



THE QUINTE NATURALIST

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



THE NEW SCIENCE OF MIGRATION



Monday, February 25, 2019
7:00 p.m.
Sills Auditorium
Bridge Street United Church,
Belleville
(corner of Bridge & Church Street)



When NASA and citizen scientists work together to help migrating shorebirds, you can bet that migration monitoring is exploring new frontiers. Pamela Stagg, radio host of *The County, Naturally*, will explain how revolutionary collaborations are changing our knowledge of bird migration.

CLUB NEWS

Membership. If you haven't renewed your membership, now's the time. If you have



been interested in club meetings or other activities but haven't joined yet, now's the time. Last month's *Quinte Naturalist* outlined all the projects in which we are involved. Check Terry Sprague's website <http://naturestuff.net/site/> under "Organizations" for a copy if you don't have your own. Your voice for nature and the environment is stronger as a member of the Quinte Field Naturalists. Politicians, other officials and the general public will pay more attention to our current club membership of over 80 than they would to a lesser group. The return for your membership is worth many times the price. \$25 for a single, \$40 family.

Annual Dinner. Tickets for this year's annual dinner will also be on sale at the



meeting. This dinner will be held at Emmanuel United Church in Foxboro on Wednesday, April 10. Michelin doesn't award stars for church dinners but all reports are that this church dinner would be worthy of such recognition. Club members who have enjoyed a dinner at Emmanuel recommend it highly.

Our speaker this year is Wayne Grady. He has written a dozen books on nature and the environment including *The Great Lakes* which won a National Outdoor Book Award in the United States and *Tree* which was a collaboration with David Suzuki illustrated by Robert Bateman. In addition he won a Governor General's Award for a translation of a novel by French-Canadian author Antonine Maillet. Recently he has written two works of fiction, one of which was short-listed for the Scotiabank Giller Prize. He is a truly gifted writer.



The meal is a fabulous Buffet Dinner with Vegetarian/Vegan Option including punch, rolls and choice of desserts; coffee and tea.

Tickets are only \$28 per person. Unfortunately because the church prepares only the number of dinners required we cannot offer refunds but if possible we will assist you to exchange your tickets with someone else if necessary.

Outings. Presqu'île Waterfowl Festival. Tom Wheatley will lead us on an outing to the



The head-bobbing display of the courting male Common Goldeneye is always amusing. This female seems to find something lacking in the performance. Photo by Tom Wheatley



One of my favourite sights during the Waterfowl Festival is a flock of Common Mergansers. The bright orange bills complete the pattern of their sharply defined plumage. Photo by Keith Gregoire.

Presqu'île Waterfowl Festival on Saturday, March 16, rain date March 17. Meet beside the Golden Jet in Zwicks Park at 9 a.m. You can also meet the group at the entrance to the park, probably about 9:45. You can bring your own lunch or enjoy the BBQ provided by the Friends of Presqu'île at the Lighthouse. The nearby Gift Shop also provides indoor facilities. Remember that you will need a park permit.

After lunch anyone interested can accompany Tom to the waterfowl hotspots Barcovan at the entrance to Wellers Bay and 12 O'clock Point at the west end of the Bay of Quinte.

Presqu'île Bay is a major staging area for waterfowl as they make their way north. Spring for waterfowl starts as soon as the ice starts leaving the bay. The ducks congregate along the ice, diving under the ice to find areas of newly exposed food. Numbers can reach 20,000 birds and twenty different species seen on one day is not an unusual occurrence.

The bay is particularly important as a staging area for migrating waterfowl. Aquatic invertebrates, vegetation and small fish are abundant and enable the birds to

add extra fat to fuel them for the rest of the journey to their nesting areas.

Presqu'île is internationally recognized as an important bird area. The spectacular waterfowl show is followed by warblers and other land birds in May with up to 100 species staying to nest. Late summer and fall shorebirds take centre stage. All this within an easy drive of a little more than half an hour.

Bay of Quinte Remedial Action Plan

You can protect wetlands and wildlife around the Bay of Quinte.

Monday, March 4, 2019 - 7:00 p.m.
Quinte Conservation, 2061 Highway #2



Volunteer as a citizen scientist

Quinte area naturalist Terry Sprague will explain **FrogWatch Ontario**, great for the kids due to its simplicity.

The more extensive **Marsh Monitoring Program** includes both birds and frogs, ideal for the outdoors enthusiast.

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: **New this year!** :
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: **Learn about monitoring for Ospreys and Eagles** :
: **by just submitting a photo.** :
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For more information contact Terry Sprague at
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ACROBAT EXTRAORDINAIRE

By Elizabeth Churcher and George Thomson
Reprinted with permission from the Tweed News, February 13, 2019

Just as dawn was breaking, Elizabeth opened her eyes and pulled herself to a sitting position at the edge of her bed. It was time to celebrate a new day. She stretched and feasted on the beauty of the sunrise gradually brightening the distant horizon, and then allowed her gaze to draw near until her eyes rested on her favourite viewing area, the bird feeding haven near the front door. But more than birds are welcomed to this popular destination! She could see two Cottontail Rabbits timidly venturing out from behind the lilac bush and three squirrels scampering about, collecting seeds that had been hurled from the feeders to the ground. There was room for all!

Animals of numerous kinds intersect with our lives every day. There are some that we can depend upon for continuous entertainment and pleasure: the Eastern Grey Squirrel surely is a part of this group. This active little mammal who visits daily has a name that can be confusing. Even though



The town of Exeter, Ontario calls itself the “Home of the White Squirrel” because a colony has established itself there. A genetic variation produces this colour morph. The black eyes show that these animals are not albino.

we may be viewing an entirely black individual, his name carries the colour grey. In our area, the Eastern Grey Squirrel occurs chiefly in the melanistic, or black morph. If you observe Squirrels closely, though, you may see variations in their fur colour: some are quite grey and some may even sport a blonde-coloured tail. Amazingly, black and grey squirrels can occur in the same litter!

Squirrels, of course, are rodents, a large group that make up about one third of all the four thousand or so species of mammals. One of the defining features of rodents, just as in all mammals, is the structure, number and arrangement of their teeth. Rodents, squirrels included, have especially designed gnawing incisor teeth: the front face of each incisor tooth is hard enamel while the back face is softer dentine. Like other rodents, the squirrel has two incisors in the upper jaw and two in the lower jaw. The incisors are deeply rooted and grow continuously throughout the life of the animal, being kept sharp with constant use. As these industrious animals gnaw, the front layer of enamel wears more slowly than the rear dentine, keeping a sharp chisel edge ready for action at all times. Think Beaver here --- they are not able to leap over buildings in a single bound but they can gnaw through a Quaking Aspen, with those glorious orange incisors.

Now out of the Beaver pond and back to our nimble Squirrels who benefit from being able to navigate the world above us, especially tall trees. Squirrels' incisor teeth have evolved to deal with nuts, one of their staple food items. True nuts, like Walnuts, hickory nuts, beech nuts and acorns have a hard fruit wall, fortified with tough molecules of lignin, around the single seed, the 'kernel' of the nut. Squirrels are equipped to chew through the hard nut walls, an ability which has resulted in an arms race between squirrels and trees that produce nuts. Through Nature's evolutionary process of adaptation, the fruit walls of the nuts have gotten thicker and harder and the squirrels' incisors and jaws have gotten bigger and stronger. Will either party ever win? Our guess is "No, Nature's wisdom will prevail, offering balance and harmony forever!"

--- But there is more to the relationship between trees and squirrels. The trees depend on the squirrels to disperse their seeds through the woodland ecosystem. Squirrels like our Eastern Grey are classic scatter hoarders: they bury seeds in little holes in the woodland soil, for future consumption. They do have excellent spatial memory, but, fortunately for the Oak tree or American Beech or Butternut Hickory, the squirrels forget where they have buried about fifteen per cent of the nuts. In a good mast year, lots of the nuts will be dispersed throughout the ecosystem. Evolution has taught the squirrel lots of tricks. For example, oaks of the White Oak group sprout in the Autumn, so the squirrel either eats the white Oak acorns right away or nips the embryos so the acorn won't sprout and hence will last through the Winter. In contrast, acorns of the Red Oak group sprout the following Spring, so the squirrel can bury them straight away. The acorn may be recovered for food but if the squirrel waits until the acorn has sprouted in the Spring, he will not benefit too greatly from his snack as nuts lose a significant part of their nutritive value after sprouting. Acorns that have been left lying on the ground and are exposed after the snow melts are a better option.



The squirrel is a resourceful fount, never seeming to exhaust his survival strategies. --- So on to the acrobatics mentioned in the title and back to our bird feeders! Of course, we provide shelled peanuts in silo feeders for woodpeckers, chickadees, nuthatches and Blue Jays. It matters not to the squirrels that peanuts are legumes, not true nuts: they are just a yummy treat! In attempt to maintain peace in the feeding area, George, in his wisdom, put the platform feeders that hold sunflower seeds, nuts and many other delicacies, a goodly distance from the trees and he equipped the supportive pole with baffles. --- But he overlooked one detail! Trees grow --- twigs develop into small branches, extending the girth of the tree's crown. Squirrels keep a close eye on the situation and are always ready to take advantage of a new opportunity. We have watched them go out onto the small branches. While some stop at the end and turn back, others, bolder & braver, can be seen doing mental calculations involving horizontal and vertical distance to the feeder, with the tempting seeds and peanuts awaiting. After several movements, probably an integral part of the problem-solving process, a daring individual launches himself into space, legs outstretched, twisting & turning, ultimately landing on the feeder roof. Victory, but not for George!

We stand gazing and puzzling over whether or not these brilliant acrobats will someday conquer the baffles that currently are holding them back from a quick scamper up the pole.

Our persistent observations have helped us to learn so much. Not long after we installed the silo style peanut feeder, the squirrels discovered this temptation. Although they had difficulty getting the peanuts out of the small openings, they soon learned that they could swing it vigorously and knock it off the pole. During the descent, the feeder's lid would open, spilling out a gourmet meal for them. George purchased a funnel-shaped baffle and secured it to the pole to deter the squirrels. Then we waited and watched, actually feeling quite smug. On day three, we were outsmarted! One enterprising Grey Squirrel was able to stretch his body across the slanting side of the baffle and use his weight to bring the baffle to a vertical position. With the tough little pads on his front feet, he pulled himself past the baffle and up on to the crook of the pole where he hung upside down, probing at the peanuts in the feeder. At least the baffle prevented him from hurling the feeder to the ground, where he selfishly could consume all of its contents. Partially to maintain harmony and partially to reward the squirrel for the great entertainment he offered to us while achieving this feat, we sprinkled some peanuts on the ground for him.



Balance is a concept critical to peace of Earth and to the continuance of life. As we analyze the relationship between squirrels and trees, we can appreciate that they need one another. The squirrel must eat enough nuts from trees to survive but not so many that trees will be disadvantaged in sustaining life. Working together, the squirrel helps to ensure that sufficient tree progeny is distributed, providing a promising future for both. --- And while this ambitious little mammal tantalizes us with new challenges, perhaps as much as we do him, we openly admit that



we enjoy the battle of wits that continues between us. Will the 'acrobat extraordinaire' win or shall we be victorious? We hope for neither. For us, the more important question focuses on whether or not we can maintain a balance, recognizing the benefits of working together for everyone involved.

Long-tailed Duck



Unlike other waterfowl long-tailed ducks have three plumages annually leading to many intermediate patterns which can be confusing to birders. Shown here are the winter plumages above, male on the left and female on the right. Both photos by Kyle Blaney. The pair in summer plumage below, male on the right, female on the left, were photographed by L. Page Brown. All photos are originally from the Macaulay Library and ebird.



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 pm, 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 – February 15, 2019

Please send submissions to sharronjohnblaney@gmail.com