



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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(802) 868-4781 ext 121

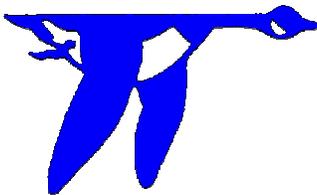
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Newsletter edited by Ken Copenhaver

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MNWR HQ hours are
Monday thru Friday
8:00am – 4:30pm
Saturdays
10:00 am – 2:00 pm

Field Notes

By Mark Batchelder, Friends board member

With the winter season in full swing it seems like a good time to explore some of the exciting possibilities that this season presents. A sure and certain cure for Cabin Fever has always been a liberal dose of fresh air and exercise, both of which can be enjoyed in abundance on the Refuge trails. One of the most enjoyable aspects of the season is the ability to observe and identify wildlife tracks in the snow. A wonderful quote from Naturalist Ernest Thompson Seton captures the essence of these signs:

"Never forget the trail, look ever for the track in the snow; it is the priceless, unimpeachable record of the creature's life and thought, in the oldest writing known on earth."

Reading signs of wildlife can be practiced in any season but is certainly much more observable and recordable when the snow is on the ground. I often take photos of tracks I encounter, to be studied and identified at a later date in the comfort of my home utilizing the wealth of resources now available to everyone from many sources.

Along with verifying which animal has left the tracks or other signs, a great deal of other information about the species is sure to be available that will build on your knowledge and increase your awareness of how everything is connected in this fascinating world of nature. In addition to the usual suspects of mammals that are leaving their calling cards in the snow, also be on the lookout for the predators of the air—owls and hawks—who when swooping down on their prey often leave body or wing prints in the snow depicting the ancient life and death struggle to survive in this cold and meager season.

One great way to enjoy this activity is to attend one of the monthly walks sponsored by the Friends of Missisquoi NWR where you can share your discoveries with expert naturalists who are devoted to sharing their knowledge and experience. I hope to see you (or your tracks) out there soon, reading another chapter of nature's ongoing story.

FRIENDS OF MISSISQUOI NATIONAL WILDLIFE REFUGE

Bi-monthly Board Meeting

Wednesday, March 13, 2013 at 6:30 pm

At the Refuge Headquarters

Members are always welcome to attend.

Come and see what the board is planning and contribute your ideas.

Next meeting: May 8, 2013 at 6:30 pm

Manager's Musings: Thoughts on Missisquoi's 70th Birthday

by Ken Sturm, Refuge Manager, Missisquoi NWR

It was 70 years ago when the Missisquoi National Wildlife Refuge (NWR) officially joined the growing yet fledgling National Wildlife Refuge System in the United States. Missisquoi NWR came into the refuge system in 1943 along with other refuges in that year including Chincoteague NWR and Santa Ana NWR. In fact, it was only a few years earlier, in 1940, when these lands gained the name "refuge" under Executive Order 2416, which also included some of the earliest guidelines on how these lands would be managed differently from other public lands. Under this Executive Order, the existing 193 "reservations" officially become "refuges" where it was "unlawful to hunt, trap, capture, willfully disturb, or kill any bird or wild animal ... or to enter thereon for any purpose, except as permitted by law or by rules and regulations of the Secretary of the Interior." Also in 1940 the Bureaus of Biological Survey and Fisheries were combined to create the U.S. Fish and Wildlife Service.

These changes set the stage for the growth and management of the refuge system and of the Missisquoi NWR. Although the official establishment of our refuge is listed as 1943, land was acquired and staffed on the Missisquoi Delta in 1941. Jay S. Gashwiler was on site in the fall of 1941 and issued the refuge's first quarterly narrative. Mr. Gashwiler listed his title as "Junior Biologist" in his reports and was stationed at Missisquoi until 1943 when Ellis D. Traux ("laborer-patrolman") replaced him on site. Perhaps his title was in response to the formal designation of the refuge at



Aerial view of Missisquoi River Delta. Credit: USFWS

that time and allowed for formal law enforcement and patrols. During this time the land owned by the refuge consisted of the "island" portion of the Missisquoi Delta, essentially from Cranberry Creek north to Shad Island, or approximately 1,582 acres.

Work on the refuge in the early 40's revolved around patrolling the refuge land, documenting presence of wildlife, primarily waterfowl and water birds, and conducting some maintenance projects. Goose Bay Pool was the best waterfowl habitat on the refuge, and Gashwiler and Traux both noted several thousand ducks using this wetland habitat during their tenures. This was of course before the development of Cranberry Pool, the refuge's 500-acre wetland impoundment, which now enhances our ability to provide resting, nesting and feeding habitat for waterfowl.

Time was devoted to establishing trails on the island mainly to allow movement to various areas of the refuge by employees, surveying waterfowl and water

birds, making water level measurements, and patrolling during hunting season. Early wildlife habitat management efforts are noted in these reports as well, including creating and enlarging existing cavities in hollow trees for Wood Ducks, Hooded Mergansers, and Common Goldeneyes; planting trees; and seeding a field of rye for the winter, then grass and clover in hopes of creating a good summer hay crop.

Considerable effort was also made to establish a camp for field activities on the refuge. The camp was located on a high ridge between Big Marsh Slough and Goose Bay. It was described as a “shed-style portable camp” rescued from the former Swanton Fish Hatchery (now long gone) and moved out to the refuge in 1942. By the end of 1943 the camp was complete with two beds, a cupboard, wash stand, table, porch and a wood storage area. Presumably Mr. Gashwiler and Mr. Traux often stayed on site when posting boundaries, counting ducks and other water birds, or doing other routine maintenance and management of the refuge.

Many interesting comparisons from the early wildlife observations and weather conditions can be made to those now, 70 years later. For example in 1942 the first attempts at banding waterfowl were made on the refuge using handmade box traps (from lumber purchased from the Swanton Lumber Co.). Mr. Gashwiler reports the following banding information in his September-December 1942 report:

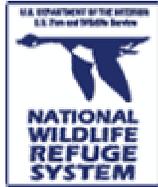
Species	Number Banded	Number Handled
Black Ducks (Common)	80	137
Black Ducks (Red-leg)	24	31
Wood Ducks	63	94
Mallards	2	3
TOTALS	169	265

The first thing to jump out at the reader from this report is the distinction between “Common” and “Red-leg” Black Ducks. Prior to 1943 it was assumed that there were two subspecies of Black Ducks based upon leg color and a scan of journal publications of the early 1900s shows that there was considerable discussion over the merits of a subspecies designation. These claims were finally laid to rest in 1943 when it was decided that the leg color was an artifact of age and season rather than unique genetics. However, it was apparently widely accepted so that Mr. Gashwiler made special note of the separate banding numbers on Missisquoi in the fall of 1942.

The second thing to jump out at the reader from this banding report should be the relative number of Black Ducks compared to the other species banded or handled. In Mr. Gashwiler’s trapping efforts, 63% of all ducks were Black Ducks and only 1% were Mallards. Last year the refuge banded a total of 765 ducks of which only 1% were Black Ducks while 70% were Wood Ducks and 29 % Mallards. Data like this is represented across the flyway where Black Duck populations have declined over 60% since the 1950s.

Many comparisons could be made between those early years and what the refuge is now. Some of the same challenges of managing the refuge in the early 1940s are still with us, although new pressures such as invasive species and water quality have become additional management concerns. What remains the same is the central purpose of establishing this refuge: To provide a sanctuary for migratory waterfowl. And this purpose becomes more important as wetland habitats shrink or are degraded over the decades.

Please join with the refuge staff in celebrating Missisquoi NWR’s 70th birthday and plan to visit throughout the year to experience the wildlife and plant community changes which are land marks for each passing year.



Spring Activities Schedule at Missisquoi National Wildlife Refuge

29 Tabor Rd.
Swanton, VT 05488

All programs and tours are free, but registration is required where noted.

"12,000 Years on the Missisquoi"

Fridays, 6:30-9:00 pm

Dr. Fred Wiseman will be presenting a series of programs at the refuge Visitors Center titled "**12,000 Years on the Missisquoi**" throughout Spring 2013 and continuing again in the fall. This series is designed for aspiring ecological history buffs of all ages and deals with ancient and modern Native American ecology on the Missisquoi River and its environs. All programs will be held on Fridays in the large classroom at the refuge Visitor Center and are free to the public. **All ages are welcome and encouraged to attend!!**

February 22: "How to Serve Mammoth: Ice Age Hunting on Land and the Champlain Sea"

is a Native American audio/visual program and discussion, featuring the DVD "Before the Lake Was Champlain." Dr. Wiseman will demonstrate a repeating lance and Atlatl (hunting tools) and display artifacts such as Paleo-Indian points, scrapers, and drills. Other fossil items and displays will also be exhibited.

March 8: "Let's Eat Everything I: Ancient Hunting and Fishing"

describes the early Native American community "settling in" to the Missisquoi Valley and features Archaic period hunting strategies, such as killing ducks with a pumpkin and rabbits with a stick! Stone tools, arrowheads, bolas, spears, and harpoons will be displayed and demonstrated.

April 12 "Let's Eat Everything II: Ancient Forest Management"

introduces the idea of Agroforestry, the precursor to the sugarbush, and the discovery of a variety of plant uses for food, medicine, and industry. Period artifacts will be displayed and demonstrations incorporated into the presentation.

This series will be continued in the Fall – schedule to be announced.

Maquam Bog Walk

Saturday February 23, 9:00 to 11:00 am

Join Missisquoi NWR Volunteer, Greg Simard, for an educational nature walk into the Maquam Bog. Get out and take a winter walk on a portion of the refuge that is unique and not well traveled. Bring your camera and binoculars and join Greg for an enjoyable few hours in the great outdoors in the mid-winter season. Greg offers a great foundation of knowledge regarding the formation and functions of the bog in all seasons and is also familiar with the plants and wildlife likely to be seen while in the bog community.

Meet at the Tabor Road parking area on Tabor Road, approximately 1 mile past the refuge Visitor Center. **Please call 802-868-4781 to register and to receive updates on the status of the walk.**

Owl Prowl 1

Saturday February 23, 6:00 to 9:00 pm

Join Jeremy Brooks on an owl prowling at the **Black/Maquam Creek Trail**. We will watch and listen for some of the resident birds "who" "who" operate during the night shift. Meet at the parking area located approx. 2-1/2 miles west of Swanton on Rte. 78. Look for the large Refuge sign at the parking area.

Bring along a low intensity flashlight. **Please call 802-868-4781 to register for this activity.**

Owl Prowl 2**Saturday March 23, 7:00 to 10:00 pm**

Join Jeremy Brooks for a second owl prowling at the **Stephen Young Marsh Trail** where we will seek out and listen to the vocalizations of resident owls. Meet at 6:00 PM at the parking area on Tabor Rd, about a mile past the refuge Visitor Center and across from Stephen Young Marsh.

Bring along a low intensity flashlight. **Please call 802-868-4781 to register for this activity.**

Vernal Pool Walk**Saturday April 6, 6:00 to 8:00 pm**

Join Park Ranger, Dave Frisque, for a look at the life and activity in a vernal pool early in the spring. Vernal pools are important breeding areas for some of the more reclusive and seldom seen amphibians such as wood frogs and salamanders. Because these temporary wetlands often dry up completely by late summer or early fall, egg laying and early development of juveniles must begin early in the spring.

The walk will take place at the **Stephen Young Marsh Trail** area. Meet at 6:00 PM at the Parking Lot across from Stephen Young Marsh on Tabor Rd, about one mile past the refuge Visitor Center. Bring along a small flashlight and waterproof footwear. **Please call 802-868-4781 to register for this activity.**

Woodcock Walk 1**Friday April 19, 6:30 to 8:30 PM**

Join refuge volunteer, Greg Simard, for a woodcock walk at the **Stephen Young Marsh** area. Woodcock have a unique courtship display that incorporates an aerial display and a ground level calling display that occurs just before and after sunset. Join Greg for an enjoyable early evening walk to witness this unique springtime activity.

Participants will meet at the Parking Lot across from Stephen Young Marsh on Tabor Rd, about 1 mile past the refuge Visitor Center. **Please call 802-868-4781 to register for this activity.**

Green Up Day**Friday May 3, 9:00 AM to Noon**

Looking for volunteers to help "green up" the refuge! We will concentrate our efforts on river cleanup activities using refuge boats. The refuge will monitor river levels and flow rates. Excessive water levels or flow rates which may constitute a danger to volunteers or staff or make boat maneuverability difficult will result in postponement or cancellation of this activity.

All participants should meet at Louie's Landing parking lot on RT. 78. **Please register for this activity at 802-868-4781.**

Woodcock Walk 2**Friday May 3, 6:30 to 8:30 PM**

Join Park Ranger, Dave Frisque, for a woodcock walk at the Stephen Young Marsh area. (See description above.) Participants will meet at the Parking Lot across from Stephen Young Marsh on Tabor Rd, about 1 mile past the refuge Visitor Center. **Please call 802-868-4781 to register for this activity.**

International Migratory Bird Day & Open House**Saturday May 18, 7:30 AM to 2:00 PM**

The Refuge will celebrate the 21st annual International Migratory Bird Day (IMBD) on Saturday May 18, 2013. The theme for the 2013 IMBD program is "Life Cycle of Migratory Birds: Conservation Across the Americas." The theme strives to highlight the connectivity between North and South America, providing nesting and rearing habitat in the North and wintering/pairing habitats in the South, both essential to the annual life cycle for hundreds of migrant species.

Activities will begin at 7:30 AM with an orientation at the refuge headquarters, after which small teams will disperse via the refuge trails on foot and via waterways by boats. Each team will have an experienced birder as leader. We will record all species and as many individuals within those species as we can find.

Survey teams will return to the headquarters building by 11:30 AM to tally their results and have a light lunch. At 1:00 PM we will have a speaker (to be announced) with a natural resource presentation on a topic relevant to the IMBD celebration.

Please call 802-868-4781 to register for the morning activities.

Kids Fishing Derby

Saturday June 22, 8:00 AM to 2:00 PM

The annual **Kids Fishing Derby** is scheduled for Saturday, June 22, 2013. This activity begins at 8:00 AM and will end in the early afternoon, usually 1:00-2:00 PM. More information will be available as we get closer to the date.

Please register for this popular educational and recreational event at 802-868-4781.

Monthly Nature/Photography Walks

1st Saturday of each month, 9:00 am to 11:00 am

Join Friends of Missisquoi NWR board member Joe Belanger for nature walks on various refuge trails, held the first Saturday of each month. Registration is not required. The schedule for the next three months is:

March 2: Jeep Trail. Meet at the Louie's Landing boat access area. We will drive in to the trail head at Mac's Bend.

April 6: Maquam/Black Creek Trail. Meet at the parking lot located on Rte 78 approx. 2 ½ miles west of Swanton.

May 4: Old Railroad Passage Trail. Meet at the parking lot on Tabor Rd, about a mile past the refuge headquarters and across the road from the Stephen Young Marsh.

Monthly Bird Monitoring Walks

3rd Saturday of each month, 8:00 am to 10:00 am

Friends board members Bridget Butler and Ken Copenhaver lead bird monitoring walks year-round on various refuge trails on the third Saturday of each month. The purpose of the walks is to gather long-term data on the presence of birds, their abundance, and changes in populations. Observations will be entered into the Vermont eBird database where data is stored by the Cornell Lab of Ornithology and the National Audubon Society. These walks are appropriate for all levels of birders and provide a wonderful opportunity to learn about birds throughout the seasons. Registration is not required. **After 35 months of walks we have recorded 123 species of birds.** The schedule for the next three months is:

March 16: Old Railroad Passage Trail. Meet at the parking lot on Tabor Rd, about a mile past the refuge headquarters and across the road from the Stephen Young Marsh.

April 20: Maquam/Black Creek Trail. Meet at the parking lot located on Rte 78 approx. 2 ½ miles west of Swanton.

May 18: Stephen Young Marsh Trail. Meet at the parking lot on Tabor Rd, about a mile past the refuge headquarters and across the road from the marsh. Note that this walk will be part of the International Migratory Bird Day activities.

To check for any schedule changes or additions, visit the Friends website at www.friendsofmissisquoi.org and click on the "Calendar."

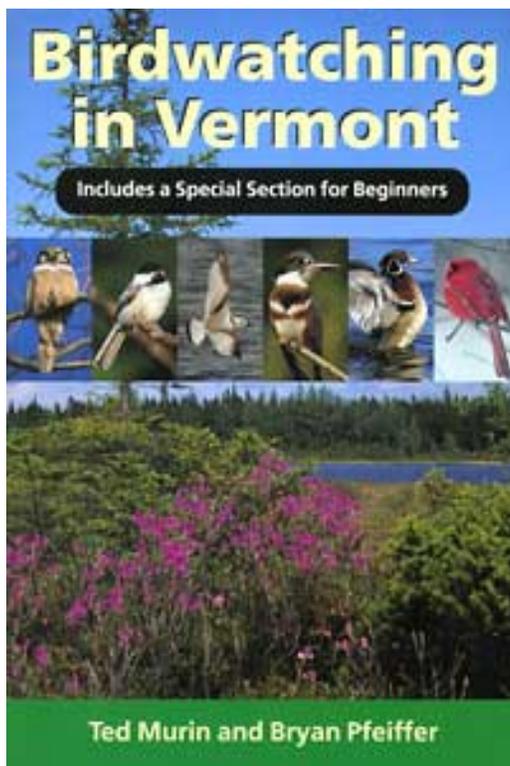
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