-hatch year male woodcock, has completed a long flight and is now resting in Mississippi! It took our refuge bird three months to

make the trip, making stops in Quebec, New York, Pennsylvania, Ohio and Tennessee before stopping in Mississippi.

Woodcock have been monitored for years through traditional banding efforts; however, this project uses GPS technology in a "backpack" which is placed on the bird. The GPS unit can then deliver accurate point location information to researchers as



the bird migrates from Vermont to its southern wintering grounds. This type of device can allow biologists to evaluate where and for how long woodcock stop along the way to rest and feed, providing valuable habitat information. For example, the Friend's woodcock spent four days in Ohio and by zooming into the points taken, we can see it was using open fields to rest and feed before making the big jump across Kentucky to southern Tennessee:

Understanding limitations of habitat during migration, as well as areas where these birds focus on, can encourage targeted conservation and management efforts on the ground. Hopefully this information will ensure woodcock have the resources they need to successfully move from their breeding grounds to their southern wintering habitats. Thanks to the Friends for supporting this important research project!



# Understanding Trail Use at Missisquoi NWR

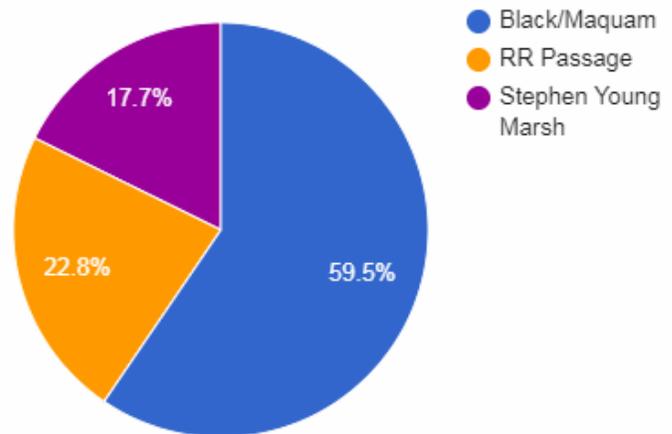
by Ken Sturm, Refuge Manager, Missisquoi NWR

For those intrepid trail users of the refuge this winter, you may have noticed three new boxes located on the Stephen Young, Black/Maquam, and Railroad Passage trails. These little boxes are the refuge's new trail counters. Public use information is hard to estimate, and the refuge system is required to report public use data back to our headquarters in Washington annually. Trail counters are nothing new and Missisquoi has had a few set up on some trails for years.

However, these three new counters are more sophisticated and provide a variety of analysis to the information being collected. Understanding what trails are the most used, the times and days of the week that use is occurring, and annual trends in use can help the refuge maintain trails better and provide outreach and education during the most effective times. This information can also be used as documentation for grants and other resource requests.

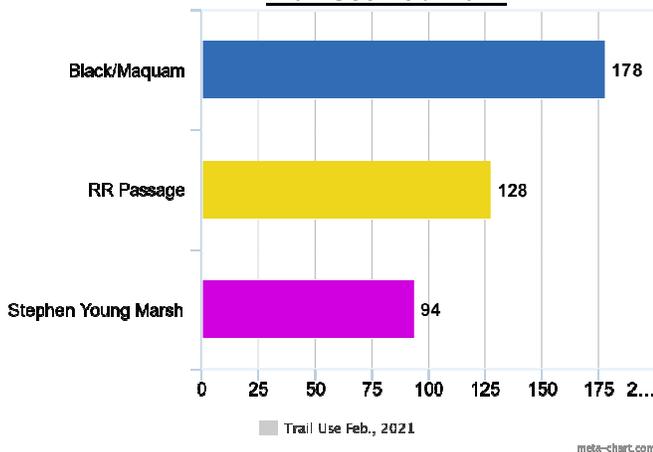
One way to view the information is by comparing all trail activity for the three trails in one chart. Although it is no surprise to see the Black/Maquam trail as the heaviest used trail, we can now quantify by how much.

Distribution of Trail Use

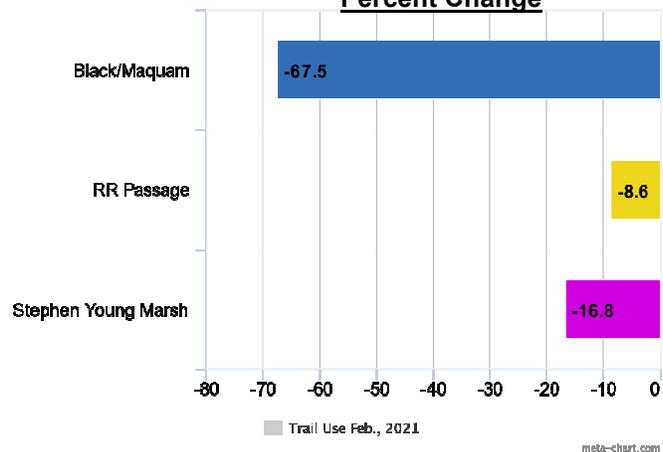


In addition, we can view how use has changed over time. For all three trails, we can see that the use has declined over the last few months, which is expected during the cold and snowy months. Interestingly the trail that gets the most use also showed the greatest decline in use since January.

Trail Use Feb. 2021



Percent Change



These counters have only been in place for a few months so the amount of information we have is limited. As we continue to collect information, the comparisons between trails, and on any specific trail, will provide much more interesting data. This will be helpful over the years to understand and communicate public use information at Missisquoi NWR.



## **Bird Tales a Huge Success!**

The global pandemic was not enough to stop the 5<sup>th</sup> Annual Evening of Bird Tales. The event moved to a Zoom platform and took place on Thursday evening, February 11<sup>th</sup>. Well over 100 attendees came together from throughout the state and beyond to enjoy presentations from a variety of bird enthusiasts. The benefits of holding this year's event in this way was the ability to draw both an audience and presenters from outside of our little corner of Vermont, and we were able to showcase

the Missisquoi NWR to some who have never had the chance to visit. This year's Bird Tales was themed, and each of the five presenters gave their own version of birding over the last year, in the midst of a pandemic. There was poetry, prose, education, and many personal heartfelt stories. If you missed this popular event, you can now view it in its entirety by visiting

<http://friendsofmissisquoi.org/birdtales/>

Also, visit <https://www.facebook.com/friendsofmissisquoi> to learn more about the refuge and coming events. You can also look at, comment on, and share your own photos.

You do not need to have a Facebook account to view the page. Please stop by and let us know what you think!



# **Chronolog Installed at Stephen J. Young Marsh Overlook**

## **Time-lapse Photos Powered by Citizen Science**

Chronolog Citizen Science will engage visitors in the documentation of gradual natural changes at the Stephen J. Young Marsh at Missisquoi NWR, as viewed from the observation platform. This site features a managed wetland and early successional (young forest) habitat. Over time, it will provide refuge staff and the public with photographic evidence of environmental change at this location. Using a cell phone, refuge visitors capture an image of the surrounding environment and e-mail that image to Chronolog. Chronolog will then stitch together each image to create a timeline showing environmental change over time.

Chronolog crowdsources time-lapse photos from around the country to tell stories about unique environments. This technology is easy to use and all you need is your cell phone. By partnering with Chronolog the refuge can now share with the world the refuge's changes in aquatic vegetation, muskrat and beaver activity, invasive species abundance, habitat management and much more!



**Instruction sign and cell phone bracket**



**First Chronolog picture taken at the marsh.**

To learn more about Chronolog, visit their website at <https://www.chronolog.io/about>. To view the current time-lapse from the platform at Stephen J. Young Marsh go to <https://www.chronolog.io/site/MIS101>

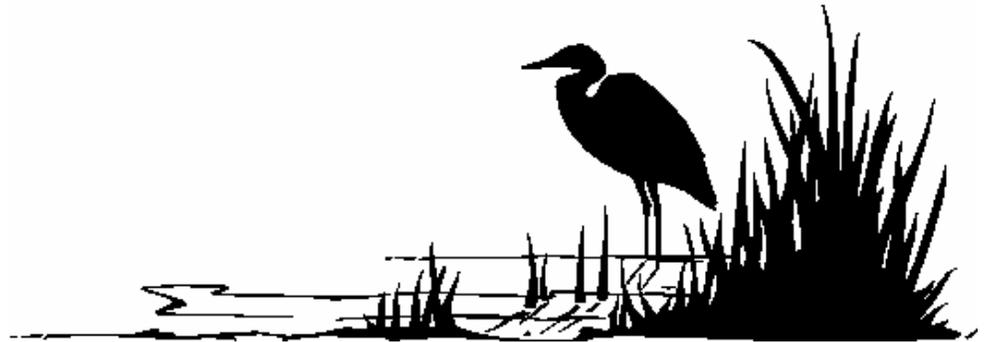
FRIENDS OF MISSISQUOI NATIONAL WILDLIFE REFUGE

BI-MONTHLY BOARD MEETING

Wednesday, May 12th, 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 July 14th 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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Date: \_\_\_\_\_ (membership begins the month you join)

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