



The Quinte Naturalist

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

January

“When one tugs at a single thing in nature, he finds it attached to the rest of the world.”

John Muir.



Photo courtesy of Karen Henry

Recently this hawk landed on the deck railing just outside a window in a rural home in Quinte West. Can you identify the species? Answer on page 3.

There are many themes which emerge from the observation of nature. The predominant one is probably the complexity of our ecosystem and how little we understand about it. Some of this inadequacy results from a lack of data but our attitude is an even more serious problem. We act as though we somehow live outside ecological processes when in fact we are just as much a part of these processes as a black bear, a pileated woodpecker, a white pine, the bacteria which live in our stomachs or the virus which exists in the bacteria.

One thing we can be sure of is that our actions will have ecological results. Sometimes they are obvious. Draining a wetland produces a completely different habitat. Burning fossil fuels changes the composition of the air we breathe to our detriment. Erecting wind turbines produces less of what we call pollution but kills or destroys the habitat of other creatures which have their own role in the ecosystem. There are natural processes which we just cannot avoid.

This issue of *The Quinte Naturalist* considers some recent discoveries about our effects on the ecosystem which supports us. From climate change to subtle variations in familiar species our daily activities have their effects both intended and unintended. We need to do our best to understand them and to ask ourselves a question. Do the benefits of what we are doing outweigh the losses?

SEE CLUB NEWS ON PAGE 2

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Unless otherwise noted all articles are written by the editor.

To-night's Speaker

Terry Sprague

Thoughts from the Pied Piper of Nature

Copies of Terry's book, Up Before Five, will also be on sale.

You've heard about the "man who needs no introduction." Well, he's speaking at our February meeting. Terry has been taking people to cool places for almost 25 years and discussing everything from natural history to human history. His stories about birds, mammals, herptiles, insects, wildflowers, sawmills, logging camps, agriculture, and the people who shaped these areas reveal the secrets of Quinte's nature and why it is the way it is. Just as important, these stories entertain us. Don't miss Terry's presentation. 7:30 p.m., Monday, February 27 at Sills Auditorium in Bridge Street United Church.



TREASURE TABLE

Don't bury your treasures. Bring any treasures you no longer need to the February meeting for the treasure table. Treasures can include books you've read, crafts you've made, items in good condition that you would like to see go to a good home. We've all got things that are too good to throw out but they just don't meet our needs anymore. Please put the price on each item you donate.

Bring your loonies and toonies to the meeting so you can buy some of these treasures.

MUDPUPPY NIGHT

This outing had to be cancelled not once, but twice, once because of driving conditions and once because the warm weather caused very poor viewing conditions. Maybe next year.

The Quinte Field Naturalists Association, an incorporated 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), 7:30, 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.

President
George Thomson
613-478-3205

Past President
Wendy Turner
613-966-1518

Vice-President
Frank Hiebert
613-968-5825

Secretary
Elizabeth Churcher
613-478-3205

Treasurer
Norma Broadbear
613-962-6667

Environmental Officer
Denice Wilkins
613-478-5070

Membership/Mailing
Marge Fisher
613-968-3277

Refreshments
Sharron Blaney
613-962-9337

Outings/Newsletter
John Blaney - 613-962-9337
Next Newsletter Deadline - March 10, 2012
Please send submissions to john.blaney@sympatico.ca



Photo courtesy Art Henry

MYSTERY HAWK

Here's another view of the hawk pictured on the first page. The red-tailed hawk's belly band of brown feathers is now obvious. Some experts do warn that this band alone is not enough to identify the species but in this case we can be sure of what we are seeing when all factors are considered. Why isn't the tail red? It's a juvenile bird showing the typical dark banded tail.

HASTINGS STEWARDSHIP COUNCIL WINTER SPEAKER SERIES

March 14 Thurlow Community Centre, 516 Harmony Road, 7 p.m. Thomas J. Pawlick- Local Author of "**End of Food**". Thomas Pawlick will speak of the trends towards local food supply and small agricultural operations and their impact at a local and global level. The book "End Of Food" is based on hard scientific research, most of which has been conducted outside of the United States, where food production lobbies have fought hard against this kind of research. Pawlick exposes an alarming trend in the food available in our grocery stores. This is not an argument about unhealthy, processed foods, rather it exposes the problems with all foods, including fruits and vegetables that people commonly assume are healthy.

MEMBERSHIPS

Some of you have not renewed your membership for 2012. You know who you are. Actually if you've reached my age you may not know who you are but you can ask at the meeting. Memberships are \$25 single and \$40 for a family. Please pay by cheque to simplify book-keeping. You can also renew by mailing your cheque to Quinte Field Naturalists, 43 Parkdale Dr., Belleville, ON, K8P 2P3

OUTINGS

As some of you know my ability to get around has been limited lately by an uncooperative knee. Are there any volunteers to take the group on a hike? Not much expertise is required; after all even I can do it. I can suggest locations. I do hope to be able to have an owling expedition soon but I am waiting to find out what an orthopedic surgeon wants to do to me and when he wants to do it. Advice to anyone who might be in a similar situation. Looking up "knee replacement" on the internet may provide more information than you want. Did you know that it involves a saw! a drill! and glue! Maybe there's an alternative which does not require equipment from Black and Decker.

ROAD TO EVOLUTION

The effects of roads on wildlife have been well studied. Generally these effects are negative but recently Steven Brady, a Yale researcher, found that one species, the yellow spotted salamander, may be overcoming one of those effects, toxic runoff.



Photo by Joe Crowley, Ontario Nature

Yellow-spotted salamanders are fairly common but their secretive nature makes them a little difficult to find. They live under stones or logs or in burrows in mature, deciduous forests. They don't bask in the sun. They emerge only at night or during the breeding season. They can be over 20 cm. in length and their distinctive yellow blotches make them easy to identify when you do spot them.

We are coming up to their breeding season which is reported to be fascinating when seen. On an early rainy spring evening, possibly when there is still ice on some water they move en masse to vernal pools to breed. Masses of 50 or more wriggle and squirm. The males release spermatophores which sink to the bottom of the pool. The females place their vents on these spermatophores which enter their cloaca to fertilize the eggs. The female will later lay masses of eggs in the pools.

The salamanders have to develop quickly because vernal pools are temporary and will dry up during the summer. They choose vernal pools because temporary pools don't have fish which would eat the eggs.

This strategy to perpetuate the species was successful until we came along and built roads through the forest. Obviously mass migrations make the salamanders vulnerable to high mortality rates resulting from roadkills if the path to the pool requires crossing a road.

We build our roads with high crowns to take water off the road and ditches on the sides to collect the water. To a salamander a ditch filled with water is just another vernal pool. Unfortunately it's a pool with concentrations of sodium chloride from road salt up to 70 times higher than pools two or three hundred yards from the road. This doesn't sound good and for the eggs it's not. In the roadside ditches Brady found that 56 percent of the

eggs survived their first ten weeks whereas in the more distant pools 87 percent survived for this period. But then a curious thing happened.

After a few generations the salamanders which do survive this early trauma seem to have a genetic advantage over their relatives from the pure woodland pools, According to Brady, “The animals that come from roadside ponds do better – substantially better – than the ones that originate from woodland ponds when they are raised together.” Groups of roadside salamanders seem to be evolving to be more robust to meet the challenges humans have created.

“This adaptation is certainly encouraging for conservation,” said Brady. “But our modern footprint is fundamentally changing species in ways we don’t understand and, critically, we don’t know if these adaptive responses will keep pace with environmental change.”

MORE EVENTS FOR NATURALISTS

WATERFOWL WEEKEND

Presqu’ile Provincial Park, March 17 and 18

Volunteer naturalists will help you identify up to 25 species of waterfowl which stop to prepare for the taxing nesting season. There’s also a decoy display and a chance to talk to local photographers about wildlife photography. Special children’s activities and crafts include a Wacky Waterfowl Fact Hunt. You can join the Friends of Presqu’ile for a BBQ lunch at the lighthouse from 11:00 a.m. on both days. The Lighthouse Interpretive Centre and the Friends’ Gift Shop will also be open.



Photo courtesy Paul O'Toole

As far as birders are concerned the star attraction this month has been this female mountain bluebird. It’s rare, possibly only the fifth one verified in the Kingston area. It’s reliable, being seen almost daily from Feb. 6 until quite recently. It’s easy to find. It hangs out on the trees and wires right beside the road about 100 metres this side of Ducks Dive Charters near the Prince Edward Point National Wildlife Area.

FROM THE BAY OF QUINTE RAP NEWSLETTER

A sure sign of spring is, the Community Wildlife Monitoring Program evening. Once again, Terry Sprague, over the course of one evening, will teach everyone how to monitor a marsh whether it’s in your backyard, at the cottage, or a selected monitoring site. The Marsh Monitoring Program includes bird and amphibian monitoring. Volunteers can monitor for either or both species. Another program is called FrogWatch Ontario. This is a good entry level program, great for families due to its simplicity. This year, the evening workshop is Monday, March 5, 2012 at 7:00 p.m. at Quinte Conservation.

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TARTARIAN HONEYSUCKLE – BEAUTIFUL?

Much of the information in this article was found in an article in the Jan. 2012 issue of Birding written by Amanda D. Rodewald, a professor at Ohio State University. Much of the research was done in Ohio.

If you've walked any trails in the Quinte region or for that matter just driven on country roads you have undoubtedly seen tartarian honeysuckle in old fields or along fence rows. It's a multi-branched fairly tall shrub with beautiful pink or white flowers in late spring and early summer. After flowering it is covered with abundant red to orange berries. It's a perfect example of how complex the interconnections of species in an ecosystem are and how introduced or exotic species can change an ecosystem and redirect evolution.



It was the beauty of this plant which led to its introduction to North America in the 1700s and Ontario in the 1800s as an ornamental. It can still be found for sale in nurseries today. Like so many introduced species it proved to be invasive without the natural controls found in its place of origin, eastern Asia. Birds and animals love the berries and spread seeds widely. There are nitrogen-fixing nodules on its roots making it perfect for areas of poor soil in the Quinte region.

As it begins to dominate a plant community tartarian honeysuckle inhibits the growth of native shrub and ground layer species by shading and depleting soil moisture and nutrients. Spring ephemerals like trilliums, trout lilies and hepaticas are particularly at risk because they have evolved to bloom before native trees and shrubs but not before the honeysuckle.

You might still be advised by some people to plant tartarian honeysuckle both for its attractive bloom and berries and its ability to attract birds like robins, cardinals and catbirds. Its tangle of branches also makes a perfect nesting habitat for these same species. These attractive features come at a cost that biologists are only now documenting.

While some bird species seem to flourish as a result of the proliferation of tartarian honeysuckle others decline. Recent research has shown that Acadian flycatchers tend to avoid areas dominated by honeysuckle. This species does not nest in Quinte but local nesters could be affected. One biologist has suggested that in our area red-headed woodpeckers, a species of considerable concern, might be deterred by honeysuckle. The woodpecker likes to nest in an open almost savannah-like forest. Honeysuckle grows well in just such a forest and changes the understory significantly. Does this make the forest unattractive to the woodpecker? Obviously research is necessary to answer questions like this.

The relationship between Tartarian honeysuckle and northern cardinals is more complicated and the implications even more subtle. Among cardinals the dominant, fittest males get to choose the prime nesting sites. Cardinals see the honeysuckle, leafed out earlier than other shrubs, as providing prime nesting sites and a chance to get an early start on nesting. The fittest males get first choice of nesting sites and often choose

honeysuckle. Research has shown that cardinals that nest in honeysuckles produce 20% fewer young over the entire nesting season than those that nest in other plants.

What's the problem? It appears to be predation. When most bird nests are in low leafed-out shrubs a predators' search for food can be concentrated in plants like honeysuckle. Later in the season nests will be in a wide variety of plants at a variety of heights so the search for prey becomes more difficult and nests at all levels suffer less predation. It remains to be seen how a lower success rate for the fittest birds will impact the species in the long run but it could lead to an evolutionary change.

Nest failure is only one aspect of the relationship between cardinals and honeysuckle. There is another factor which could trigger evolutionary change. Researchers found that in areas with a lot of the honeysuckle the fittest males were not as brightly coloured as expected whereas the less fit males were brighter than expected. In other words plumage colour is a less reliable indicator of a male's condition if it lives in an area with a lot of tartarian honeysuckle. The brightness of a male cardinal's plumage usually indicates its general fitness and thus its attractiveness to females. In an area growing a lot of honeysuckle colour becomes less useful as an indicator of fitness.

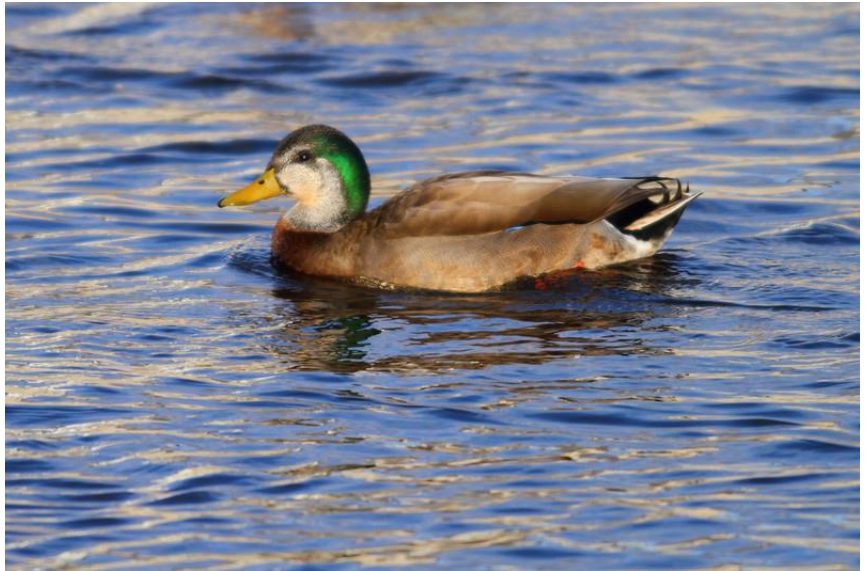


Photo courtesy Kyle Blaney
Humans are only one factor in the processes of nature. Genetics is another. This mallard with the odd pattern on the head was seen in the Moira River. If your field guide is Sibley's Field Guide to Birds of Eastern North America look at page 72. Sibley shows an American black duck x mallard hybrid adult male. The head pattern is almost identical. Look at the body. Sibley shows a dark body closer to what is found on a black duck. This bird has the light body more typical of the mallard. It appears to have more mallard than black duck genes. This suggests to me that the bird is a backcross, the offspring of a hybrid and a mallard, possibly even two or more generations removed from the original mallard/black duck pairing. Nature provides all sorts of intriguing puzzles.

Reading the article I felt as though I was descending into a swamp of data. I could extract myself from it only by reading between the lines. The researchers kept referring to honeysuckle dominated "urban forests," a term which usually applies to an urban area like Belleville's East Hill with a lot of trees. The author also made a rather cryptic reference to "birdseed" She stated that honeysuckle is rich in carotenoids, the chemicals which produce a cardinal's bright colours, but poorer in nutrition than the bird's native foods. On the other hand the "birdseed" (sunflower seeds?) was said to be "nutrient-rich but carotenoid poor." The implication was that by replacing natural foods with honeysuckle berries and sunflower seeds we could be changing the colour of the cardinal to a less brilliant hue.

Around Quinte the issue becomes even more complicated. Honeysuckle is found mainly not in the "urban forest" of East Hill but in rural fencerows, old fields, alvars and sparse woodlands. Is "birdseed" more or less available in these areas? Do rural residents feed the birds more or less than their urban neighbours? Is the pattern of predation on low and high nests any different in old fields where all vegetation is the same height or shorter than it is in treed suburbs? Where there is life there will always be questions.

ANNUAL DINNER

Tickets on Sale Now

This year's annual dinner will be held on Tuesday, April 17 at St. Columba Presbyterian Church. As Norma likes to say it's a roast beef dinner with all the fixings. It's topped off with homemade pie.

Our speakers this year are Martin and Kathy Parker. Kathy and Martin have travelled widely to enjoy nature and have shared their experiences with many naturalists through pictures and presentations for clubs like ours. Their topic this time is "A Birder's Adventures in The Gambia -- West Africa -- Rollers, Bee-eaters and Walking Fish" As an added bonus they'll come in costume.

Tickets for the dinner are \$25. Please remember to pay by cheque. **Tickets must be purchased ahead of time** so we know how many diners there will be and can order the appropriate number of dinners. Unfortunately for the same reason they must also be non-refundable.

BIRDING ON THE INTERNET

Perhaps you know someone who can't do much walking. Maybe they are waiting for knee surgery. You can advise them to have a look at the following websites:

<http://watch.birds.cornell.edu/feederwatch-cams/camera/view?cameraID=C100045>

Every year Project FeederWatch installs a camera in the yard of one of the participants so we can all watch the birds at their feeder. This year the camera is in Manitouwadge, Ontario. Watch for a few minutes and you will see an almost constant parade of pine grosbeaks, evening grosbeaks, redpolls, purple finches among the dozens of birds which appear during the day.

<http://www.natureinstruct.org/dendroica/index.php>

Do you want to go birding in southern Ontario? This site will let you see and hear what you might find. This time of year you might prefer to go to California or Florida or maybe the Sonoran desert in Arizona. Possibly you are looking for something more exotic so you choose Mexico and stay in the Yucatan. Name an area in North America and this site will show you the birds.. While there you can practice identifying the local avifauna in a quiz which will give you the pictures and sounds of each species. Maybe you want to practice identifying birds by ear without any visual clues. That's no problem. You can tour the site as a visitor or you can register for a few more features. It's a government site which doesn't put you on any spam lists. Vic Toews is going to know you visited the site anyway.

The Last Word

The first page of the newsletter begins with a quotation from American naturalist and founder of the Sierra Club, John Muir. Muir was active in the late 1800s and early 1900s. Even without the research into such animals as the spotted salamander or such plants as tartarian honeysuckle Muir recognized the complexity of our world. How should we twenty-first century naturalists react? Throw up our hands and say, "It's too complicated. I think I'll just watch TV?" Give up and let ecologists, biologists and other scientists do their thing while we go about our day-to-day business? I hope that's not our reaction. Even those very scientists have realized they can't conduct their studies alone. They need our help through programs such as the Marsh Monitoring Program, the Christmas Bird Count and the Baillie Birdathon. We can't shut out nature by going into an air-conditioned building. It comes into the building with us. It's always in the building. We are nature, or at least part of it. We are part of a complex web. We should strive to understand it and appreciate it. We need to ask ourselves if we are happy with the results we are getting from our actions.

FOR IMMEDIATE RELEASE

February 24th, 2012

Land Trust Exceeds Goal & Raises \$130,000 For Land Purchase

The Hastings Prince Edward Land Trust announced today that it has raised \$130,000 in donations for the maintenance fund required to complete the purchase of the 490-acre Miller family farm in South Marysburgh and preserve it in perpetuity as the Miller Family Nature Reserve.

“We have been overwhelmed by the positive response which we received” according to Douglas Stevenson, Chair of the Land Trust. “In November we set out to raise \$85,000 for this path-breaking conservation project on the County’s south shore. In the end, we exceeded our target by \$45,000.” Stevenson stated that the extra money will help the Land Trust with costs associated with this land purchase and costs associated with securing additional properties in Hastings and Prince Edward County.

“More than 90 people and organizations contributed to the campaign. While about half were from Prince Edward County, an important role was also played by Land Trust supporters in places including Peterborough, Toronto, Ottawa, Tweed, Belleville, Madoc, and Eldorado. We even had some donations from as far away as New Brunswick, Montana, and Sault Saint Marie!”

Land Trust Vice Chair and Picton resident Bob Clapp could not have been happier with the response. “I didn’t really know what to expect when the campaign began, but obviously County residents and organizations really like what we were trying to achieve with this land purchase and decided to help. The outstanding support we have received from the local community in this campaign will encourage us to expand our presence on the South Shore.”

For anyone wondering about the ecological importance of the Miller Property, it includes sensitive Alvar and Oak Savanna vegetation communities that are provincially rare. The property is located within the Prince Edward County South Shore Important Bird Area. It is a Globally Significant Important Birding Area under the congregating species category and nationally significant under the threatened species category.

Provincial Species at Risk recorded in or near the Miller Nature Reserve include the Blandings Turtle, Whip-poor-will, Black Tern, Short-eared Owl, Bobolink, Eastern Meadow Lark, Snapping Turtle, Milk Snake and Monarch Butterfly.

The property contains approximately 80 acres of Provincially Significant South Bay Coastal Wetland. There are 1,995 feet of barrier level stone shoreline separating Lake Ontario and the South Bay Coastal Wetland.

The Miller Nature Reserve is also a close link with Prince Edward Point, which in 1995 was declared an International Monarch Butterfly Reserve. The whole south shore of Prince Edward County is a migrating route and staging area for bats, monarch butterflies, dragon flies and up to 263 species of birds, including several species of raptors.

Further information on the Miller Family Nature Reserve can be obtained at <http://miller-family-reserve.com/> while information on the Hastings Prince Edward Land Trust can be obtained at <http://www.hpelt.org/about.htm> .

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