

# THE WOODLAND OBSERVER

## JANUARY 2017

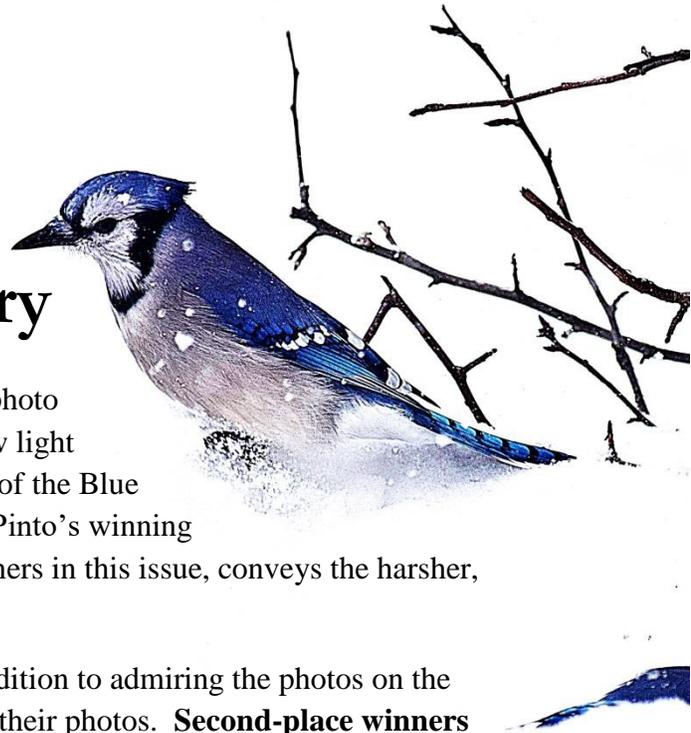


NIPISSING NATURALISTS CLUB

From the editor:

## Every picture tells a story

The blue white of a winter's day is reflected in the cover photo I took of a Blue Jay. There are varying degrees of this low light with which we have come to associate winter. The photo of the Blue Jay conveys the softer light of a winter's day, while Fred Pinto's winning landscape photo, featured along with other first place winners in this issue, conveys the harsher, colder light of a winter's day.



All the award-winning photos convey something, so in addition to admiring the photos on the next three pages, read what the winners have to say about their photos. **Second-place winners will be featured in February's newsletter.**

The Blue Jay on the cover also ties in with two, perhaps three, articles on birds: Kristen Gritanni's follow-up on her Capstone Project; Nicole Richardson's sighting of the Crested Caracara; and Rachel Sturge's attendance at Paul Smylie's class on how to prepare study skins.

But lest you think birds comprise the whole of this newsletter, featured also are: Part 1 of Rachel Geavreau's article on bats based on her presentation at the Nipissing Naturalists Club meeting in December; an article by Jordan MacMillan on how tree markers protect biodiversity – this was the last guided walk of 2016 in Laurier Woods; and Brent Turcotte's article on a very fun-filled outing examining lichens and moss.

This year marks Canada's sesquicentennial. It has been 50 years since 1967 when we joyously celebrated our 100<sup>th</sup> year. Pierre Berton called it Canada's last good year in his book entitled, *1967: The Last Good Year*, although changed to *1967: Canada's Turning Point* in the paperback edition. I don't know whether either is true, but I do know that for me 1967 was one terrific year, maybe because optimism abounded culminating in Expo 67. I have quite a collection of Expo and centennial memorabilia packed away in a box. I may take it out at some point during our sesquicentennial.

Finally, don't forget to attend the Annual General Meeting on January 10 at the North Bay-Mattawa Conservation Authority building. It is always a pleasant evening and you never know what you might come away with, perhaps a spotting scope!

Happy New Year to all members and remember **your photos and articles are always welcome**, so be sure to send them to me at [rlevesque1948@gmail.com](mailto:rlevesque1948@gmail.com).

*Renee Levesque, editor*



## Drum roll, please: Photo contest winners

They entered and you voted and here are the first-place winners in each of the four categories:



**Flora:** **Kaye Edmonds** for her photo of the milkweed plant with its seedpod bursting forth. For Kaye the milkweed “makes for fascinating photos” in all its stages – its showy flowers, its wonderful pods and the Monarch butterfly’s need of this plant to survive – its caterpillar to eat and the butterfly to lay its eggs. This autumnal beauty was taken near Widdifield Station Road with a Canon EOS Rebel SL1.

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**Landscape:** **Fred Pinto** for his photo of the frost-covered trees taken from the top of North Bay's landfill site with a point and shoot Canon SX20 in auto mode. "The day was very cold, the frost had frozen on the trees and the light was muted with low grey clouds". The frost-covered trees in black, blue and white convey both the majesty and the cold of a winter's day.



**Fauna:** A tie between **Kaye Edmonds and Rob Rodger**, Kaye for her photo of a dragonfly and Rob for his photo of a Red-tailed Hawk, both seen on the next page.



Kaye took the photo of the dragonfly in late September in Laurier Woods with a Sony 12x Optical Stabilization Zoom. She had to assume an aerobic position to get the photo and felt fortunate to get it at all before the dragonfly took flight. The brown-beige tones of both the dragonfly and the foliage reflect the season and make this a wonderful photo.



Rob photographed the Red-tailed Hawk with a Canon 7D camera using a Canon 300mm f/4 IS lens. One sunny Saturday morning, Rob took his puppy to the off-leash dog park by Champlain Park and brought along his camera and telephoto lens just in case a good opportunity for a photo presented itself. And good job he did, because on the way back to his jeep after the puppy had her run, he noticed the Red-tailed Hawk perched in a nearby tree. It seemed content to sit there while Rob took dozens of pictures of it, including his winning photo.

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**People Enjoying Nature:** Kaye Edmonds for setting up the photo of some Nipissing Naturalists Club members who were on a lichen walk one Sunday morning in October with Brent Turcotte. It's very obvious from this photo that the participants are having an enjoyable and playful time. Kaye again used her Sony camera with its 12x Optical Stabilization Zoom.



Winning photos can also be seen on our website, <https://www.nipnats.com/>.



# It All Started With a Bat House, Part 1

*By Rebecca Geauvreau, Biologist, FRi Ecological Services*

It all started with a bat house...or was it a house with bats? Either way, an interest in Ontario's only mammal capable of true flight is what sent a group of Nipissing Naturalists on a batty adventure during the summer of 2016.

## **The Beginning**

In the beginning, during the summers of 2014 and 2015, Club members conducted exit counts at the largest known Little Brown Myotis maternity roost in Ontario - in the attic of a private residence near Lake Nipissing. Members gathered outside the home for two nights in June and July, waiting for dusk to fall and the bats to emerge. The June count is important because bats exiting the roost are adult females, specifically bats with pups. These moms are feeding very hungry baby bats and must eat and drink enough to nourish themselves as well as their growing pups. In June, pups are not yet able to fly, so every bat that leaves the roost is an adult and is counted.

It is quite exciting to wait for the first bats to exit. The mosquitoes are usually loud and annoying, making it difficult to stay still to listen and watch for that unfamiliar erratic flutter of a winged mammal. It has been my experience that the exits are announced by quiet but audible chirping. The chirps are like a songbird's alarm call, but are apparently coming from pups which have been left by their mothers. Shortly following the chirps, one, then two, then two more bats appear! Club members let out little cheers and the excitement is palpable, but then we quickly resume our serious task of counting each bat as it exits the attic.

Our acoustic equipment confirms they are Little Brown Bats. In addition to visually counting the bats, we also use an iPad with a special microphone and software to record bat calls. The iPad screen in the photo at right shows the volume (loudness) and sound frequency (wave length) of the calls.

The departure in fits and starts from the roost lasts about an hour, with Club members doing their best to keep track of each bat they see. When it seems as if all the adults have exited, individual bat counts are tallied and averaged for an estimate number of adults. The consensus in June 2015 was 187 bats.



*Photo by Fred Pinto*

The July count is much the same as the June count, with one very exciting difference. In July, pups can fly and, just like their mothers, exit the roost each night, honing their skills as insect hunters. There is no chirping this time, maybe because the once-baby bats are teenagers now – too cool to whine? Regardless, club members ready themselves and wait patiently as darkness descends and the cicadas cease singing.

All at once the exodus begins, and as quickly as it starts, it is over! This round of counting is more difficult because there are simply more bats to count. Nor do the bats cooperate. They sometimes swarm around the exits making it tricky to decide if they have already been counted. As it gets darker, the contrast with a near-dark sky and a dark-bodied bat gets less and less and we have to rely on light from a single lamppost to see. The tally is averaged in much the same way it was in June - club members discuss, add, subtract, err on the side of caution and agree on 295 bats. The greater number of bats this time confirms successful reproduction in this maternity colony. The results will be passed on to researchers at the Ministry of Natural Resources and Forestry's (MNRF) wildlife section.

Club members exchange goodnights and head back to their vehicles to make their way home for some much-needed rest. It is a gratifying feeling knowing you have further helped in the understanding of a fellow creature's habits and in keeping track of its well-being. However, this feeling is quickly erased by thoughts and doubts about the long-term survival of these apparently healthy reproducing Little Brown Bats. So they reproduce and have returned to

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the same maternity roost for a couple of years, but where do they go in the winter? What about White-Nose Syndrome?

## White Nose Syndrome

White Nose Syndrome is a disease caused by the fungus *Pseudogymnoascus destructans* or Pd. It is killing hibernating cave bats at an alarming rate – some wintering sites (hibernacula) have experienced losses of 100%. The fungus is not native to North America and thrives in above-freezing cool temperatures and high humidity. Cool, above-freezing temperatures with high humidity describe excellent conditions for winter roosts for four of Ontario's bats: Little Brown, Northern Myotis, Eastern Small-footed Myotis and Tricolored.



Photo courtesy of U.S. Fish and Wildlife Service

Bats are long-lived and have very low reproductive rates, typically one pup per year for those species most impacted by white nose syndrome. This long-lived life history makes bats especially susceptible to diseases, like white-nose, which are so quick to infect and kill. Some scientists believe there will be localized extinctions of many bat species because of the speed and severity with which white nose has impacted bat populations.

The fungus itself does not kill bats. It is a combination of coincident timing and long, cold winters that make it lethal. The fungus thrives in conditions found in hibernacula when bats are using them, usually from September through to April for most species. In the absence of the fungus, bats will roost all winter, waking once every six to eight weeks to defecate and get a drink. Following the brief waking, bats resume roosting for another couple of months before waking again. This period of very low activity, which can be six or seven months depending on the location of the hibernacula, allows bats to subsist the entire winter without eating.

Bats are very clean mammals. They regularly groom their fur and clean themselves often during the active season. White nose syndrome causes a visible skin infection with mycelia (fungal threads) growing on the muzzles, wings and ears of bats. The fungus interferes with water balance and the bat's ability to thermoregulate. This in turn causes bats to wake from torpor (low-energy state) and engage in cleaning and other behaviour which uses critical fat reserves. Sometimes infected bats are observed flying in mid-winter, presumably searching for insects.

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Each waking uses up precious fat stores and bats infected with Pd usually succumb to death by dehydration, starvation or hypothermia.

There is hope. Have a look at the ground-breaking work by Georgia State University's Crow Lab. Visit <http://sites.gsu.edu/crowlab/> for lots of excellent information about bats and current research, including the latest on bananas and white nose syndrome. And if you do nothing else, check out the *Help Save Bats* video produced by Open Shade Media and The Nature Conservancy.

## North American Bat Monitoring Program

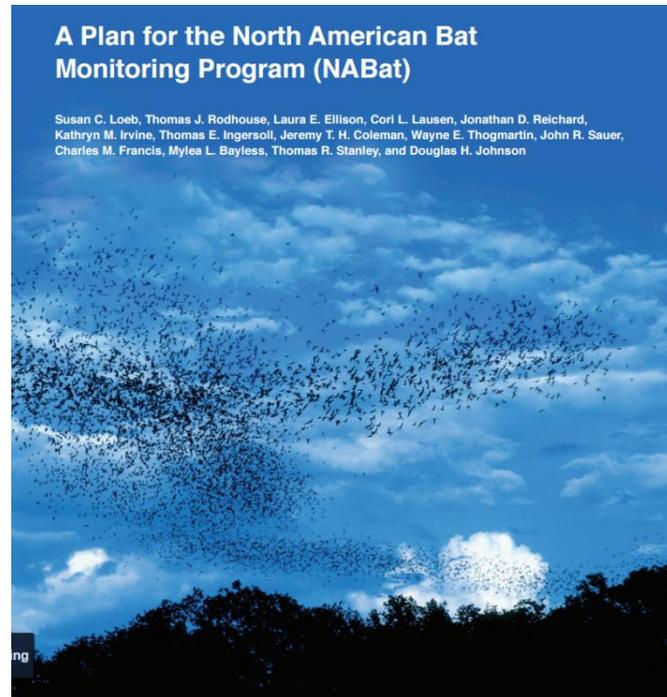
Coincident with the Club's 2015 monitoring of the Little Brown maternity roost, researchers published a proposed monitoring program titled *A Plan for the North American Bat Monitoring Program* or NABat, a continent-wide program to monitor bats by collecting and providing reliable data at local and range-wide scales to promote effective conservation decision-making and ultimately the long-term viability of bat populations.

This international program uses four approaches to gather data: winter hibernaculum counts; maternity colony counts; mobile acoustic surveys; and stationary acoustic surveys. The entire continent is divided into 10 by 10 km survey squares, which are then further divided into four smaller squares or quadrants. The idea is to deploy a stationary acoustic recorder in each of the four smaller squares and, at the same time, conduct two night-time driving transects (mobile acoustic surveys) through the same four squares.

All monitoring takes place in June because the pups are not flying yet and any data collected can be compared to other years and locations. Over time, biologists and researchers will have a reliable relative index of abundance for all eight species in Ontario and will be able to understand changes at the local and larger scales.

In October 2015, Club members, with the support of the Board of Directors, applied for a grant to conduct a bat monitoring project for the summer of 2016. Encouraged by an apparently healthy group of 288 plus Little Brown Bats, the Club put together an application for the Ontario Species at Risk Stewardship Fund (SARSF) to establish and monitor a bat square in the McConnell Lake area. Also included in the submission was a smaller project to continue exit counts at the known Little Brown maternity roost and obtain acoustic recordings for submission to the MNRF.

**Editor's Note:** Next month Part 2 of this article continues with the Club's bat-monitoring project in June 2016.



Courtesy of U.S. Forestry Service

# Crested Caracara in the northwest

*Text and photo by Nicole Richardson*

*Editor's Note: The Crested Caracara is a tropical falcon of South and Central America, Mexico and Cuba. It just reaches the southernmost parts of the U.S.- Florida, Texas and Arizona - so to have one reported near Wawa in northwestern Ontario is quite something. This is a story of one dedicated birder.*

I saw the report of the Crested Caracara on Ontbirds on Tuesday, November 29, while I was on my way north from Brantford to New Liskeard. It had been spotted earlier in the small town of Michipocoten near Wawa. Because I simply could not resist seeing this bird, instead of returning home to Brantford on Saturday, December 3 as I had planned, I hopped into my car on Thursday, December 1, and drove west and got into Wawa late that night after a seven-hour drive!

I slept in my car when I arrived in Wawa and first thing the next morning, I headed over to Michipocoten. When I arrived, there were a few other birders driving about in search of the bird. After less than five minutes of driving around, the Crested Caracara actually flew out in front of my car and perched itself nicely in a tall spruce right beside me! I got my binoculars on it, smiled, teared up a little, and then watched and photographed it for ten minutes while other birders gathered around me to do the same.

When the bird flew out of sight, I leisurely wandered back into Wawa for a much-needed coffee, and as I was heading south again past Michipocoten, I decided to stop in because I had heard the bird was being viewed again. Sure enough, it was right out in the open in the marina where I observed it very very well for 20 minutes! Before heading south and home, I got some great photos and chatted with some lovely people who had also come to see the bird. I spent the rest of the day driving the thousand kilometres home! Seeing a Crested Caracara was definitely worth the trip.

*Nicole, a former board member of Nipissing Naturalists Club, will be writing an article for February's issue on the grassland birds of the Northern Great Plains of Montana. Nicole spent this past spring and summer on a long-term project in Montana, studying the decline of grassland birds on their breeding grounds. At the end of this month, Nicole is off to Hawaii to work on another project, this one on the vulnerable endemic Hawaiian bird, the Hawaii Elepaio.*





# Consider the lichen

*Photo by Renee Levesque*

*By Brent Turcotte*

On a coolish Sunday morning on October 30, I led a group of ten Nipissing Naturalists Club members and one dog on a hike to look at lichens and other normally overlooked organisms.

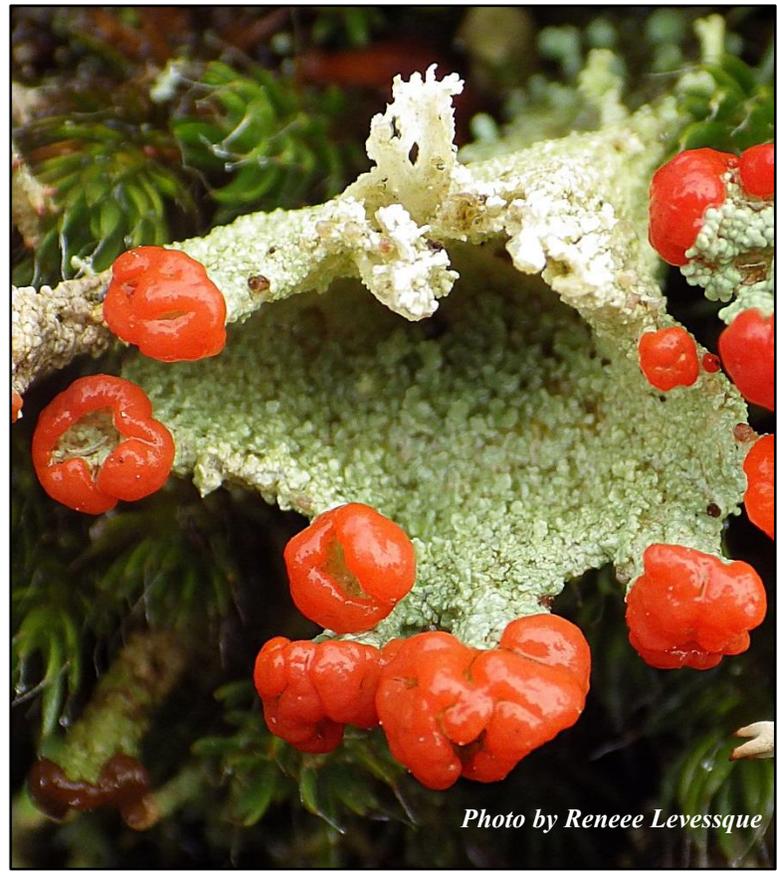
The location I chose was an unmaintained and unmarked road about 8.1 km along Songis Road off Hwy 63. It is a road I had previously discovered while poring over Crown land maps looking for new places to explore. Crown land maps call it Ypya Road. It turned out to be a nice discovery because of its unique vegetation of lichens and mosses.

Lichens are the symbiosis of a fungus plus an algae and/or cyanobacteria. (Science has even recently found some lichens with a second fungal partner.) They are extremophiles in that they are able to colonize tough environments such as bare rock or bark and are able to withstand extremes in temperature and dryness. They also absorb air pollution but are unable to filter it out and, as a result, are vulnerable to air pollution. In Sudbury and its surrounding area, you will not find older lichens because they were killed off when Sudbury's air pollution was at its worst.

What is nice about lichens is the diversity of shapes they take. They have three main forms: crustose (like spray paint on rocks); foliose (leafy looking); and fruticose (moss-like, hair-like, foam-like, or trumpet-like). **See collage of these three types of lichens which follows this article for photos by Kaye Edmonds and Renee Levesque.**

The first lichen noticed were British Soldiers or Matchsticks, a distinctive and well-known fruticose lichen. It looks like a miniature trumpet with red lips as you will see from the photo at right.

Many other species were noticed in the area we saw the British Soldiers and we hadn't even left the spot at which we started!



*Photo by Renee Levesque*

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A short walk away from this first stop, we found a special foliose tree lichen called Powered Sunshine Lichen with its yellow lobes. It was growing on a small slender branch of a tiny Black Spruce tree. (See photo at right.)

We then made out way to what I call the “special area”. Here the vegetation consists almost entirely of just mosses, lichens, mushrooms, club mosses and Black Spruce trees, enabling us to easily walk among the trees. We marvelled and speculated at the cause of this terrain. I believe it is an esker, a long steep ridge of sand left over by the glaciers and I have since named the area Ypya Esker. The area has no bedrock showing or large rocks of any kind. Perhaps that may explain the vegetation. The sand left over by the glacier had no nutrients. Lichens had to spend centuries building useful soil out of sand and pebbles. Hardy organisms followed the lichens, but the soil is not good enough for normal vegetation.

We tried to reach Balsam Creek, but there were too many downed trees on the path to the Creek, although Lori Anderson and Guy

Chartrand did manage to get over them. The rest of us did not try. It did not seem to be worth the effort to climb up, around or under all those trees to see the

road stop at a creek too wide to cross. But there was a highlight of the attempted trip to the creek – a purple fungal growth on a tree. (see photo at left).

Of special note in Ypya Esker are the club mosses. The Checklist of the Vascular Plants of Algonquin Provincial Park lists twelve species of club mosses excluding hybrids. At least four, perhaps more, species can be found along the esker, including Blue Ground Cedar – quite good for such a small botanical family.

After the esker, I took the group to the end of Gibson Mill Road where we saw five Snow Buntings - a treat for the birders in the crowd because the esker had little to offer in the way of birds. We didn't have time to explore the area, but participants could explore it on their own sometime. There are lots of directions one can go – to a set of rapids, a wetland, a corridor and more.

The outing was a lot of fun, with the participants contributing in many ways and sharing their knowledge that helped make it fun. It was more of a group effort with a great crowd than a one-sided led trip.



*Photo by Kaye Edmonds*



*Photo by Dorothy deKiewiet*



# Tree markers protect biodiversity

*By Jordan MacMillan, Technical Extension Forester, Canadian Institute of Forestry; photos by Kaye Edmonds*

On December 3, 17 members of Nipissing Naturalists Club met at Laurier Woods for a guided tour on how tree markers protect biodiversity in Ontario's forests. I led the tour with Ronnie Huang, also of Canadian Institute of Forestry. The tour included some expert insight from Fred Pinto, Registered Professional Forester.



Tree marking is the practice of selecting trees for harvest or retention. It is conducted by certified tree markers who individually inspect every tree in the

forest for any defects, disease or potential wildlife and biodiversity value. It is important for markers to aim to remove the lowest quality or defective trees, while retaining the healthy and high quality trees that will continue to grow and improve the overall health of the forest.

Participants were presented with cases where tree markers would exercise special consideration to protect wildlife and biodiversity values. For example, woodland pools and wetlands are protected to prevent erosion and sedimentation, and this in turn protects the habitat for a wide range of wetland species.

Participants were shown mast trees and trees that contain nuts, fruits, seeds or buds that are consumed by wildlife. Tree markers are required to retain a minimum of 10 mast trees, as well as 10 cavity trees per hectare. Trees with cavities (photo at left) are also important in terms of retention because they provide shelter and habitat for a number of wildlife species that dwell in the forest. Different kinds of cavities are prioritized based on the habitat value they provide. For example, a pileated woodpecker cavity has priority over a feeding cavity.

In addition to learning how tree markers maintain biodiversity and how wildlife values are protected, participants also identified trees, a



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required ability for a tree marker, and were shown how forest practitioners calculate basal area through the use of a prism (see photo of Jordan and participant at right). A prism is a small piece of glass forest practitioners use to examine a tree and determine if a tree should count towards the basal area of the target section of land. Basal area is defined as the area of a given section of land that is occupied by the cross section of tree trunks at 1.3 cm from the ground. Basal area is measured in  $m^2$ /hectare and is an important indicator for forest managers and tree markers to determine whether a forest is ready for a harvest. It also allows tree markers to calibrate how many trees should be removed.

Crown land forests in Ontario that are managed under the selection or shelterwood silviculture system are required to be tree marked by a certified tree marker. Selection and shelterwood silviculture systems are two methods used under a partial harvesting system, a system in which the area is not logged as a clear cut. Below, from the Canadian Institute of Forestry website, is a photo of a tree marker marking trees.



To become a certified tree marker, first you must enroll in a week-long tree marking course and pass three field examinations and one written examination. If successful, markers must then pass field audits to become completely certified. Currently, the Canadian Institute of Forestry and Forests Ontario are responsible for the administration and deliverance of the tree marker training program in Ontario.

For more information on the Ontario tree marker training program visit:

<https://treemarking.wordpress.com>.

**Editor's note:** For more information on protecting wildlife values, visit [http://www.westwindforest.ca/wildlife\\_stand.html](http://www.westwindforest.ca/wildlife_stand.html) and for more information on the Canadian Institute of Forestry, visit: <https://www.cif-ifc.org/>.

# The importance of citizen science

*By Kristen Grittani*

For my final Capstone project with the Master of Forest Conservation program, under the supervision of Dr. Jay R. Malcolm and Fred Pinto, University of Toronto, I was generously provided with two extensive datasets from two dedicated birders from North Bay.

The first dataset consists of the detailed daily notes of Judge Maitland Goldwin Gould, provided by his family. These notes include all the birds Judge Gould saw daily from 1942 to 1967. The second dataset, provided by Richard Tafel, shows the monthly totals of all birds observed from 1994 to 2015.

Bird science is well-supported by a large number of very dedicated and talented volunteers. Major datasets, such as the North American Breeding Bird Survey (BBS) and the Ontario Breeding Bird Atlas (OBBA), include vast amounts of data that have been used for some time now to support research. One of my goals with this project was to highlight the importance of citizen science.

The datasets of Judge Gould and Mr. Tafel have several advantages that make them particularly unique: Both were collected from single observers over a long period of time (25 and 21 years), and, as a result, there is not an issue of inter-observer differences in ability; Judge Gould's dataset begins considerably earlier than some of the other major bird research programs; and the observations are very focused on one particular area, allowing me to determine trends specific to the North Bay area.

With this data, I had two objectives: 1) Determine if trends in abundance of each species and guild (or group) exist over time or over climate variables and 2) Determine how the information in this study compares to trends observed in the OBBA and BBS.

There are some general, strong trends that have been shown through the BBS. These include a general decline in abundance across most species since 1970, as well as a decline in many groups or guilds of birds. This includes, most severely, aerial insectivores, grassland birds and shoreline birds across Canada, and forest birds in the Southern Shield Region specifically. (North American Bird Conservation Initiative Canada, 2012)



*Kristen Grittani with Dr. Jay R. Malcolm, photo by Fred Pinto*

Other trends in research are showing a northward shift in the ranges of many species (Zuckerberg, Woods and Porter, 2009); earlier



spring arrival times for migratory birds (Torti and Dunn, 2005); and a decrease of long-distance migrants in breeding habitats as a response to climate warming and precipitation. (Lemoine et al., 2003; Pearce-Higgins et al., 2015)

Using each of the observation sets provided, I performed statistical analyses to determine if individual species or guilds changed over time or as a function of climate variables: mean annual temperature, mean maximum temperature and total annual precipitation.

I divided the birds, 204 species in the earlier observation set and 279 in the later set, into guilds based on 1) habitat; 2) migratory behavior, such as long-distance, resident, etc.; 3) food type; 4) nesting habit; 5) breeding status in North Bay – for example, is this bird breeding?, is this the species' wintering habitat?; 6) Species at Risk in Ontario (SARO) status; 7) breeding range; and 8) native or non-native/invasive origin to North America. Breeding ranges were based on whether the centre of the range of a species was north, central or south in relation to North Bay. This was used as a proxy to detect range shifts.

The results of these tests are varied, but show several apparent trends.

In the earlier set over time, 39 individual species are shown as increasing in abundance, along with some guilds, including forest birds; and 25 species are shown as decreasing, along with some guilds, including grassland birds (as seen at left) and general insectivores. These results contrast with current declines in many species and guilds, likely because they were taken in a different time period and followed several important conservation developments, including the Migratory Birds Convention Act of 1916 and a push towards sustainable forest management. The decline in grassland birds is consistent with the trends reported in the BBS, while only about 38% of the trends of individual species agree with trends in the OBBA. With regard to climate variables, many species and guilds were influenced by precipitation much more so than climate variables.



In the later dataset over time, the difference in increasing and decreasing species is not as pronounced, with 28 individuals shown as increasing and 29 individuals shown as decreasing. There is only one increase seen in one food-type guild, seed-eating birds, and decreases seen in tree-nesting birds, grassland birds and aerial insectivores, the latter two also being most pronounced in the BBS. Here, the guilds seem to be strongly influenced by precipitation, but

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the individual species seem to respond more to temperature variables. This appears to indicate a stronger, and expected, influence of changing temperatures, or climate change, in the more recent years. Another interesting trend from this dataset is a decrease in short-distance migrants and resident species in response to increasing precipitation. This is similar to research showing similar proportional trends of long and short-distance migrants in response to climatic variables.

Although the agreement between these observations and the larger datasets, such as the BBS and the OBBA, are varied, there are some important aspects of this comparison. Both datasets are able to represent in some way, some of the most prominent trends from the BBS: in the earlier observations, a decline in grassland birds and general insectivores (although not aerial insectivores, but likely related); and in the later observations, the same trend in grassland birds and a decline in aerial insectivores.

The correspondence rate between the individual species and the OBBA is not very high, but there are some species trends observed in this study that are not noticed in the OBBA. We can look at these as possible advantages to this type of smaller study. Perhaps there are some trends specific to the North Bay area that become diluted in larger datasets. This could inform directed and localized conservation efforts.

My hope from this study is to highlight the importance, value and potential for scientific contribution of this type of data. Many birders have kept long, detailed records of their observations outside of structured programs and science could benefit greatly from the use of more of these datasets. If it were in the interest of a local group to continue a North Bay-specific study of bird populations, I would suggest the organization of several volunteers to implement a program to record their observations for a particular area for a set amount of time as part of their regular birding activities. A slightly more standardized approach can provide a more scientifically rigorous examination of bird populations in North Bay.

*Editor's Note: Fred Pinto was present for Kristen's presentation of her final Capstone Project and I listened in via WebEx. Kristen will officially graduate with her Masters in the spring and has accepted a position in her field of forestry in Guelph.*



Photo by Renee Levesque

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# The art (and science) of preparing study skins

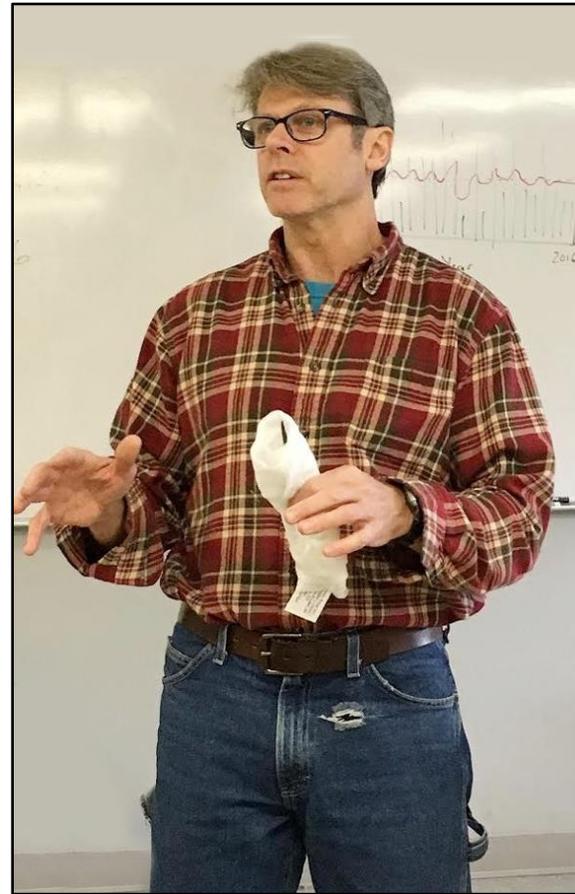
*By Dr. Rachel Sturge, Assistant Professor, Biology Department, University of Toronto, Scarborough Campus*

On Saturday morning, November 26, a group of university students and eight participants from Nipissing Naturalists Club, including myself, gathered in a science lab at Nipissing University to learn from Paul Smylie, Laboratory Technologist, Biology Department, and Naturalists Club board member, how to prepare *study skins* of bird specimens.

Paul had on hand previously prepared bird specimens which ranged from small hawks to hummingbirds to serve as examples of what our finished work should look like.

He spent some time describing the procedure, which included taking measurements of such features as wing chord (the length between the wrist joint and the tip of the longest primary feather), bill length, tarsus length and tail length.

The specimens had been turned in by people who had found them dead. Most, if not all, the specimens were the result of collisions with home windows in North Bay and surrounding area. Window collisions are the second most common reason for bird mortality in Canada.



*Paul Smylie, photo by Connie Sturge*



*Fred Pinto and Rachel Sturge, photo by Connie Sturge*

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Many of the participants were surprised to learn that it is illegal to keep a bird's body unless it is an introduced species (not endemic to the country). An individual needs a special permit to collect specimens, or needs to be affiliated with some type of research institute, such as a university.

Species included a Belted Kingfisher, a few different owl species (including my own Eastern Screech Owl sample, which appeared to be one of the casualties of a window collision), a Gray Catbird and a Northern Flicker. There were also some wood warblers, but these are too difficult for a novice to prepare.

Paul hopes to use these specimens to set up a teaching collection at Nipissing University. Such collections are essential to teach undergraduate students about avian biology and to start them on the path of learning how to identify birds by sight.

Successful study skins are displayed in museums, such as the Royal Ontario Museum which has an enormous collection that includes even a few extinct species, or in display cases at the learning institutions that own such collections. Quite often, this is the only opportunity that many people ever have to see these species. Additionally, the tissue of these specimens is used for research purposes – such as DNA analysis, to create phylogenetic trees and to examine species relationships. My own Ph.D. work involved tissue samples from specimens that came from roughly fifteen different universities and museums from the United States and Mexico.



*Lori Anderson and Ken Gowing, photo by Fred Pinto*

# Ontario Nature Conservation Awards



Ontario Nature recognizes excellence by honouring individuals, groups, government agencies and corporations who have worked towards protecting nature in Ontario. Eleven awards are presented to recognize this excellence. Click on the link below to see what these awards are and whom you might nominate for them.

[https://www.ontarionature.org/act/conservation\\_award/PDFs/2016%20Conservation%20Awards%20Flyer.pdf](https://www.ontarionature.org/act/conservation_award/PDFs/2016%20Conservation%20Awards%20Flyer.pdf).

On this site, you can also read the rules on who can nominate whom, but basically it is: Non-Ontario Nature members or groups must be nominated by two current Ontario Nature members or one Ontario Nature member group; and Ontario Nature members must be nominated by two people who can be members or non-members, or by one member group.

A group which is a member of Ontario Nature can nominate itself.

An individual or an organization can be nominated for more than one award, but each nomination must be submitted on a separate official form which can be found at:

[https://www.ontarionature.org/act/conservation\\_award/PDFs/Conservation%20Awards%20Nomination%20Form%202016.pdf](https://www.ontarionature.org/act/conservation_award/PDFs/Conservation%20Awards%20Nomination%20Form%202016.pdf).

**Please make sure you read the rules carefully.**

Nomination deadline is March 27, 2017; nomination is acknowledged on April 7, 2017; winners are notified on May 1, 2017; awards ceremony is on June 3, 2017; and awards are published in ON Nature in the Autumn 2017 issue.

Above is a photo of Club member Sonje Bols in Algonquin Park with a threatened Blanding's Turtle to which a tiny transmitter is attached to track its movements and habitat. (Photo courtesy of Sonje.)

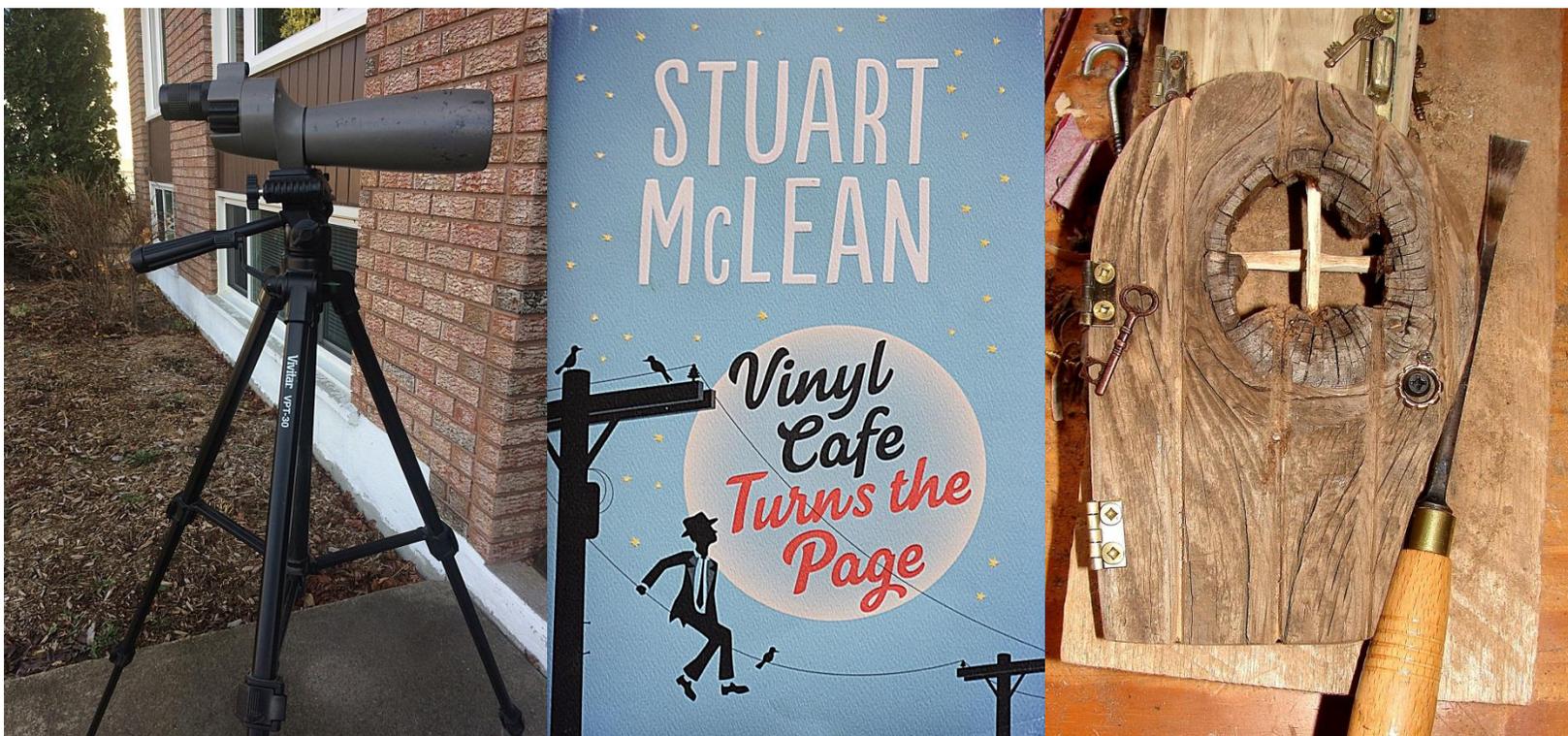
## New Year starts with Annual General Meeting

The Annual General Meeting (AGM) is our first Club meeting of the New Year and will be held at the **North Bay-Mattawa Conservation Authority on Tuesday, January 10, starting at 6:00 p.m.**

The North Bay-Mattawa Conservation Authority is located at **15 Janey Avenue, North Bay.**

The AGM will be preceded by a **potluck dinner, so be sure to bring something for all to share in.** Following the meeting, there will be a **silent auction** – always a fun event – to raise funds for the club. **Bring any items you would like to donate.** They don't have to be related to nature. Some eclectic items being donated are shown below – a spotting scope (photo by Fred Pinto), a Stuart McLean book (photo by Renee Levesque) and a miniature garden door made by Kaye Edmonds (photo by Kaye).

**(Starting Tuesday, February 14, Valentine's Day, meetings will once again be held in the auditorium at Cassellholme, starting at 7:00 p.m.)**



# THE WOODLAND OBSERVER



## Board of Directors, 2016

Fred Pinto, President: [fredpinto1@gmail.com](mailto:fredpinto1@gmail.com) 705-476-9006

Marc Buchanan, Vice-president

Joe Boivin

Sonje Bols-Hill

Irene Kasch

Mary Marrs

Stephen Mitchell

April Phelps

Oriana Pokorny

Paul Smylie

Sarah Wheelan

## Past Presidents

Dick Tafel

Ted Price

Steph Romaniuk

Angela Martin

Greg Boxwell

Jeremy St. Onge

# THE WOODLAND OBSERVER

## Bird Wing

Dick Tafel, Chairman: [rtafel@sympatico.ca](mailto:rtafel@sympatico.ca). 705-472-7907

Gary Sturge, Treasurer

Renee Levesque, Bird Wing Scribe.

The Bird Wing newsletter is published each month, except December, and sent to members by email and posted on Nipissing Naturalists Club website, <http://www.nipnats.com/club-activities/bird-wing/>. Also posted on the website are the monthly Bird Bash results and Year-end reports by Dick Tafel, as well as the Christmas Bird Count Reports by Lori Anderson.

*The Woodland Observer* is published electronically each month from September to June and sent to members by email and posted on Nipissing Naturalists Club website, <http://www.nipnats.com/> under the link, "Newsletter".

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**Contributors this issue:** Dorothy deKiewiet, Kaye Edmonds, Rebecca Geauvreau, Kristen Grittani, Renee Levesque, Jordan MacMillan, Fred Pinto, Nicole Richardson, Rob Rodger, Connie Sturge, Rachel Sturge, Brent Turcotte and Matt Walter.

**Special thanks to:** Angela Martin for clarification of Ontario Nature nominations; and Sonje Bols, Canadian Institute of Forestry, Fort Wayne's Children Zoo, US Department of Agriculture and US Fish and Wildlife for the use of their photos.

## Membership Fees

Annual Nipissing Naturalists Club membership fees are: single \$20.00; family \$30.00.

There is an **additional annual \$5.00 membership fee for Bird Wing** which meets the **fourth Tuesday of every month in the auditorium of the North Bay Public Library from 6:30 to 9:00 p.m.** This fee is paid directly to Bird Wing.



The Nipissing Naturalists Club is affiliated with Ontario Nature: <http://www.ontarionature.org/>.