



OFO News

NEWSLETTER OF THE ONTARIO FIELD ORNITHOLOGISTS



Hummingbird Research in Ontario and Canada

Ruby-throated Hummingbird.
Sandra and Frank Horvath

By Cindy Cartwright

In This Issue

- 1** Hummingbird Research in Ontario and Canada
- 4** Birding for Kids
- 6** Swimming Owls
- 7** 2015 Update: The Ontario Bird Records Committee
Message from the President
- 8** Bird Photography: Digital Single Lens Reflex Camera
- 12** OFO Convention 2014
- 13** Young Birders Walks
- 14** Book Review
- 15** Photo Quiz

Ontario Field Ornithologists

Box 116 Station F
Toronto ON M4Y 2L4
OFO Website: www.ofo.ca
Email: of@of.ca

In this report, Cindy Cartwright outlines her research in a personal and lively way that reflects what OFO members do as field naturalists — get “out there,” look, listen and take notes the way Darwin did. Darwin endured seasickness during months at sea aboard the HMS Beagle, and spent years ashore on horseback, documenting nature. When Cartwright went to places where Ruby-throated Hummingbirds weren’t supposed to be, knocked on doors where hummer feeders were in the yard, and got reports from local people who had been feeding them for years, she was “out there” in the grand tradition of field naturalists. We hope you enjoy her account of this research. Roger Bird

They’re tiny, agile, and incredibly fast — amazing to watch as they hover, then take off at high speed and zip out of sight like miniature rockets. Observing field marks can be as difficult as trying to ID a single jet pilot while watching a Snowbird exhibition flight. At times, it’s tough to tell if it was a male or female that just buzzed by.

Hummingbirds are hard to locate and study away from feeders. As a result, the Trochilidae is not a family often researched except in conjunction with projects that have links to human flight or energy consumption. Important details of hummingbirds’ lives are unknown or sometimes incorrect.

I received an additional endorsement on my Canadian Wildlife Service permit to band hummingbirds in 2002 and was the first Ontario bander to specifically target hummingbirds for research outside of standard passerine migration monitoring. Checking the scientific literature, I was surprised that very little research had been done on the Trochilidae, particularly the Ruby-throated Hummingbird, and I could not find reference to any species-specific projects anywhere in Canada.

Following discussions with banders and hummingbirders¹ across Ontario, I started the Ontario Hummingbird Project in January 2005. At that time, the only other hummingbird research in Ontario was at Holiday Beach Migration Observatory



Photo: Steven Kapusta

The Ontario Hummingbird Project was the first province-wide banding and observational research program.

(HBMO). Allen Chartier began banding hummingbirds there in 2000 during fall migration. He ceased banding in Ontario at the end of 2003.

The Ontario Hummingbird Project (OHP) was the first province-wide banding and observational research program. It continues to be the only project in Ontario that combines scientific banding, education, and data from citizen scientists and migration monitoring stations, birders, hummingbirders, and the public. The project's focus is life history, so banding large numbers of hummingbirds is not a priority.

Through banding studies and observations since its inception, OHP has documented Ruby-throated Hummingbird data such as longevity (Cartwright, C. 2014. *OFO News* Vol. 32 No. 2, June 2014), the length of time males remain on breeding territory, extent of the breeding season, the number of broods each year, the northern limit of their Ontario range and the ability to carry their own weight. Research in some areas is ongoing while other data awaits journal publication. Everyone is welcome to participate in the project to help unravel the mysteries of hummingbird life in Ontario.

New Ruby-throated Hummingbird range map

When OHP began, I planned to expand it nationally, since so little such research was going on anywhere in Canada. With requests and the encouragement from hummingbirders in the Atlantic provinces, I started Hummingbirds Canada in 2010. One of its first goals built on work previously done by its Ontario forerunner — to determine the northern range limits of Ruby-throats as accurately as possible. Range maps in field guides and other sources are incomplete. They closely mirror the populated areas of Canada and if no one lives there, who will observe and document the presence of hummingbirds?

After contacting hundreds of observers, verifying reports, personally documenting hummingbirds north, west and east of the range limits in field guides, I topped it off with a literature search and compiled a new range map for the Ruby-throated Hummingbird in Canada in early 2014.

There is one question that may never be answered. Have Ruby-throats always been present in small numbers as far north in Ontario and the central provinces as shown on the map, or has the species expanded its range due to climate change? Because these birds are so small and quick, and heard only at close range or when defending territory, they are often missed in the wild. The lack of observers beyond the borders of the road system may have limited previous observations and reports in these areas. For the same reason, it is possible that the range limit is actually farther north than this map shows. Most hummingbird data in previous breeding bird atlases is heavily based on feeder sightings. Atlas participants report that they found it difficult to detect hummingbirds away from

feeders, and many made little effort to find them in areas where they were not expected (Cartwright, unpublished data).

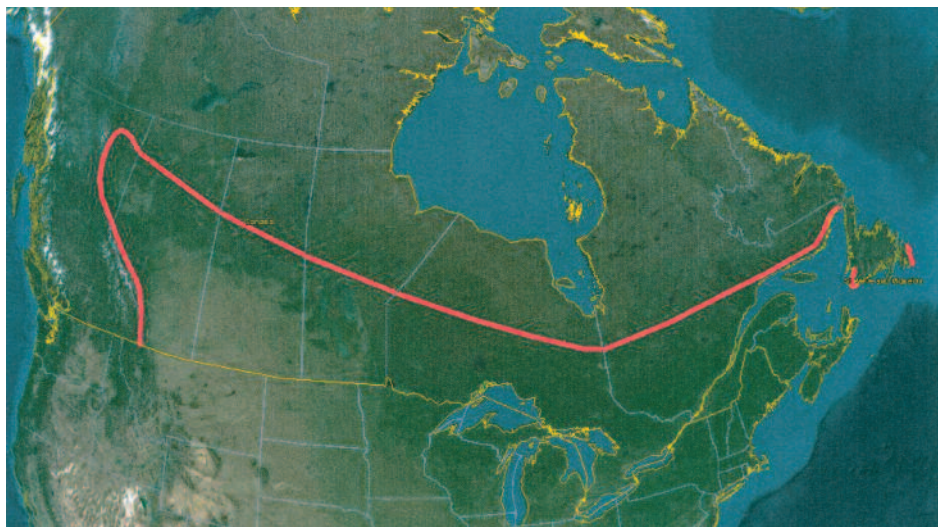
British Columbia

While working as bander-in-charge at a bird observatory in north-central British Columbia in 2003, I received reports of a Ruby-throated Hummingbird at a Fort St. John feeder. This was my first inkling of Ruby-throats in British Columbia. Over the next several years, more were reported from as far north as Fort Nelson. Doreen Cubie, an American researcher, banded 10 in 2011 in the Dawson Creek-Fort St. John area. In June 2014, I passed through the area on her way to the Yukon and again observed a Ruby-throat at a feeder in Taylor. A literature search supported these reports, as well as other sightings in this area. The Ruby-throated Hummingbird should be considered scarce but annual in B.C. east of the Rockies.

Northern Ontario

During the second Ontario Breeding Bird Atlas, I atlased in several squares along Hwy 599 north of Pickle Lake in 2005. I travelled as far north as Pipestone River Provincial Park and found a single Ruby-throated Hummingbird. In March 2006, I asked approximately 100 outfitters in northern Ontario to look for hummingbirds at remote fly-in hunting and fishing camps. More than 25 responded immediately confirming that they had hummingbird feeders at their lodges and cabins and provided their locations. More confirmations trickled in over time. Rare sightings in Moosonee and Attawapiskat raise the possibility that the bird's northern limit in Ontario extends to James Bay — but this has yet to be documented.

Northern range limit of Ruby-throated Hummingbird in Canada (Cartwright 2014).





Range of Ruby-throated Hummingbird in British Columbia.

The red line is the known range limit in Canada. Red flags and labels represent locations that hummers are occurring on an annual basis. Purple flags and labels represent locations where hummers have been documented in the recent past. Orange represent historic records more than 10 years ago.

Below: Range of Ruby-throated Hummingbird in Newfoundland and Labrador.



A leucistic Ruby-throated Hummingbird banded and released near Kincardine, ON. Photo: Steven Kapusta

Eastern Quebec

In 2011, municipalities in the lower St. Lawrence River in eastern Quebec responded to queries and confirmed that residents were feeding hummingbirds in communities along Highway 138. In July 2013, I reinforced these findings while travelling to Newfoundland and Labrador to do research there. Along the way through Quebec, I observed Ruby-throated Hummingbirds at both feeders and flowers. Once on the east coast, I headed into extreme eastern Quebec from Blanc Sablon, Labrador and again found hummingbirds being fed at a few houses along the way. My conclusion: Small numbers of hummingbirds spend the breeding season each year along the northern coast of the Gulf of St. Lawrence.

Newfoundland and Labrador

I found Ruby-throated Hummingbirds at two locations in Blanc Sablon near the Quebec border, and at 29 locations in southwestern Newfoundland. I visited every house with feeders in the yard to check for humming-

birds. Residents said hummingbirds had been there annually for many years. They all had been feeding them for at least five years, specifically mentioning the summer of 2008. A few said they had been feeding them for eight to 10 years, and one woman insisted that her uncle had been feeding them prior to moving into a nursing home in 2001. So I concluded that Ruby-throated Hummingbirds have occurred annually in southwestern Newfoundland for at least six years, and should be considered a regular breeding species in the Grand Codroy River estuary.

In an unexpected encounter, one St. John's resident originally from Sudbury, Ontario and familiar with Ruby-throated Hummingbirds, reported seeing them coming to lupines along a local trail every year since she had moved to Newfoundland four years earlier. Unfortunately, I could not check the trail and flowers because the area was closed due to a forest fire. Ruby-throats are reported irregularly along the east coast of Newfoundland from Cape Race up to St. John's. This area is sparsely populated with

few cultivated flower gardens, so hummingbirds may occur annually but remain undetected (Cartwright 2013, unpub. data). Pending further research, the Ruby-throated Hummingbird is currently considered rare in eastern Newfoundland, as well as on St. Pierre-Miquelon and Anticosti Islands.

There is still much to be learned about these fascinating birds, and both the Ontario Hummingbird Project and Hummingbirds Canada are ongoing. Amateur ornithologists and the public have a big role to play in collecting information to increase our understanding of them. Ontario birders can start watching for them in late March and participating in OHP research at home in our province and Hummingbirds Canada when they travel.

Ontario Hummingbird Project
www.ontariohummingbirds.ca

¹ Hummingbirders are people whose interest in birds is restricted to feeding hummingbirds either by planting hummingbird gardens or by maintaining feeders.

We all hope our kids will share our joy of watching birds, but it doesn't always happen. So, how can we attract children, grandchildren, nieces or nephews, even neighbourhood kids into this world? Here are a few suggestions from real-life experiments on my own children.



Birding for Kids

Article and photos by Chris Earley

Nathan, age 8, feeding a Gray Jay during a hike at Algonquin Provincial Park

Start early with toddlers

Really, they can do it. Just modify some of the things “regular” parents do with their kids. Instead of asking your toddler, “What does a pig say?” ask, “What does a Great Horned Owl say?” That should impress your birding friends. Other easy sounds for toddlers to mimic are Mourning Dove, American Crow and Black-capped Chickadee.

That's the world of sounds. For visuals, put up a bird feeder that a toddler can watch from a highchair, outside the kitchen window. While doing dishes one time, I once looked up from the sink and saw a Blue Jay at the feeder. I turned to two year old Nathan, sitting beside the back deck window in his highchair, and asked, “Can you say Blue Jay?” He looked outside and replied, “Dove.” I said, “No, that is a Blue Jay. Can you say Blue Jay?” He looked at me and said, “Dove!”

A heated exchange ensued: “Blue Jay!”, “Dove!”, Blue Jay!”, “Dove!” until I walked

over, pointed to the Blue Jay shouted “Blue Jay!” No kid of mine was going to incorrectly identify a Blue Jay, no matter how young he was. Nathan then pointed to the ground under the feeder (which I couldn't see from my kitchen sink window) where there were eight Mourning Doves. He then screamed “Dove! Wooo Wooo Wooo Wooo!” So, yes, a two-year old can correctly ID a bird despite botched instructions from Dad.

Everything is new for preschoolers

Nothing beats the curiosity of a three- or four-year-old. The backyard bird feeder can be a focal point for teaching a child field marks and feeding strategies. Kids this age can handle complexity, but proper explanations are crucial. When daughter Skye was three, she looked out the window and saw a Sharp-shinned Hawk on top of a male Northern Cardinal. She was upset and asked why I let the hawk have the cardinal. I explained that the hawk took the

cardinal, I didn't give it to the hawk, and that it was OK because hawks need to eat, too. I thought I had focused on the cycle of life concept clearly, but her imagination generated a wildly different mental image. When Mum came home, Skye said, “Mummy! Daddy was holding the boy cardinal and a hawk came and took it from him!” So, when you are explaining things to this age group, ask the child to explain them back to you to make sure they got it right.

Another thing about this age group is that binoculars don't work well for them. I made a substitute. I bought two plastic connectors (the ones you use to connect 1.5 or two-inch PVC piping) and make a pair of “binos” with them. Not only are they light, but the optics are super clear! Kids can use these and feel like they are doing what you are doing. Don't despair if they are more focused on the insects at their feet. That little warbler you are looking at is likely out of your child's range, but the Praying Mantis or butterfly is right there in front of them.

Encourage their interest in anything — insects, frogs, wildflowers, even pine cones — they want to look at. Curiosity about other parts of nature is wonderful and may translate to birds when they are older.

Project time for ages five to eight

These ages can handle fun projects linked to watching birds. When Nathan was six we helped him make his own field guide. I took my old photographic Audubon guide (do you remember those green guides?) and got a small daytimer binder with lined pages. Every time Nathan saw a new bird species, we would find it in the book, cut out the photo and glue it onto one of the binder pages. Then he wrote out the name of the bird on the top of the page. Soon he had a booklet full of the birds he had seen.

Think about the type of projects your child likes to do, and relate them to birds. Start a feather collection, build a bird out of Legos, or make a bird collage from old birding magazines — all doable projects.

Science from nine to 12

Return to that backyard bird feeder. Project Feederwatch is perfect for this age group. Skye and I made it a bit competitive. Who can see the most Dark-eyed Juncos for a two-day period? It's great to hear a tri-

umphant “Yes!” from the next room when the sheet is checked and a higher number is logged in. Interest in birds at this age can wax and wane, so leave Project Feederwatch sheets on the kitchen table with a pen during each count period. This allows for additions to happen randomly rather than having set sessions just sitting there to watch. You'll be surprised how many additions that aren't your own will be on the sheet at the end of each count.

Another good research project for this age group is a Christmas Bird Count for Kids event, all the more fun because other kids are doing the same thing.

Technology can take over this age group pretty fast so use it to your advantage. Both my kids have field guide apps on their devices. They don't use them regularly, but they are there when needed. We also play “Test the Dad” with these apps. On a long drive, one of the kids will go into the app for bird songs for me to identify. They start with easy ones and then try to trick me with really hard or obscure species. They love it when I'm wrong.

The teenage challenge

Now it gets tricky. While some teenagers might be cool with continuing a birding interest at this age, others are mortified

when you bring binoculars out of your backpack. The best thing to do here is let the teenager decide when birding might be OK. Don't be afraid to make offers they can't refuse. If you have been doing an annual trip to Point Pelee all their lives, for example, they likely will want to continue going, especially if it means missing some school.

Or set up a special event such as helping to band birds somewhere and say they can bring a friend. Be persistent but not forceful ... all those “no's” may someday change to a “yes.”

*(Chris Earley is the interpretive biologist and education co-ordinator at the University of Guelph Arboretum. Nathan, now 18, is the co-author of **Dragonflies: Catching, Identifying, How and Where They Live** and has been a camp naturalist for two summers. He spent last summer teaching visitors about insects at the Monteverde Butterfly Garden in Costa Rica. Skye, now 13, is the co-author of **Caterpillars: Find, Identify, Raise Your Own**. She still goes to Point Pelee and does Project Feederwatch despite her current passion for shopping.)*

Skye, age 8, painting cardinals for our Christmas decorations.



Swimming Owls

Owls are known throughout the world for their ability to fly silently, however their ability to swim is less well known.

By Cindy Cartwright

Snowy Owl swimming in Hamilton Harbour, December 2014. Photo: Len Manning

In fact, if asked, most birders would emphatically state that owls cannot swim. Recently photos and videos have been posted on the internet showing several owl species doing the breaststroke near the shore of large bodies of water.

The first time I ever heard of an owl swimming was a number of years ago when John Woodcock was working as Bander-in-Charge at Thunder Cape Bird Observatory on Lake Superior. He reported observing a Great Gray Owl flying low over the water, then landing about 500 metres out on the lake and proceeding to swim toward shore. At the time, he speculated that the nomadic owl was too tired to continue in flight.

In December 2014 another report of an owl swimming in Ontario came to my attention. An email from a listserv included a link to photos of a heavily marked Snowy Owl swimming in Hamilton Harbour. The owl had been attempting some waterfowl hunting when it was attacked by a territorial pair of Peregrine Falcons. When the owl couldn't evade them in the air, it went into the water. Ontario birder Len Manning took photos of the owl swimming successfully to shore to rest there before flying off.

While this seems to be very strange behaviour for an owl, a quick web search revealed that it is not a totally unknown one. The PBS series *Nature*, in their 2012 special "Magic of the Snowy Owl", documented young Snowy Owlets deliberately entering and swimming across a small Arctic stream in response to the parents' calls. The PBS

show can found on the internet by searching for it by name. Although swimming owlets had not been previously documented on video, David Parmelee had reported it as early as 1967.

Not only can a Snowy Owl swim, but it can make it to shore towing reasonably large prey. In November 2012, an adult Snowy Owl was observed attacking a Common Merganser in the water and hauling it back to land in Chequamegon Bay at Ashland, Wisconsin. A Common Merganser can weigh up to 2.1 kg compared to the 2-3 kg of the average Snowy Owl.

Swimming is not restricted to Snowy and Great Gray Owls. The Weather Network posted a video of a Great Horned Owl swimming in Lake Michigan in December 2014. The photographer, birder Steve Spitzer had taken the footage after the owl was forced down into the water near Chicago by a pair of Peregrine Falcons. The owl butterflyed to

shore, dried off and flew away. This video and several others can be found in numerous locations on the internet and found by searching for 'swimming owls.'

Dawn Keller, an Illinois rehabber, also told a story in her blog in March 2011 of a Great Horned Owl that evaded capture by deliberately jumping into the water of a creek and swimming to the other side. This owl swam without difficulty in spite of an obvious injury to its wing which prevented it from flying.

A quick literature search produced this information. *The Encyclopedia of North American Birds* states on page 871 that all birds float but if their "feathers become sodden, they may drown." David Parmelee (1992) documents that Snowy Owls can at least swim short distances although they do not swim as a rule. No information was found documenting swimming among smaller owl species, or maximum distances or length of time that larger owls can stay afloat. This doesn't mean that they can't swim, just that it hasn't been observed.

Although swimming is not the preferred method of crossing water, it is clear that many owl species are capable of swimming, at least for short distances.

Literature Cited

Parmelee, D. F., H. A. Stephens, and R. H. Schmidt. 1967. The birds of southeastern Victoria Island and adjacent small islands. *Natl. Mus. Canada Bull.* 222:1-229.

Parmelee, David F. 1992. Snowy Owl (*Bubo scandiacus*). *The Birds of North America Online* (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/010>

Terres, John K. 1996. *The Audubon Society Encyclopedia of North American Birds.*

Snowy Owl resting after a swim in Hamilton Harbour, December 2014. Photo: Len Manning



2015 Update

The Ontario Bird Records Committee

By Brandon Holden

The 2015 Ontario Bird Records Committee (OBRC) had a busy ending to the 2014 calendar year. Current active members are myself (as Chairperson), Mike Burrell (Secretary), Barb Charlton (Assistant to the Secretary), Peter Burke, Mark Gawn, Bruce Di Labio, Ron Ridout, Bill Crins and Ross Wood. Rare bird observations that occurred in 2014 have been solicited and compiled into voting packages, which are well under way to completion at the time of publication here. What was historically an extremely time consuming role, the secretary position has had a spectacular update thanks to the dedication of Mike Burrell. All votes and tabulations are now completed automatically with the conversion of operations to Microsoft Excel. After serving as the secretary for 2013 bird observations, it is truly a thing of beauty! With that said, we cannot offer enough thanks to Mike and Barb for the volunteer time they put into the operations site of the committee.

In our immediate future is the OBRC's annual general meeting, held at the Royal Ontario Museum. Here all members converge into a small meeting room to try and reach a conclusion on our most challenging records received over the past year. Hopefully we are able to get through those records in a timely manner, as there several housekeeping items that follow; some of which are notable to all OFO members. The 2012 OBRC policy meeting updates allow any OFO member to provide nominations for new OBRC members as we replace those with expiring terms. Our meeting is expected to be held in mid-late March, so please send nominations as soon as possible to obrc@ofoc.ca.

For guidance, the OBRC has drafted a basic outline of how candidates are assessed. A good candidate for OBRC membership is someone who:

- is a current OFO member in good standing
- is an active and engaged member of the Ontario birding community
- has a demonstrated expertise in Ontario birds
- has demonstrated support for the OBRC and its objectives (i.e. submits high quality rare bird reports)
- is prepared to complete committee tasks, such as voting, and other appointed tasks by the committee and/or Chair in a timely manner
- is willing to promote birding in general and the OBRC specifically during their time on the committee

The OBRC strives, when possible, to select members who represent the geographic and demographic breadth of the Ontario birding community. We look forward to hearing from you! The committee is always looking for comments and concerns from the birding community, so feel free to contact us anytime.

As we enter a historically slow period for "rare bird sightings" I would like to thank the numerous observers who support the OBRC by submitting documentation and/or helping compile information. I am well aware that the committee would cease to function without the support of the birding community. As things start heating up in the months ahead, I look forward to hearing from you all again in 2015 — as well as getting to know some of you for the first time.

Message from the OFO President



I was recently honoured to be elected President by the OFO Board of Directors at our October 2014 meeting. For those who don't know me, I've been a naturalist since I was a child, a birder for almost 30 years and an OFO member for as long as I can remember. I joined the OFO Board in 2009. I've headed the Convention Committee for the past five years, initiated OFO activities for young birders and served as Secretary and Vice President.

OFO is an impressive organization and all of our activities are run entirely by volunteers. The Ontario Bird Records Committee (OBRC), a respected group that evaluates Ontario rare bird reports, is an OFO committee. OFO holds approximately 50 field trips each year, publishes two excellent journals: *Ontario Birds* and *OFO News*, hosts the Ontbirds Listserv, organizes an ever growing annual convention, runs a website that publishes site guides and birding resources (www.ofoc.ca), awards certificates of appreciation to individuals and groups that help birds and the birding community and much, much more.

All of this is to say that my colleagues on the Board and I are passionate about OFO and creating great opportunities for Ontario's birders to experience and learn more about Ontario's birds and to encourage newer and expert birders alike.

At this time, I'd like to thank the outgoing board members for their time and efforts over the past years.

We welcome all of your suggestions, concerns and ideas for OFO. Please email me anytime at president@ofoc.ca. We want to hear from you!

Lynne Freeman

BIRD PHOTOGRAPHY

Making the Switch to a Digital Single Lens Reflex Camera

Article and photos by John Reaume

The digital image is captured by a sensor chip rather than film – a huge advantage as sensor chips are able to capture a much broader range of light than film.



Add a challenging and rewarding dimension to your birding experience with photography. Images you gather can be used to further appreciate the field marks of your subject and the time spent in the bird's presence can help you to appreciate its behaviours which will make you a better birder. Images can be used to improve ones personal birding skills, shared with a greater audience through prints or on the internet, used for records committees to help confirm the presence of rare birds, or even for publishing.

Knowing your intended use for the images is the first step in deciding which type of camera system to invest. For many birders, "point-and-shoot" cameras will be the logical choice. They have a built in lens, reasonable zooming options and high quality sensors with respectable file sizes to allow some basic editing of the images. They tend to be small, light and easy to carry. They can be put up to your scope for digiscoping opportunities that will greatly increase their reach to distant targets. Although these cameras are quite capable of taking excellent photos there are a number of disadvantages that become apparent over time. Even with their zoom features out to the maximum setting the bird will often appear small in the frame. You will find yourself trying to get closer to the subject, often creating stress on the bird or causing it to flush. Though the final images are often quite good there is still a difference when compared to the images of birds that you see in your favorite birding magazines.

At many of your favorite birding hotspots you will often see bird photographers with big lenses on tripods. What are the advantages and disadvantages of 'upgrading' from your current camera system to the 'big lenses'? First let's review some of the obvious disadvantages. The smaller telephoto lenses are not going to fit into your pocket like the point-and-shoot models. Even with image stabilization options on many modern lenses you will have better quality images when you use a tripod. Larger lenses and tripods are not an advantage on some of the crowded birding trails at your favorite birding hotspots during peak migration. The weight of some of the possible combinations may influence how far in you wish to hike carrying your gear — perhaps limiting some of your birding options. Sooner or later you

Bohemian Waxwing.
Canon EOS-7D, 500mm f/4 lens at ISO 400, f8 and 1/125

will find yourself narrowing your field of search to areas that your camera can 'reach'. You tend to look only to the well-lit side of the path and start ignoring the tree top warblers that are a photographer's nightmare. It is hard to be a mobile birder willing to scan through dense vegetation at awkward angles and a bird photographer at the same time.

Complexity is another disadvantage. The myriad of choices in terms of camera settings (ISO, metering choices, focus point selections, exposure compensation, drive modes etc.) can be overwhelming. It turns out that these same choices are one of the main reasons to convert to these new camera systems, as we will see. Cost is certainly the other big factor in making the switch to DSLR photography.

DSLR stands for Digital Single Lens Reflex camera. The 'digital' refers to the fact that the image is captured by a sensor chip rather than film — a huge advantage as the sensor chips are able to capture a much broader range of light than film.

What this means is much more detail is apparent in the image in both the dark shadows of the picture as well as in the brighter regions. These cameras use a 'single lens' for viewing (note this could be a zoom lens in which you can change the magnification). The 'reflex' is in reference to the fact that the light from the image passes through the lens and is reflected off a mirror or prism so that what you see through the viewfinder is what the sensor will record. Have you ever shot through a fence with a point and shoot camera with the viewfinder looking clear and the image recording the fence wire?

Most bird photographers these days use either Canon or Nikon DSLRs for bird photography. Both companies have a large selection of entry level DSLRs up to high end pro models with the added advantage of having a large selection of available lenses to choose from. This can be an advantage in terms of the used lens market as well. There are other camera manufacturers out there that make excellent models as well but the depth of lens choice give Canon and Nikon a decided advantage. However, the lenses are not interchangeable between companies. The rest of this article will not refer to specific manufacturers but to features that are common to them all.

Chip size: When purchasing your first DSLR one of the first features to be aware of is the 'chip' size that the camera uses. Is it a full frame sensor, i.e. the image sensor is the same size as 35mm film (36 x 24mm), or is it a cropped sensor such as the APS-C chip which is much smaller than a full 35mm frame? As it is easier to manufacture and cheaper to produce the smaller chip sizes the majority of camera bodies will use these smaller sensors. This can be an advantage in bird photography as our subjects are often far away and small in the frame. The smaller chips will only record from the center of the lens's image circle and the edges are cropped off. This creates an apparent magnification of the subject and is often referred to as the 'crop-factor' for that DSLR. In the case of the above-mentioned APS-C chip there is an apparent crop factor of 1.6x, that is your subject appears 1.6x larger when recorded than if you had a camera with a full frame sensor.

Megapixels: The number of megapixels (MP) that your camera can record is almost irrelevant today as even the point-and-shoot models record huge files. Anything over 8MP is more than adequate for even making large prints. Today's smartphones even have 8MP cameras. The quality of your photo will depend on your technique and not on the number of MPs. The main problem with the large MP cameras is the storage of the images. They will take up a lot of space on your computer's hard drive unless you learn to become a brutal editor of your images.

Virtually all models of DSLRs will have a method of selecting ISO, drive mode, metering points, autofocus point selection and shooting modes and we will look at those settings in detail later in the article. First you need to spend more money....

Lenses: The lens is your most important investment with regard to the final quality of your image. Virtually all DSLR camera bodies manufactured today will give you good results but it is the quality of your glass in your lens that will determine your success. When considering a lens purchase for bird photography we are looking at the telephoto product line. First the focal length of the lens needs to be decided. Most bird

photographers will shoot between 300 and 600mm. To think of this in terms of binoculars each 50mm represents 1x in magnification. Thus a 300mm lens ($300 \div 50 = 6$) is the same as a 6x binocular; 400mm = 8x; 500mm = 10x and 600mm = 12x. Remember if you bought a DSLR with the APS-C chip you get an "extra" 1.6x thus your 300mm lens at 6x becomes a 9.6x magnification (i.e. $6 \times 1.6 = 9.6$). You can see how this crop factor can come in handy. Your 400mm becomes a 12.8x; 500mm becomes 16x and 600mm becomes 19.2x magnification.



Magnolia Warbler. Canon EOS-1D Mark II N, 500mm f/4 lens with a 1.4x teleconverter at ISO 400, f5.6 and 1/400

The next factor to consider in your lens purchase is the f-stop of your lens. This number that is printed on the lens is derived from the focal length of the lens (as noted above) divided by the diameter of the glass at the front of the lens (its aperture). The smaller this number is the more light gathering ability the lens has (in other words the smaller the number of the f-stop, the faster the shutter speeds that can be obtained, the heavier the lens will be, the more expensive the lens will be). Every choice you make is a compromise, for example, the Canon 400mm f 5.6 lens weighs 1250g where as the 400mm f2.8 lens weighs 5300g (over 4 x the weight). The image size from each lens will be the same in a given camera but because you can achieve higher shutter speeds with the f2.8 lens (because of the increased light gathering ability of the bigger diameter/aperture lens) you will be more likely to 'freeze' the action of a moving bird and the resulting image will be sharper.

A general note about zoom lenses: There are many high quality zoom lenses on the market to choose from. They have the advantage of being able to change the magnification of your subject without moving yourself. Sometimes birds fly very close and the big lenses are too big and cannot focus close enough to take an image. Having said that the quality of a zoom lens compared to a lens of fixed focal length at the same magnification is generally not as good. There are compromises built into every zoom lens — one of which is often the speed of the lens (its f-stop is often higher than the fixed lens) resulting in slower shutter speed options and often less sharp images. These lenses are still very capable of capturing excellent photos using good technique.

Tripods: Tripods are a necessity. Quality images require that the subject detail be crisp. Birds by their nature tend to be very mobile and we have little control over this. Motion of the photographer though is a factor that we can influence. Faster shutter speeds will help in freezing the motion of our subject. We can achieve this by increas-

ing the ISO setting on the camera (akin to using faster ASA film) with some compromise in ‘noise’ in the resulting image. Buying a low f-stop lens (i.e. a large diameter/aperture lens) will also gather more light and allow us to reach higher shutter speeds. This does mean more weight, which translates into a situation where most photographers are unable to support the weight of their equipment by hand holding the camera/lens combination in a prolonged and steady manner. Modern lenses are often image stabilized which helps but if you are tracking a bird through the vegetation for any period of time your ability to avoid camera shake becomes compromised. The tripod becomes a necessary tool to avoid the arm fatigue inherent in a typical shoot.

Monopods (a single pole to support camera and lens) are better than nothing but you cannot rest your equipment unsupported during the long intervals in between actively using your equipment. Monopods are not as stable as tripods. Tripods (popular manufactures include Gitzo and Manfrotto) need to be properly sized for the equipment they are bearing. Most models

will state how much weight they can support without compromise. When purchasing a tripod make sure that at full height you can comfortably shoot from a standing position without having to raise a center column. The center column changes your tripod into a monopod and should not be routinely used. If your tripod reaches a height above eye level this can be an advantage for shooting birds higher in trees and help to save your neck. Any time you are shooting from an uncomfortable position you are likely adding camera shake, which will detract from your image quality. Decent tripods are not inexpensive but in the end your final result will only be as good as the weakest link in your system. Many photographers have been disappointed in the results from their expensive camera and lens because of the use of a cheap, wobbly tripod that could not support the weight of their equipment and hold their gear steady enough to capture a crisp image.

A tripod head is required to attach your camera/lens to the tripod itself. The most popular models amongst bird photographers are Ball Heads where one lever releases a ‘ball’ to which the camera/lens is attached allowing freedom of movement in any direction. Simply pulling back on the lever locks the camera in the chosen position. With the largest and heaviest camera/lens combinations many bird photographers will use the Wimberley Tripod Head, which perfectly balances the larger lenses making it easy to position. Ball Heads on a tripod tend to keel over if you are not paying attention to the center of gravity of your equipment (and this can cause some significant finger pinching).

Regardless of which tripod head system you go for a quick release system is highly desirable. This includes a plate that is permanently attached to each lens you plan to shoot with (as well as a plate for the camera body for use with shorter lenses). The tripod head will have a clamping system to allow quick attachment and release of your gear from the tripod. The ‘Swiss-Arca’ system is one of the most popular types and most major manufactures will make tripod heads compatible with this system (see links at bottom of article).



Beanbags can be an essential tool to the bird photographer. Whether home made or purchased they are often used on the side door of your car allowing you to use your vehicle as a mobile blind. With your gear steadied on the beanbag you can often approach birds on a fence post like Upland Sandpipers, Wilson’s Snipe or Bobolinks from the comfort of your vehicle. Remember to turn off your engine to reduce vibrations to your equipment before tripping the shutter.

Getting ready for your first outing means being familiar with your equipment.

Reading the manual is highly desirable (if not a little overwhelming). There are many combinations of settings that would work for bird photography each with their own advantages and disadvantages. In future articles we will explore this in more detail but for now I will suggest one such way to set up your system and from these basic settings one can improvise in different situations.

For a basic shoot I have the ISO set to 400. The shooting mode set to Aperture Priority with the aperture set wide open, i.e. the

f-stop is set for as low a number as the lens will allow. This means the lens aperture allows the most light available that it can deliver to the sensor and hence the fastest shutter speed possible for the settings.

Exposure Compensation set to 0 (this will be different in many specialty situations like shooting in the snow).

Drive Mode set to continuous shooting (whatever the highest frame rate your camera is capable of achieving).

Auto Focus point is generally set to the central target point with your initial goal to

place this focus point on the eye of your subject. You should know how your camera allows you to change this focus point to off center to better frame your subject but this will come with time and practice.

Metering Mode is generally set to 'evaluative metering' (Canon) or 'matrix metering' (Nikon) where the camera decides on the best exposure. Again there are many situations where we would choose an alternate setting for metering but for general purpose bird photography this will work quite well.

If you think you have a good shot but realize that you messed up on the exposure (particularly with over exposure) do not automatically discard the image. These are often very salvageable in post processing (unlike in the film days where over exposure was a complete loss). All modern digital cameras have a view screen on the back that will display your image afterwards along with an incredibly useful histogram of your photo. Learning how to use your histogram is critical for ensuring you have a good exposure of your subject. This may warn you that you need to make adjustments in real time (i.e. while your subject is still present).

The last decision to make before you start using your equipment is what image quality to record in to your memory card. Most people will be well served by shooting in a large jpeg format. Here the camera uses its internal protocols to help sharpen, saturate and otherwise adjust your image so little post processing is needed apart from perhaps cropping your image for a more pleasing composition. This format will discard data though according to its protocols to make a smaller sized file. The advantage

is that you will fit more images onto your card but have less leeway to adjust your image in post processing.

For those who take pleasure in the 'tweaking' of your image after the fact on a computer then shooting in the native RAW format is the preferred recording mode. No data is lost, the file sizes are larger but you have greater liberty in adjusting the image, which often will give a superior result compared to the auto rendering of a jpeg by the camera.



Shutter speed
1/160 second

Aperture f5.6

The displayed
image gives
instant feedback
to ensure you
have not cropped
off a vital portion
of the bird

ISO setting 400

RAW format

The histogram provides feedback about exposure. If the RGB graphs are too far to the left then the image is under exposed; too far to the right and over exposed; this image shows an ideal histogram with the bulk of the graph in the centre showing a well exposed image.

The Preview Screen

These parameters let you know if your image capture was successful or if you need to make adjustments in real time.

Suggested web sites that cater to the nature photographer :

- **NatureScapes** – sells equipment, organizes workshops, galleries and forms to share and inspire: <http://www.naturescapes.net>
- **Really Right Stuff** – camera support experts – camera and lens plates, ball heads, tripods and more: <http://reallyrightstuff.com>
- **Kirk Enterprise Solutions** – sells camera/lens plates, tripod heads, tripods and more <http://www.kirkphoto.com>

I have no particular affiliation with any of the above companies and have bought products from all of them over the years and have been impressed with their quality and knowledge.

This article is the first of several on photography and birding. Others will follow in future issues. If you have suggestions for information that you would like to see covered in these articles, please make a request through the OFO News editors.

John Reaume is an OFO member and an avid bird photographer who has had many images published over the last 27 years. His cover shots grace the Ontario Breeding Bird Atlas and the ROM Birds of Ontario Field Guides. Email: reaumejohn@mac.com Website: www.johnreaumepphoto.com



Lake Doré and area field trip participants. Photo: Aaron Hywarren

OFO Convention 2014

By Bob Cermak and Ron Tozer

OFO held its annual convention in Ottawa this year on 26-28 September. Over 230 birders enjoyed beautiful summer-like weather, great birding, excellent food, entertaining presentations and lots of socializing. The convention was enjoyed by all and was an outstanding success.

Thirty-eight trip leaders, mostly from the Ottawa Field-Naturalists' Club (OFNC) but also from OFO, Club Des Ornithologues De L'Outaouais, Pembroke Area Field Naturalists Club, Francophone Far Eastern Ontario Birding Group (Groupe de miroise de l'Est ontarien) and Kingston Field Naturalists led 29 field trips in a wide variety of birding habitats in the Ottawa, Outaouais, Lake Doré, Westmeath, Far Eastern Ontario and Kingston areas.

A strong contingent of young birders attended the convention and enjoyed the field trips, a pizza lunch, and visits to the Innis Point Bird Observatory and the Wild Bird Care Centre. They also attended the Saturday night convention reception, dinner and presentations.

The first OFO Convention in Ottawa in 2006 recorded 138 species during two days. An impressive 151 species were recorded during this year's three-day event. The Ottawa area produced 150 of those species with one additional species (Caspian Tern) found at Kingston. Geese were a favorite feature for many participants, with Snow, Cackling, Greater White-fronted and an apparent Ross's being observed (although the latter was judged to be a Ross's x Lesser Snow

Goose hybrid after subsequent detailed examination of photographs). The 151 species compares favorably with the record high Convention total of 178 species observed at Cobourg and Point Pelee.

The Friday evening Birds and Beers event at the Nepean Sportsplex was well attended and much enjoyed. MC Richard Pope introduced the entertaining and informative presentations. Bruce Di Labio gave a very interesting illustrated overview of birding history and rarities titled Birds of the Ottawa Region. Sarah Rupert (with assistance from Justin Peter) returned again with a fun Bird Quiz in the Jeopardy format that tested our knowledge and memories.

The Saturday evening Banquet and Displays, again at the Nepean Sportsplex, was a great success. The meal featured excellent food and efficient serving staff, both greatly appreciated by attendees. OFO sincerely thanks the many donors of raffle prizes and all who purchased tickets and generously supported the organization. Thanks to Pat Tozer, Claire Nelson and Mike Nelson for selling raffle tickets at the banquet.

Shirley's Bay field trip participants.

Photo: Jamie Spence



Gerry Binsfeld and Glenn Coady had earlier presented the Distinguished Ornithologist Award to Clive Goodwin at his home in Cobourg. They showed a video of this event at the Banquet. They reviewed Clive's many contributions to birding and ornithology in Ontario and discussed their personal experience with using his book *A Bird-Finding Guide to Ontario*, which was an excellent resource long before Google maps and cell phone communication.

The keynote speaker at the Banquet was Chris Earley, interpretive biologist and education coordinator at the University of Guelph's Arboretum. His presentation concerned inspiring and educating people about birds and the environment. Chris is a dynamic and humorous speaker and his talk was very well received.

At the convention we asked for members feedback. Less than 1% of the 61 people who responded were not OFO members and 12% were attending their first convention. Their reasons for attending the convention (multiple choices were encouraged) were fairly evenly distributed: 30% attended to go birding, 27% to learn about new birding locations, 26% to socialize and 18% wanted to improve their birding skills. 95% thought that the number of hikes and workshops were just about right and there were a number of suggestions on how we could improve our hikes, especially those which involve convoying. 88% indicated that the Friday night Birds & Beers program and speakers was just right (94 people enjoyed the lasagna, salad and desert buffet and 164 attended the presentations). 97% indicated that the Saturday night reception and banquet program and speaker were just right. The Board appreciates and will be considering the feedback that was provided.

Mark your calendar now to attend next year's convention on October 2-4 at Point Pelee.

Young Birders Walks

The young birders walks on the convention were a great success

Carlos Barbery



The first walk, with 11 young birders, was to Shirley's Bay. The group first stopped by the woods where a couple of Purple Finches and Pine Siskins were observed through the scope. We then proceeded to the dyke where we observed numerous flocks of waterfowl, a Bald Eagle, and a mixed flock of warblers and vireos. After an excellent morning at Shirley's Bay we then headed to Andrew Hayden Park for a pizza lunch, where we scanned the flocks of Canada Geese for any unusual geese. Following our lunch we headed over to Innis Point Bird Observatory where we were given a banding demonstration and explored the area.

The next day we started out at the Britannia Conservation Area where we walked along the Ridge, around the Filtration Plant and then concluded with a walk through the woods. The number of species here wasn't as great as the previous morning, but we managed to find a Rusty Blackbird, a Winter Wren and two Blue-headed Vireo. The afternoon ended at the Wild Bird Care Centre where we saw a variety of birds in rehabilitation and toured the facility. The species count for all walks was 83 species.

Special Thanks *By Lynne Freeman*

We thank Bob Cermak and Rémy Poulin for all their hard work in organizing the Ottawa OFO Convention, one of the best ever. And thanks to Ron Tozer for once again being the MC at the Banquet. The tremendous contribution of the many trip leaders in finding birds and showing them to participants was a big part of the convention's success, and we appreciate their effort very much.

Book Review

Ten Thousand Birds: Ornithology since Darwin. 2014. Tim Birkhead, Jo Wimpenny & Bob Montgomerie. Princeton University Press, Princeton, New Jersey. Hardcover. 544 pages. 94 color illus. 60 halftones. \$45.00 USD (ISBN: 9780691151977).

Darwin's *The Origin of Species* was published in 1859. Since then, we learn in the preface to *Ten Thousand Birds*, there have been no fewer than 380,000 publications in ornithology. How did the authors of this attractive new book select their topics from so much material? They decided to focus on areas in which ornithologists have contributed not only to ornithology but also to the broader progress of science. For example, in the chapter "Behaviour as Adaptation," it is revealing to consider Dawkins' book *The Selfish Gene* in the larger context of what was transpiring in ornithology at the time

The authors identify eleven topics, which taken together cover much of the history of ornithology since Darwin. They devote one chapter to each topic, as in "Yesterday's Birds," "The Origin and Diversification of Species," "Birds on the Tree of Life," "The Study of Instinct" and "Tomorrow's Birds." Each chapter contains excellent photographs and drawings, timelines of the development of the ideas and a coda summarizing the main ideas and the authors' speculations about the future of the topic. One of the many attractive features of the book is the inclusion at the end of each chapter of brief autobiographies of significant ornithologists. We learn in these autobiographies, for example, that many of the top ornithologists began their careers by watching birds. Each chapter can be read on its own, as a discrete essay. The reader might find it helpful to look up unfamiliar technical terms, e.g. "Modern Synthesis," but most of the terms encountered in the early chapters are revisited and explained in later chapters.

As a birder, I found the chapters "Origin and Diversification of Species" and "Birds on the Tree of Life" particularly interesting. In 1920 there were approximately 20,000 bird species. Lumping of species since then has reduced the number to about 10,000. Currently, however, molecular DNA studies are allowing ornithologists to revisit the question of what constitutes a species, with the outcome of increasing numbers of species. The authors caution, however, that we now know that birds do not always fit the simple notion of what a species is (if anything).

Ornithologists are also studying the relationships among the higher taxonomic categories of birds. We have come a long way from the situation prior to the availability of DNA testing. The authors cite Arthur J. Cain (1959):

Probably more pure nonsense has been talked about phylogeny in birds than in any other group of animals. People have made the most astonishing assumptions about what must be primitive in given groups and what must have given rise to what.

The authors trace Sibley's pioneering DNA work (1990) and his rise and fall from grace. They then describe the use of molecular DNA by Hackett and his collaborators (2008) to resolve, once and for all, the relationships among the higher taxonomic categories of birds.

A particularly informative feature of the book is the presentation of arguments and

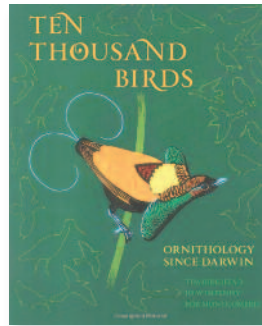
discussions, often in the words of the participants, which took place over the years. In "Population Studies of Birds," the authors describe the battle between David Lack and Wynne-Edwards over the nature of selection. Lack supported individual selection while Wynne-Edwards supported group selection. He argued, for example, that starlings at their roosts were making choices about which individuals would breed. There is an entertaining description of the two protagonists getting together to look for brook saxifrage in the Cairngorms and their pleasure when Lack found a rare Eurasian Wryneck. As with many controversies depicted in the book, the truth about selection lies somewhere between the two extremes, and ornithology has benefited from the arguments and discussions, no matter how acrimonious they sometimes become.

Another attractive feature of *Ten Thousand Birds* is the richness of examples of bird behavior: an Emperor Penguin diving to a depth of 564 meters below the ocean surface; female canaries singing after being injected with testosterone; and some House Finches learning to migrate 30 years after they were introduced into eastern North America.

I highly recommend this book to anyone interested in birds. I suggest reading the preface first. It is packed with interesting information, including the authors' picks of the top ten ornithologists since Darwin and the top ten books on ornithology since Darwin.

The reader can find more information about the book at its website, <http://myriadbirds.com>.

John Black



FOLLOW-UP: Wintering Waterfowl Cindy Cartwright



Dave Milsom and Cindy Cartwright each wrote short articles on the effect of the harsh winter of 2013/2014 on waterbirds, "Wintering Waterfowl Abandon the Great Lakes" and "Waterfowl Grounded in Bruce County", in the October 2014 issue of *OFO News*. The February 2015 issue of *BirdWatching* magazine (formerly *Birder's World*) will be including an informative follow up article on the topic which Ontario birders may want to read.

Photo Quiz

By Willie D'Anna



Photo: Sam Barone

Ducks — the males are beautiful but the females are usually just brown and they all look the same.

That's not my assessment but it is one that I have heard expressed by other birders. Of course it is an over-simplification but there is some truth in it. They usually do have a lot of brown, they can look similar to several other species, and often a scope is necessary to make the identification. However, I do not share the disdain that is implied in the statement above. I think female ducks have their own special beauty, which is amply displayed in this photo quiz. Here in the photo quiz realm, no scope is necessary. We can just sit back, relax, and study the field guide.

Before even reading the opening paragraph, many experienced birders will have already figured out that this is a female dabbling duck, or possibly a male in eclipse plumage. A quick perusal of the field guide indicates that the only diving ducks that show the mottled brown plumage of the quiz bird are the eiders and they are easily ruled out by the short lobes at the base of the bill, as well as the lack of feathering extending down the sides of the bill.

I know it is tempting to use size to quickly eliminate several other possibilities but that should only be done by very experienced birders. Why? Because a lone bird in the field, much more so in a photograph, can be notoriously deceiving when it comes to size. Let's go through the possibilities one at a time. Mallard — the smooth evenly dark bill is not shown by this ubiquitous duck, except on rare occasions. The lack of white on the sides of the tail firmly rules out that species. Mottled Duck and American Black Duck — the plumage of the quiz bird is too pale to be

either of these. Gadwall — this bird lacks the steep forehead typical of that species. In addition note the green speculum on the secondaries, which is never shown by a Gadwall. American and Eurasian Wigeon — the dark eyeline and crown and dark bill are not features of any wigeon. Northern Pintail — like the wigeon, female Pintails are known for relatively uniform plain heads. Shape is an even better way to rule out that species — the quiz bird lacks the long tail and long thin neck that a Pintail would show. Northern Shoveler — the bill shape is a little spatulate, that is, expanding in width near the tip, but it is not nearly the length of a Shoveler's bill, which usually has prominent orange along the cutting edges of the mandibles.

We are left with the smallest dabbling ducks — Cinnamon, Blue-winged, and Green-winged Teal, and Garganey. We can rule out the latter pretty easily as the quiz bird lacks the square-headed look of a Garganey, as well as any hint of white in the supercilium (eyebrow), or any hint of a dark

stripe across the cheek. I have been pretty much ignoring the green speculum and some readers might be wondering if that mark indicates which teal this is. Unfortunately, that feature is not shown by Green-winged Teal alone, as both Blue-winged and Cinnamon Teal can also show a green speculum. One field mark not shown by the quiz bird and which is almost always present on a Green-winged Teal is a contrasting pale buffy or whitish streak on the undertail coverts below the edge of the tail. This is usually the first thing I look for to confirm the identity of a female Green-winged Teal. Not seeing that feature and noting that the bill appears too large, we can whittle our choices down to either Cinnamon or Blue-winged Teal.

Cinnamon Teal is a great rarity in Ontario while Blue-winged Teal is a fairly common though declining breeder in most of the province. Both of these species have longer slightly spatulate bills somewhat like a Northern Shoveler. Both have blue on the upperwing coverts, which keen observers will have noted is present and visible on the quiz bird, just forward of the small white patch. We could have narrowed our choices down much more quickly had we used this character earlier but I chose not to because the wing coverts are often hidden on a swimming teal. The best way to separate these two similar ducks is to study the face pattern. Cinnamon Teal has a plainer face

pattern that does not fit the strong dark eyeline on the quiz bird. It also has a slightly longer more Shoveler-like bill than this and tends to be warmer brown on the face.

*This female **Blue-winged Teal**, displaying its subtle beauty very nicely here, was photographed by Sam Barone at the Prospect Road marsh, just south of the new Carden Alvar Provincial Park, on 26 May 2009.*

Carden Alvar Bluebirds and Swallows

By Herb Furniss

After a cold late spring in 2014, it turned out to be a good year for my Eastern Bluebird nest box trail on the Carden Alvar. I fledged 145 bluebirds so there was no decrease along my Wylie Road and area trail. However, for Tree Swallows, which often compete with bluebirds for boxes, it was another story. There were only two swallow nestings in 2014. As well, I live nearby on the Talbot River beside Lake Simcoe, where my neighbour and I have eight nest boxes and we didn't have any Tree Swallows this year.



OFO News

Editor

Cindy Cartwright
pom@bmts.com

Contributing Editors

Mike Burrell
mike.burrell.on@gmail.com
Willie D'Anna, Photo Quiz
dannapotter@roadrunner.com
Christian Friis
friis.christian@gmail.com
Allen Woodliffe
awoodliffe@hotmail.com

Editorial Assistants

Geoff Carpentier, Jean Iron,
Ron Pittaway and Roger Bird

OFO News Layout and Design

Judie Shore judieshore@bell.net

Articles and notes are welcome. Contributors should check the OFO website under publications for deadlines and submission guidelines.

OFO Website www.ofo.ca

Doug Woods, Coordinator
Email: ofo@ofo.ca

Ontbirds

Mark Cranford – Coordinator
Ontbirds, with over 3000 subscribers, is OFO's successful listserv for reporting rare bird sightings. Now the largest birding listserv in North America, *Ontbirds* has become an integral part of the Ontario birding community. Follow the instructions on the OFO website to subscribe to *Ontbirds*.
Email: ontbirds@ofo.ca

OFO Membership

Annual membership: Canada: \$35.00
For information please contact the OFO Membership Secretary, Mark Cranford: membership@ofo.ca or check our website: www.ofo.ca

Return undelivered mail to:

Ontario Field Ornithologists
PO Box 116 Station F
Toronto ON M4Y 2L4

© OFO Pileated Woodpecker logo is a copyright registered with the Government of Canada. The OFO logo and material published in *OFO News* may not be reproduced without permission.

Publications Mail Agreement Number 40046348
ISSN 1200-1589 © OFO News 2015

Printed by Paragon DPI, Toronto

OFO Convention 2014—Photo Excursion at the Jack Pine Trail. Photo: Nina Stavlund

