



# The Quinte Naturalist

*The Quinte Field Naturalists Association is affiliated with Ontario Nature, a non-profit organization sponsoring nature education, conservation and research.*

## March



***“Let’s nest in March,” he said. “It’ll be great,” he said. “You can admire the spring flowers while you’re on the nest,” he said. See page 2 for more information about this photo and the Motus Wildlife Tracking System.***



**Monday, March 27 – Motus Wildlife Tracking System. Program Manager - Stuart Mackenzie.** This most ambitious bird tracking initiative in the world is leading to spectacular discoveries! Motus Program Manager Stuart Mackenzie, will explain the project, share some of the discoveries and discuss how this technology will aid in conservation efforts.

*The Quinte Naturalist - March - Page 1*

*Club News is on pages 7 and 8. Last meeting before the Annual Dinner.*



**Motus** - Stuart Mackenzie, our speaker this month will be explaining Motus. Canada leads the way with this wildlife tracking system. It consists of radio transmitters so small that they can be attached to dragonflies and monarch butterflies. Signals from these transmitters are picked up by a network of over 350 automated stations. The detailed information enables researchers to know where birds and other small animals travel and how they react to many geographic features such as the Great Lakes and to human features such as suburban and industrial areas.



**BirdNote** – The photo is by David Stephens. He is one of several talented nature photographers who donate their work to BirdNote. <http://birdnote.org/>. This is a website which accompanies a 2 minute radio spot heard on over 200 American public radio stations. You can also access the broadcast through the website every day. Broadcasts are written by birders, reviewed by scientists and accompanied by sounds mainly from the Cornell Lab of Ornithology.

The broadcast accompanying this photo explains that it is actually quite normal for great horned owls to nest in these conditions. When the two owlets hatch they will have to stay with their parents a long time to learn hunting skills in time for the following winter.

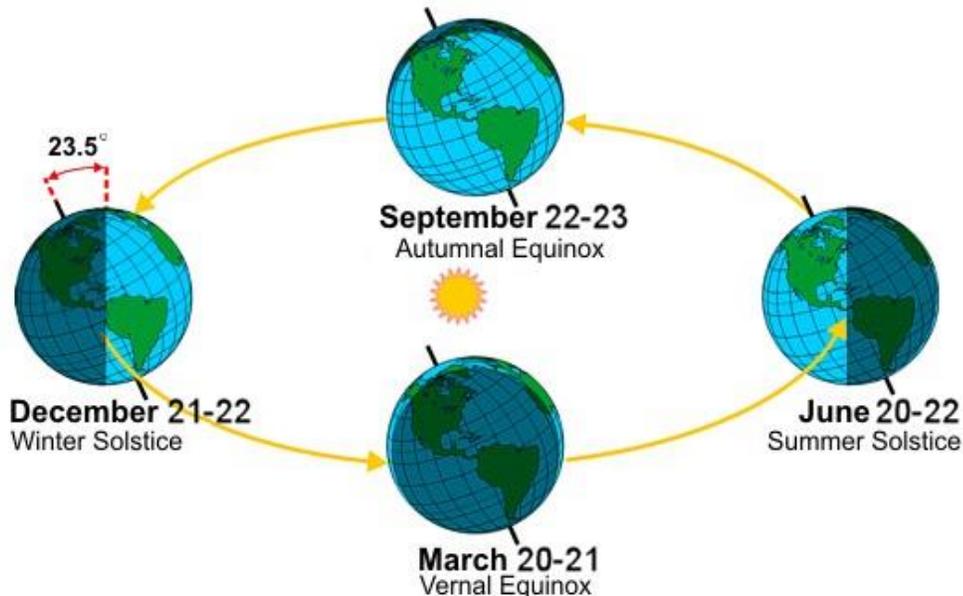
The website also contains links to further information about the subject of the broadcast and birds in general, an archive of previous broadcasts and a blog. While I encourage you to have a look at the website I must warn you that it can be a serious distraction. For instance I now know more about the elephant bird than I used to. It was a 10-foot tall flightless bird which weighed almost half a ton and lived on the island of Madagascar until its extinction in the 17<sup>th</sup> or 18<sup>th</sup> century. Its eggs were over a foot long and the equivalent of 180 chicken eggs.

## SEASONAL PET PEEVE

**Warning:** The first paragraph was written by a cranky nit-picking old geezer. The rest is a summary of material provided by cooler heads at the US National Weather Service.

What happened at 4:29 am on March 20<sup>th</sup>? You may have heard or you may even have said yourself that it was the vernal equinox which is the beginning of spring and the moment when the sun crossed the equator. Wrong! Wrong! Wrong! The sun doesn't cross anything. As shown in the model developed by Copernicus in the sixteenth century the earth revolves around the sun. Within the solar system the sun is the stable centre.

What's really happening? The earth's axis is tilted at an angle of 23.5 degrees relative to the path it travels around the sun. The word *equinox* is derived from two Latin words



meaning “equal” and “night.” On the two annual equinoxes the sun is directly overhead at noon on the equator and we all have days with nearly equal hours of light and dark. It's “nearly” because the refraction caused by the earth's atmosphere makes the sun appear to be above the horizon when it is still below the horizon.

Our distance from the sun varies during the year but has almost nothing to do with temperature. We are furthest from the sun in July. The tilting of the earth's axis gives us our seasons as it determines the length of the daylight period when we are receiving solar energy and the angle at which we receive it.

## Plumages

**Story by Elizabeth Churcher and George Thomson  
First Published in the Tweed News, March 15, 2017**

Our clothes closet is jammed with a full array of winter and spring coats right now. There are heavily lined boots and thin rubber boots organized on the tray and snowshoes still stand in the corner waiting for action. Is it going to rain or snow --- or perhaps find the answer somewhere between? Throughout late Winter and early Spring, our Tweed weather is variable but we continue to think ahead, anticipating the arrival of warm Spring rains interspersed with sunny days. --- But even in the midst of those dreaded ice storms, we cling to the value of living our lives to the full, enjoying and cherishing each moment, searching for what nature has to offer.

As the morning sun climbs up in the east and we peer out towards the bird feeders, we are filled with curiosity. Will another guest have completed its northward migration, or at least stop by for a break on its long journey? At present, we are celebrating the return of the Red-winged Blackbirds and Common Grackles. Granted, these early arrivals do not go as far south as many of other Spring migrants who will arrive later but they are still bona fide birds of Spring. We heard Bluebirds



*Photo by Gilles Bisson  
Male red-winged blackbirds return before  
females to claim the best nest sites.*

the other day and flocks of Robins have been with us for weeks now: indeed, more Robins and Bluebirds are staying with us for the Winter.

Almost everything associated with Spring is full of hope and newness. The returning Spring birds who will be arriving in the weeks to come will be resplendent in fresh plumages with the males of many species sporting especially bright and colourful new coats. The plumage of birds is the entire feather covering --- head and body, wings and tail. Feathers are, of course, the distinctive body covering of birds, just as hair is in mammals. Fully adult birds change their plumage annually from basic to alternate plumage.

Changing feathers is not nearly as simple as visiting a store and selecting a new coat. Feather replacement requires a lot of energy. Fed by blood vessels, each new feather develops in a follicle underneath the overlying feather and, as the new feather, or pinfeather grows, it pushes out the old one. This replacement of newer feathers by older ones is called molting. --- And it needs to happen for far more than just a new look! Life is hard on the feathers, and as they wear, the bird loses both insulation and the ability to fly at maximum efficiency. Also, feather replacement brings on the breeding plumage, especially colourful in the males of many species.

Virtually all of our birds replace all of their feathers in a complete molt in late summer or early autumn. At this time, the breeding season is over, food is still plentiful and they have some time before they either begin their southward journey or prepare for Winter with us. If a bird can ever be said to have a more “leisurely” time in his life, it is during this period. This molt is called the prebasic molt --- all feathers are replaced and the basic plumage, the feather coat the bird will wear until next Spring, is acquired.

As molting takes place, the wisdom of nature prevails. Flight feathers on the wings and tail are replaced gradually and in sequence so that the bird does not lose her ability to fly. Exceptions here are male ducks who molt into a drab eclipse plumage after the breeding season. Because they molt all of their flight feathers at once, they are unable to fly for the month that they are changing into their alternate (breeding) plumage. Yes, these birds are adorned in their new breeding fashions even before winter arrives! Why so early? It is thought that because ducks form pair bonds during the winter, they get an early start on courtship with their bright breeding plumage, most colourful and distinctive in the males.

As Spring and breeding time approaches, most of our birds have their second or pre-alternate molt, into their alternate (breeding) plumage. Unlike the complete, pre-basic molt in the Autumn, the pre-alternate molt in the Spring is only a partial molt --- just head and body feathers being replaced. Even now, for example, some male Goldfinches are starting to look brighter yellow.



In nature, there are always exceptions to the rule. Some of our songbirds acquire their

***Molting birds, like this male goldfinch may confuse birders because they do not look like field guide pictures.***

breeding attire without replacing a single feather. In them, the feather tips of the basic plumage wear off, revealing the colours and pattern of the alternate (breeding) plumage. A good example here is the Starling (pictured). The basic plumage is black with white speckles, which they wear all winter. As breeding time approaches, the white speckles, which are the feather tips, wear off, giving the shiny, black appearance of the breeding plumage. The bill also changes from black to bright yellow. Other birds that acquire their alternate (breeding) plumage in this way



are Meadowlarks, Bobolinks, Red-winged Blackbirds, House Sparrows, White-throated and White-crowned Sparrows and Snow Buntings, among others.



***Because the Starling's plumage is iridescent this bird in breeding plumage appears to be very colourful.***

We cannot leave the topic of molting and plumages without a look at the plumages that birds have before they become adult. Most of our Songbirds develop their adult appearance when they are one year old. Until then, they wear juvenile plumage, the purpose of which, it is thought, is to allow

them to be tolerated by adult birds defending their territories. Recognizing the colours of the younger birds, the defenders permit them to remain while chasing away other competing adults. Some birds, such as Gulls and Eagles, take 3 or 4 years to acquire the full adult basic and alternate (breeding) plumages. Observing and coming to know the juvenile, basic and alternate (breeding) plumages of birds add exciting dimensions to our overall enjoyment of our feathered friends --- birds are fun and interesting to watch, whatever plumage they are wearing! --- And understanding the purpose of their different coats and how they all come about helps us develop a greater appreciation of the complexity and superiority of nature.



***An immature starling shows a third plumage for the species.***

## CLUB NEWS



**Treasure Table** – February’s Treasure Table was extremely successful. Thanks to everyone who donated treasures and thanks to everyone who purchased treasures. It was a real club effort. Special thanks have to go Lorie Brown and June Humphrey who so capably managed the enterprise. Funds will support club projects. Please let a member of the executive know if there is a project which you would like to see the club support.

Please “Like” QFN on Facebook

And visit Terry’s website for all the latest news on nature in the Quinte Area - [naturestuff.net](http://naturestuff.net)

**Correspondence** The full text of these letters is available in the QFN section of Terry Sprague’s website.

**March 13, 2017.** A letter to the Ministry of Natural Resources and Forestry in response to the climate change adaptation strategy, **Naturally Resilient**. We acknowledge the laudable goals in the document but are concerned about how they will be implemented. We believe that there should be specific targets, priorities and timelines. In addition we ask for a commitment to conserve 17 per cent of Ontario’s lands and waters by 2020 as outlined in the Ontario Biodiversity Strategy. We also ask for commitments to address the negative impacts of forestry, mining and infrastructure development and the provision of adequate funding. <http://apps.mnr.gov.on.ca/public/files/er/mnrf-climatechange-eng.pdf>

**March 16, 2017** Comments on the proposed Management Plan for the Prince Edward Point National Wildlife Area. [https://www.ec.gc.ca/ap-pa/F9B122F9-E1ED-41F7-8D7D-5828786B5548/PEP\\_NWA\\_MP\\_P.pdf](https://www.ec.gc.ca/ap-pa/F9B122F9-E1ED-41F7-8D7D-5828786B5548/PEP_NWA_MP_P.pdf). We appreciate the work of the Prince Edward County Field Naturalists and the Prince Edward Point Bird Observatory and support their submissions. Increasing the number of visitors as proposed will require increased opportunities for enjoyment through trails, displays, workshops and seminars. Local and visiting naturalists should be considered a resource when planning changes. The entire south shore should be consolidated into one large protected area excluding industrial windmills. We are pleased to see the attention given to the maintenance of habitat for grassland birds. Opportunities created to bring more visitors to the area should

*The Quinte Naturalist - March - Page 7*

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be monitored closely. This work may require increased staffing. We also urge ongoing consultation with the observatory staff and volunteers.

**March 22, 2017** A letter to Health Canada's Pest Management Regulatory Agency commending them for re-evaluating the use of the neonicotinoid, imidacloprid, including a proposal to phase-out its use over the next 3 to 5 years. Because of imidacloprid's high toxicity, persistence in the environment and the risks it poses to animals and the integrity of ecosystems we urge a full ban and a rapid phase-out.

## **THE DEADLINE APPROACHES**

**Annual Dinner.** The tickets for our Annual Fundraising Dinner, being held on April 24<sup>th</sup>, are on sale at \$28 per person. This year it's a roast beef dinner with a vegetarian option, coffee or tea and dessert of pie or fruit. The guest speaker will be Robert Alvo, author of "Being a Bird in North America" He presents serious science with humour. Join us and spend an enjoyable evening with friends learning about birds and being entertained. Because we must let the church know how many dinners to prepare **there will be no ticket sales after April 10.** Purchase your tickets at the meeting or call Doug Newfield, 613-477-3066 for tickets.

*The Quinte Field Naturalists Association, an affiliate of Ontario Nature, is a non-profit organization sponsoring nature education, conservation and research. It was founded in 1949 and incorporated in 1990, and encompasses the counties of Hastings and Prince Edward. The Quinte Field Naturalists Association is legally entitled to hold real estate and accept benefits. Quinte Field Naturalists meet on the fourth Monday of every month from September to March (except December), 7:00, Sills Auditorium, Bridge Street United Church, 60 Bridge Street East, Belleville. In April we hold our annual dinner at an alternate time and location. New members and guests are always welcome.*

*Bring a friend.*

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Next Newsletter Deadline – April 15, 2017

Please send submissions to [sharronjohnblaney@gmail.com](mailto:sharronjohnblaney@gmail.com)

*The Quinte Naturalist - March - Page 8*

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