

# THE BULLETIN

### NEWS AND VIEWS FROM THE RICHMOND HILL NATURALISTS

January 2010 — No. 486

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Sparkling Violetear - Refugio Paz de las Aves, Ecuador, 2007. Photo by Carol Horner

Ecuador: Astonishing Beauty in a Challenging Land

The Richmond Hill Naturalists are warmly welcoming two very impressive birders/ photographers from the GTA at our next General Meeting on January 21st. Carol Horner and Kevin Seymour will help us shake off January's icy grip with a virtual visit to Ecuador. Bisected by the Andes, Ecuador teems with a hugely diverse array of life in a very small area, making it an excellent destination for naturalists. Carol and Kevin will talk about birding on the east and west slopes, and pramo regions of the Andes, as well as birding in the eastern Amazonian lowlands. Their presentation includes beautiful photographs, not only of birds, but also

plantlife, butterflies and the spectacular scenery of Ecuador.

Carol Horner is a birder and nature photographer. She is a member and former board member of the Pickering Naturalists, as well as former board member of the Ontario Field Ornithologists. Kevin Seymour has been a birder and a naturalist for many years, and is currently President of the Toronto Ornithological Club.

Join us for a tropical evening at Richmond Hill Presbyterian Church, Wallace Hall. 10066 Yonge St., North of Major Mackenzie Dr., West side, on Thursday, 7: 30pm, January 21. Refreshments will be served. Entrance is free.



The Bulletin is published 9 times per year, from September to May inclusive, by the Richmond Hill Naturalists, and is mailed free to members. The Bulletin is the official publication of the Richmond Hill Naturalists, a non-profit organization the objectives of which are to stimulate public interest in natural history and to encourage the preservation of our natural areas.

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Deadlines: The editor encourages submissions from any member on any topic related to nature or conservation, and in particular, any issue that might be of interest or concern to members of this club. e-mail: editor@ rhnaturalists.ca Deadlines are the 2nd Thursday of each

Bulletin Advertisers have been selected because of their relevance to member interests. Members are encouraged to patronize our advertisers and please mention that you saw their ad in our Bulletin.

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## MEMBERSHIP IN RHN

The Membership Application Form, is available at each General Meeting from Mike Turk, or in our club brochure, available from any executive member. You may also sign up or renew by clicking on the Membership link at: www.rhnaturalists.ca

## SAVE A TREE OR THREE Get the Bulletin by Email!

If you have internet access, and are currently getting the Bulletin by "snail mail", please get yourself on the email list. Enjoy the full-colour pictures, clickable links and more.

Please email editor@rhnatu ralists.ca if you would like to receive the Bulletin in your In-Box instead of your Mailbox.



SIGN UP! For Richmond Hill The Richmond Hill Naturalists and community groups such as the DDO Defenders and Observatory Hill Homeowners Association continue to advocate for the complete protection of the David Dunlap Observatory and Park. Please call your local councilor (905-771-8800), write a letter and/or

A Development

buy a sign. Tell Town Council you want LEADERSHIP & ALL Dunlap Parklands protected! If you support the community drive to preserve the entire Dunlap Observatory property, please purchase one of our beautiful lawn signs. Our volunteers will be happy to deliver a sign to your door. Buttons and T-Shirts also available.

## **Coming Events**





- Thursday, January 21, 7:30pm. General Meeting Speakers: Birders/photographers Carol Horner and Kevin Seymour BioDiversity and Birding in Ecuador. The meeting will take place at the Richmond Hill Presbyterian Church, Wallace Hall. 10066 Yonge St., North of Major Mackenzie Dr., West side. For info contact Marianne Yake at 905-883-3047, or visit www.RHNaturalists.ca.
- Sunday, January 24, 2010, 1:30pm 6:00pm. Jim Baillie Memorial Bird Walk: "Gulls and Waterfowl" Sunnyside. Leader: Bob Cumming Meet in the Sunnyside Parking Lot at the foot of Windermere Ave. Dress warmly. 1:30 p.m. Sunset. These outings are aimed at birders of all abilities. Beginners are welcome. Free to the public. Sponsored by the Toronto Ornithological Club.
- Sunday, Jan 31, 2010. Jim Baillie Memorial Bird Walk: "Winter Birds" Durham Region. Leader: Rayfield Pye. Meet at the S.W. cor of the Pickering GO station parking lot (Bayly/Liverpool) to car pool if necessary. Bring a lunch and dress warmly. 9:00 a.m. early p.m. Sponsored by the Toronto Ornothological Club.
- Wednesday, February 10, 2010, 7:30pm: Bird Group Meeting Northern Sawwhet and Boreal Owl hosted by Dana Jonak, 190 Grandview Av. Thornhill. All are welcome. For information call 905-881-0603.
- Thursday, February 18, 7:30pm General Meeting Speaker: Allan Foster Great Nature Stories. Richmond Hill Presbyterian Church, Wallace Hall. 10066 Yonge St., North of Major Mackenzie Dr., West side.
- Saturday, February 27, 2010. The Stewardship Forum is an annual event that provides a venue for learning, information sharing and networking for community based environmental stewardship groups active in the GTA. Details will be posted on the TRCA Events Calendar at http://www.trca.on.ca/events/, or contact Kasey Livingston at 416-661-6600 ext. 5639 for more information.

Please note: Richmond Hill Naturalists welcomes anyone to volunteer as an outing leader. Contact trips@rhnaturalists.ca if you would like to organize or promote an outing.



## A Bird in the Hand

Richmond Hill Naturalist
Theresa McKenzie describes
her experience with Bird
Immersion - volunteering at
the Tommy Thompson Park
Bird Research Station.
The highlight of my 2009 turned

out to be getting the opportunity to join the volunteer team at the Tommy Thompson Park Bird

Research Station. Tommy
Thompson Park is located
on the landfill extending
south and west from the
southern end of Leslie St.
at the lake, commonly
referred to as the Leslie
St. spit.

I'm somewhere in the intermediate range as far as bird ID skills go and figured this would be a great way to accelerate my progress, while contributing to science. Since I work full time, I was able to do just the minimum volunteer

commitment of two days a week, though I would have loved to have done more.

As many of you know, the Toronto and Region Conservation Authority operated banding station at the spit is one of several across Canada that make up the Canadian Migration Monitoring Network. Data is compiled from all of them into a single database by Bird Studies Canada, making it possible to look for trends in year to year populations and in migration condition for species that are sufficiently well sampled. In addition, the same protocols are followed at stations located in the U.S. and data is shared across North America. Recaptures of banded birds are fairly rare, and occur most frequently at the station that banded the bird, but when these do occur, it provides an opportunity to investigate how quickly a bird is able to build up fat for migration.

Up before the sun
Monitoring is carried out during the
spring and fall migration periods,
from the beginning of April through
mid-June and then mid-August
through mid-November. For the
single staff person (the licensed
bander, Brett Tryon) and the
volunteer team, the day begins 40
minutes to an hour before sunrise.



Banding Station, Tommy Thompson Park 2009. Photo by Glenn Reed

with 15 mist nets distributed throughout the study area to be prepared for opening by 30 min. before sunrise. Birders are used to rising early, but with the 32 min. drive from Oak Ridges, for me this meant getting up as early as 3:30 am. Nets are open for 6 hours, making for an 8 to 9 hour day in total.

Excitement builds as you begin to hear the birds waking up while setting up, and you wonder what you'll get in the nets that day. In the spring we'd often get a glimpse of an American woodcock on the trail before sunrise while listening to the robins, then as it got a little lighter we'd see a scarlet tanager or two and begin hearing the Baltimore orioles and the warblers. In the fall we'd be on the lookout for owls, and I had several good sightings of Northern saw whets and one Long-eared Owl. I also saw my first Whip-poor-will, a

female that roosted close enough to a trail that we were able to get good looks without disturbing her. I had the chance to see all of our thrushes and several warbler species of both sexes and multiple ages up close, to get lots of practice with song ID, and to work on figuring out species in the fall by chip note alone. I also heard the Whimbrels going through the third

weekend of May, although we were busy on a net run and couldn't rush out to the shore to see them.

Once the nets are open, trained volunteers check them every 30 minutes, extracting any captured birds and transporting them back to the banding lab. There, "processing" includes applying a uniquely numbered CWS band to the leg, recording the species, the age class and sex where possible, measuring the wing chord length, the weight (in grams), and

visually estimating the amount of stored fat, which is done by comparing the amount of visible fat contained in pockets under the skin to a coded chart.



Magnolia Warbler, Tommy Thompson Park. Photo by Glenn Reed

Sexing and Aging Birds
In the spring birds are aged as second year (SY) or after second year (ASY), usually based on plumage. In the fall, the designations are hatch year (HY) or after hatch year (AHY), again perhaps based on plumage, but also with the aid of "skulling", where a close look at the bird's skull through the skin shows up areas where a second layer of skull has not yet formed in HY birds. It isn't possible to tell the actual ago the adults.

actual age the adults. Sexing is possible for many species, but not all. In the spring, sometimes a brood patch (area of the breast where feathers are lost to facilitate transferring warmth to the eggs while brooding) or a cloacal protuberance on a male will allow the sexing of an individual in a species without differing male/female plumage Brood patches are helpful in sexing only species for which only one sex

female. In some species both brood and both develop the patches.

A volunteer records the data as birds are processed. Other volunteer jobs include conducting a one hour census, wherein the same route is walked an hour after sunrise each day and every bird seen or heard is identified and species counts recorded. At each of two, three and four hours after sunrise a 10 minute point is conducted at specified stations, similarly recording all individuals seen or heard from the stationary point.

Herpetological Interventions
The spit is an interesting mix of
natural and cultural habitats.
While not natural in origin,
having been constructed entirely
from "clean" fill, it extends for 10
km. and now provides

naturalized vegetation and habitat for many resident species. It is also one of the few remaining sizeable stopover habitat patches for migrating birds along the GTA stretch of the Lake Ontario shore. Various restoration projects by TRCA have created native habitats along with structures designed to assist in conserving declining species, while naturalized vegetation contains a large proportion of exotic species brought in as seeds in the fill or



writch only one sex develops them, usually the Black-Throated Green Warbler, Tommy Thompson Park. Photo by Glenn predator forces and the sex develops them.

arriving later. Native species that are very rare in the region are also represented, including at

least two species of orchid. Landfill provides an excellent habitat for snakes with all the protected cavities it contains. We happened upon a "mating ball" containing a huge number of garter snakes last April. We learned that they begin mating "en masse" as they emerge from their winter hibernaculum. Not realizing what they were doing at first, my husband picked up a melanistic (black) garter to have a closer look at it. Upon noticing that it was attached to another snake at the vent, he quickly said "sorry" and dropped it, which made me laugh. I'm sure the snake appreciated the

apology!

Dumping zone for unwanted wildlife

The spit appears to have become a favoured drop off spot for species not wanted in urban subdivisions. One morning I counted 35 raccoons milling around the park gate as I waited for other people to arrive. And guess where that white-tailed deer they tazered in the city a couple of months ago ended up? There's lots of evidence of

beavers, with downed trees obstructing trials and occasionally even the net lanes. They favour the native tree species unfortunately, rarely going for the multitude of European birch available around the banding station. Mink, while native of course, and a species of concern within the urban parts of Toronto, are a challenge for us if they find the nets. The predator forces either

half or full closing of nets, since it is our job to observe while avoiding any impact on natural processes.



Fall Blackpoll Warbler photo by Theresa McKenzie

A bird in the hand...
The chance to see many bird species in the hand was a great experience that helped my identification skills immensely. Having a good look at a species

Continued Page 6...

in the hand seemed to cement it into my brain so that the next time I saw one in the field I nailed the ID much more quickly.

During the fall I conducted the census several times. I really felt the pressure not to miss anything, but of course that's virtually impossible when you're trying to count every bird while the wind is blowing, planes are taking off from the island airport every several minutes, and you have to keep moving (plus of course, I'm still learning). Some days were quiet but on a good day my brain was hurting by the end. And of course those drab



Orange-Crowned Warbler, Tommy Thompson Park 2009. Photo by Glenn Reed

fall warblers tortured me.

Someone quoted a line that I could really relate to ... "First I couldn't see it, and then it vanished!" But now, I can tell a first fall female Blackpoll warbler from a similar age/sex Baybreasted so progress is happening! I was also pretty pleased to get to the point where I could pick out the Hermit thrushes by their quiet little "chuck" on a windy day.

Since I spent a lot of time recording for the bander (and observing) I only began learning to extract the birds from nets

toward the end. First you learn the correct way to hold birds (in the bander's grip and the photographer's grip). I had lots of practice with those, but graduating to extracting is a big step. Of course, once this was my focus most of the birds were caught while I was away doing the census, as dictated by Murphy's Law. For me, this is the hardest part to learn. Manual dexterity is not my forte, and extreme care is required to ensure that the bird is handled safely. My trainers have been very patient so far. Hopefully next spring I'll get to the point of being able to do that on my own.

#### Hooked!

Visitors are welcomed at the station when the park is open (9-5 on weekends and holidays). The best time to come is fairly early, since the catch slows down later in the morning. The banding station is located about 3km. in from the park entrance. A gravel driveway signed for the sailing club accesses the banding station as well. A shuttle bus operates from June through Thanksgiving, but don't count on it in early May. A bicycle is the best way to get to the station from the park entrance, or even better, cover the whole length of the spit. You can observe the bander at work and walk the main trails. The net lanes are out of bounds since having people too close impacts the results. Volunteers have to observe the same rule, going to the nets only while on a net round.

I plan to continue there next year. Stop by and say hi if you're birding down that way.

Theresa McKenzie





Visit ValerieKent.Com

Got a few great pictures? Please send your nature and club photos to editor@rhnaturalists.ca



# A World's First -- a Pollinator Park in Guelph

### by Deb Chute

The rights of bees and other pollinators are being recognized in Guelph. These little insects have the power to influence 70% of our food supply according to Pollination Canada/Seeds of Diversity literature.

On December 13, 2009, Marianne Yake, Natalie Helferty, Alice Kong (The North American Native Plant Society) and myself were treated to an insightful visit in Guelph with Vicki Beard, who is working to spearhead the formation of this Pollinator Park in Guelph. It will be a first for the

world and a model for other municipalities to emulate. Dare we dream of this for the meadows of the David Dunlap Observatory?

This park is the project of "Pollination Guelph" in partnership with the City of Guelph. Pollination Guelph is a federally incorporated, nonprofit organization run by an enthusiastic volunteer Board of Directors. It represents educational, research, governmental,

environmental and business interests. Their goal is to enhance and preserve habitat for pollinators. They also educate on the often overlooked role of pollinators. Visit their site at www.pollinationguelph.ca

Vicki Beard, a Guelph councilor and Vice Chairperson of "Pollination Guelph", took us on a tour of the 112 acre decommissioned Eastview Landfill site which will become the welcome home for declining pollinator populations. Although just a barren windswept piece of land at this time of the year, it will become a flourishing meadow with forbes, grasses, and flowering plants. It is also slated to contain a large variety of habitat requirements – from dead wood to sandy soil to rocky piles.

In the spring of 2010, a 1.5 hectare demonstration plot will be started by Natvik Ecological, an ecological restoration company in Guelph. It is planned to be in view of a new housing development right across the road.

Under the direction of the University of Guelph, pollinator monitoring is already underway. It will determine the number and kinds of pollinators with the goal of showing how this will change as the park progresses. We can check back in the spring for a species list.



Vicki Beard, Guelph Ward 2 Councillor, envisioning the future Pollinator Park. Photo by Deb Chute

A botanical inventory has also been completed for the site. Natives such as goldenrods and asters are already present and attracting lots of pollinators as are Evening Primrose, Black-eyed Susans and Common Milkweed.

\*Pollination Guelph" encourages citizens to plant pollinator-friendly gardens. Its board Vice-Chair, Vicki Beard, definitely practices what she preaches. Vicki treated us to a tour of her extensive backyard garden. It is a recent recipient of the North American Native Plant Society's Native Garden Award, 2009. We came home with seeds galore for our own native gardening attempts.

## **Book Review**

American Earth: Environmental writing since Thoreau

Edited by Bill McKibben

1025 pages

Penguin Books

Since his first book, "The End of Nature", published in 1989, Bill McKibben has been sounding alarms - and offering constructive solutions - to the environmental crises facing the modern era. In spite of his dire warnings and unflinching conviction that humans have fundamentally changed the natural world forever, he continues to argue optimistically that people can thrive in new communities if our culture of mass consumption and the politics of growth-at-all-costs can be held in check.

American Earth: Environmental writing since Thoreau is a captivating anthology of American environmental writing, demonstrating that environmental writing has been a significant force in American literature for nearly two centuries.

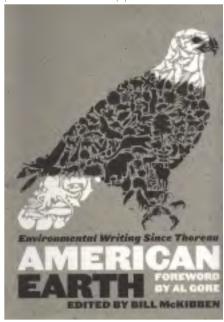
Featuring more than 100 works from essays to art, the book begins with Henry David Thoreau's 1837 journal entries and continues with gamechanging texts from Rachel Carson and Al Gore. Along the way McKibben introduces readers to a hundred other voices, including songs from Joni Mitchell and Marvin Gaye, essays from E.B White and Alice Walker, key presidential speeches, independent thinkers like Buckminster Fuller and many others.

With their words, McKibben argues, the environmentalist movement has won many great battles – such as the protection

of hundreds of thousands of acres of habitat, the banning of DDT and other toxic chemicals and stricter regulations protecting air and water.

The book is both accessible and useful. The writings are arranged chronologically with introductions that embed them in the context of the time and unite them into a cohesive tapestry.

40 pages of color and black and while photographs taken from books, paintings, newspapers, editorial cartoons and posters enhance and illustrate the texts. A 30-page chronology of key environmental milestones is also provided as an appendix.



McKibben deliberately ends with with a piece by Rebecca Solnit, entitled "The Thoreau Problem", an essay challenging the conventional view that Thoreau's two-year experiment living in a cabin on Walden Pond was a mere escape from civilization, a flight from the "real" world to the natural. Solnit point out that the experiment was of far greater import than one man's personal escape from civilization.

Thoreau describes meeting and guiding runaway slaves through the woods toward freedom; he hosted a meeting of the "Concord Female Anti-Slavery Society at his Walden Pond hut. During his experiment Thoreau spent a night in jail for refusing to pay taxes which supported the Mexican-American War and slavery. Solnit objects to the compartmentalization of Thoreau, a reluctance to understand his love of nature and his social/political conscience as a unified force within the man. For her, the Throreau "problem" is a microcosm of a "larger partition in American thought". She writes: "Those who deny that nature and culture, landscape and politics, the city and the country are inextricably fused have undermined the connections for all of us".

For the many naturalists who profess little interest in environmental issues, Solnit makes an important point: that we can not afford to leave our political and social consciences behind when we venture into the forest. When Frank Chapman devised the first Christmas Bird Count, it was conceived in part as a political act -- a peaceful rebellion against the lethal excesses of the Christmas "Side Hunt". Small acts such as planting a tree in an urban park or bigger ones such as trying to preserve David Dunlap Observatory or a larger tract of the Boreal forest are just a few of the ways we reconnect "nature and culture, landscape and politics, the city and the country". In American Earth, Mckibben has assembled a timeless collection of writing that teaches how such connections are possible and why they are necessary.

-- Rod Potter

## **Astronomy**

Coppery Mars makes closest approach this month

### by Heide DeBond

Mars is the most fascinating object to watch this January and February as Earth passes between Mars and the Sun on January 29th. This is called "opposition" and occurs on average every 780 days. Mars will be almost due south close to midnight and easy to find with its coppery hue. Closest approach is on 27th Jan at a distance of nearly 100 million kilometres when Mars' magnitude will be -1.3.

The word planet is derived from the Greek 'planetes' meaning 'wanderer'. As we watch them over time, planets seem to speed up and slow down during their journeys and at times appear to loop back and forth relative to the stars. At times a planet's eastward motion relative to the stars stops and then appears to move westward in the sky for a month or two before reversing and continuing on its eastward journey. It's just a cosmic optical illusion as the

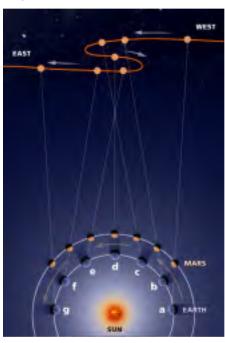




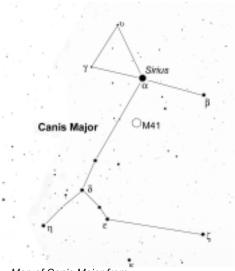
illustration and photograph on this page shows.

Keep watching our website (astro.rhnaturalists.ca) for information on speakers' nights and observing sessions in January. We will be providing Mars observing opportunities at the end of January.

Orion's Faithful Dog Last month we looked at the constellation Orion, the Mighty Hunter. Now we will look at Orion's faithful Dog - Canis Major. According to an early Greek myth, Canis was a gift of the dawn goddess Aurora to Cephalus, hunter and Sun symbol. In honour of its great speed, Zeus placed the dog in the heavens. Arabians called Canis Major Al Kalb al Akbar or Greater Dog, and also Al Kalb al Jabbar, "The Dog of The Giant".

Canis Major is approximately 20 degrees (less than the distance from the tip of your little finger to your thumb) from the three belt stars of Orion. The brightest star 'Sirius' or 'Alpha Canis Majoris' has the greatest apparent brightness of any star that we can see. Its name was derived from the Greek 'seirios' or 'scorching'. Early Hindus knew Sirius as Sukra or the Rain God. Sirius was extensively worshipped in Northern Egypt where its

appearance heralded the flooding of the Nile which was supremely important to Egyptian farmers. Sirius is a white-hot hydrogen star with a mass of 2.35 solar masses. Its radius is only 1.8 times our sun and is at a distance of 8.7 light years (1 light year = 1



Map of Canis Major from http://www.jb.man.ac.uk/astronomy/nightsky/AList/CanisMajor.jpg

trillion km).

In 1862, American telescope builder Alvan Clark turned his new 18.5 inch telescope at Sirius and confirmed a companion star, as predicted by Friedrich W. Bessel in 1834. Sirius A and Sirius B (\* The Pup") complete their orbit around a centre of mass every fifty years and are separated from each other by a distance of 20 astronomical units (distance from Sun to the Earth). Further research has revealed that Sirius B's temperature is 1.5 times that of the Sun and radiates more than 5 times as much energy per square foot as the Sun. Sirius B's mass is nearly equal to the Sun and its radius is only 5% of the Sun's radius, it must be unbelievably compressed. A cubic foot of this star's material has a mass

of nearly 35,000 tons.

Another star in the constellation Canis Major is Murzim or Beta Canis Majoris which is found just slightly to the bottom right of Sirius. It is sometimes called Murzim or 'The Announcer' for when Murzim rises, Sirius soon appears. Murzim is a bright variable star approximately 500 light years distant.

Astronats Website:

http://astro.rhnaturalists.ca/



Open Star Cluster M41

## **Christmas Bird Count**

#### by Gene Denzel

The weather was relatively kind for the annual Christmas Bird Count, held on Saturday 19 October 2009. During the day more than 40 people working in eight groups covered the territory in our 12.1 km diameter circle (centered at Yonge and Stouffville Road). The groups were led by: Theo Hofmann, Theresa McKenzie and Glenn Reed, Bruce Brydon, Tom Waechter, Graham Leonard. Michael White, and Gene Denzel. In addition to the regulars from past years, there were a number

of new participants. While the teams were canvassing their areas, there were also a number of people who volunteered to observe the birds coming to their backyard feeders for some portion of the day. When all was done and reported at the Chili Supper hosted by Joe Agg and his wife that evening, we had counted almost 5800 birds in 50 species. In addition there were a couple of other species observed during the 3 days before and after the 19th (termed 'countweek species')

Among the species observed

were a few which had not been reported often in the many years the Richmond Hill Naturalists have been doing this count. Theo Hofmann is going to write up a historical comparison for the next issue of the Bulletin.

The data from our count is, along with the results from the 2000+ other counts, put into a database maintained by the Audubon Society. This allows scientists to track the distribution of various species over the 109 year history of the counts.



# **Christmas Bird Count participant?**

When she noticed the local chickadees were making a racket, RH Naturalist Diana Piche and Project Feederwatch participant was astonished and thrilled to find this Long-Eared Owl carefully observing the little birds at her back yard feeder in Richmond Hill. The date was December 12 so the owl was just a few days too early to be part of the official CBC results.

