

DW^{The} Wood Duck

Volume 65 Number 2

October, 2011



The four breeding records for American White Pelicans in Ontario are colonies on islands in Lake Nipigon, Lake of the Woods Provincial Park, James Bay, and Lake Superior. At times they can be seen around Hamilton as they migrate to or from their wintering grounds.

Photo by Mark Greathead taken near the Grand River, Brantford, April 22, 2011.

Publications Committee: Rob Dobos, Bill Lamond, Diane Green, Don McLean, Michael Fischer, Kelly Pike, Jean Stollard, Susan Doka, and Kevin McLaughlin.

The *Wood Duck* is the official publication of the HNC and produced by volunteer members of the Club. It is published nine times a year from September to May, inclusive. Deadline for receipt of material is the 12th of the month preceding publication date. Articles may be reprinted without permission but credit lines must be included and unless otherwise specified. Opinions expressed in the *Wood Duck* are those of the author and do not necessarily reflect those of the editor or of the Hamilton Naturalists' Club. The Hamilton Naturalists' Club promotes public interest in the study, conservation and appreciation of our natural heritage. Meetings are held monthly September to May inclusive and field events are scheduled throughout the year. Visitors are welcome. The HNC is a registered charity and all donations as well as membership fees are tax deductible.

HNC BOARD 2011-12

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MEMBERSHIP FEES – Please remit to The Membership Director, Hamilton Naturalist Club P.O.Box 89052, Hamilton, ON, L9S 4R5		HNC PUBLICATIONS - To order contact Alf Senior 905 527 0905 or senioralfred@yahoo.ca	
Life Membership	\$ 750	Hamilton Nature Counts 2003	\$ 75
Single Membership	35	Checklist of the Birds of Ham./Wentworth	2
Senior Single Membership	30	Date Guide to Birds of Ham./Wentworth	1
Student Single Membership	30	Naturally Hamilton – Guide to Green Spaces	free
Senior Joint Membership	35	Head-of-the-Lake Pocket Nature Guide	8
Student Joint Membership	35	The Habitats of Hamilton and Halton Poster	4
Family Membership	40	A Monthly Guide to Nature and Conservation	5
Junior Naturalists – 1 st child	65	Hamilton Mammal Atlas	15
Junior Nats – additional children	55	Birds of Hamilton and Surrounding Areas	45
Honorary Life Member	none	Reptiles and Amphibians of Ham. Area; check local libraries	

President's Report

by Bill Lamond

This was another successful year for the HNC. The Nature Counts II project with the City of Hamilton is going a bit more slowly than we had hoped, but it is moving along and much field work was completed in 2011. There have been some problems in obtaining the necessary funding for this project but we will eventually secure the funding. No matter, the project may have to be extended a year or two.

The Head-of-the-Lake Land Trust/Sanctuary Committee is getting more and more involved with land conservation issues. We have been approached a few times this year about conservation easements. Unfortunately, our potential acquisition of a new sanctuary in the Beverly Swamp fell through. This was most disappointing as it was almost looking like a "done deal". The landowner had second thoughts about selling at this time but we hope he will consider us in the future. This property may yet be an HNC sanctuary!

Any money that was raised for this purchase will be used to fund the purchase of another HNC sanctuary, surely in the near future.

I hope all of you were impressed with the look of the September *Wood Duck*. New Editor Herman van Barneveld did a superb job in bringing forth a colour *Wood Duck* to highlight the 50th anniversary of our Spooky Hollow Sanctuary acquisition. We are very optimistic that, come the New Year, all *Wood Duck* issues will look like our September issue. We just have to secure a constant source of funding for the extra cost of a colour *Wood Duck*. This we will do, I am sure.

Past President's Report

by Jim Stollard

I have enjoyed a busy third year as Past President (PP), but now will be stepping down from the HNC Board after 9 years of service as Treasurer, President and Past President.

Once again I supervised the Volunteer of the Year selection process. We have selected some very deserving award winners whose accomplishments will be celebrated when the Volunteer of the Year Awards are presented at the November 14th Monthly Meeting.

Another important duty of the PP is to chair the Nominating Committee which proposes a slate of members to become the incoming Board of Directors for the next year. This slate is elected by a vote of the members present at the October Annual General Meeting (AGM).

Our Club's bylaw calls for proposed Board members to be nominated by contacting the Nominating Committee at least two weeks prior to the AGM. Accordingly, a notice of positions available on the Board was published in the September *Wood Duck* and in the Club's August E-Newsletter. This year's

My time as HNC President is coming to an end in very short order. At the October meeting, the "reins of power" will be handed over to Vice President Michael Fischer who, I think, will make a fine President for the HNC, with all his time spent with Sanctuary Committee and the Head-of-the-Lake Land Trust as proof.

It has been a privilege for me to serve as President of this wonderful organization for the last three years. When I accepted the position it was a bit daunting, as I thought it would be impossible for me to live up to the standards set by so many of our Presidents through the years. I hesitate to name them for fear of leaving some out, but many of you know of whom I speak. I thank all of the members of the Board during my term, as everyone was helpful when help was requested. I especially want to thank Past President Jim Stollard who was most helpful to me and to the rest of the Board, with his tireless work in making sure that things were done right and carried through to the end.

Of course I'm not going anywhere soon. I will still be Past President and I plan to become more involved with the Sanctuary Committee/Land Trust. I urge all of you to become active with the Club and all that it does. We can always use more volunteers. I have found that volunteering my time for the Club has been very enriching for me and I can't think of a better legacy for my children and for all those who will come after.

Nominating Committee consisted of Elaine Serena, Jean Stollard and I. The committee has contacted many club members as we worked to recruit a new Vice President and to replace retiring directors Diane Green and Jean Stollard. We thank the incoming directors who have agreed to join the Board and help run our club.

I continue to lead the Club's participation in the Nature Counts Two Natural Areas Inventory (NAI) of the City of Hamilton. The NAI continues to be plagued by a funding shortfall; however, thanks to grants from the Ontario Trillium Foundation, the Salamander Foundation, the McLean Foundation and the Ontario Ministry of Natural Resources Species at Risk Stewardship Fund, we have a reduced but able team working in the field. The team consists of NAI Coordinator Tawnia Martel, GIS/Database Technician John Butcher, Contract Ornithologist Bob Curry, Contract Botanist Anthony Goodban and Ecological Land Classification Technicians Nicholas Schwetz, Maegan Wardell and Juliana Lopez.

The Sanctuary Land Trust Committee and the Conservation Committee are two very important activities in our Club. I have attended a number of meetings of both to help with land securement as well as natural area protection. I took a particular interest in the fight to add the Feeder Area to the Eramosa Karst Conservation Area and am pleased that Hamilton has designated the area as open space to prevent development and that the province appears to be in the final stages of giving the area permanent protection.

Report of Director-at-Large

by Gord McNulty

An active year of speaking up for the environment produced some encouraging results and room for optimism from my perspective. Progress toward the protection of the Eramosa Karst feeder lands was the highlight. On February 1, Terry Carleton and I represented the HNC at the City of Hamilton Planning Committee to bolster the HNC's letter in support of the City of Hamilton's proposal, subsequently confirmed by city council, to designate the feeder lands as open space.

I attended the fourth annual Friends of the Eramosa Karst dinner dance on March 5. It was a huge success, being attended by more than 400 people. I was manning a display table for the HNC as well as collecting signatures for Ontario Nature's Biodiversity Charter campaign. A breakthrough finally came later in March when the province announced it would not appeal the open space designation and would work with the Hamilton Conservation Authority to protect the feeder lands from development.

Much of my focus involved the proverbial "elephant in the room" for the environment in southern Ontario: the Niagara to GTA Corridor. In May, I drafted and submitted a detailed letter to the NGTA Study Team, signed by HNC President Bill Lamond, on behalf of the HNC. The letter (a) applauded the shelving of the proposed "Mid-Pen" connection from Fort Erie to Highway 403; (b) opposed proposed corridor routes between Highway 403 and 407 ETR and from 403 to Highway 401, because of the serious environmental impact on the Niagara Escarpment and the Beverly Swamp, and because it would promote urban sprawl; and (3) opposed the idea of widening 403

In all my efforts over the last nine years, I had much help from other Board and club members. I thank everyone who assisted me over those years. I urge you to become involved in our Club's committees, projects, and Board of Directors to learn more about nature in the Hamilton/Burlington area and to help our Club adapt to all of the challenges facing us including climate change and a growing urbanization.

through Hamilton, because of the impact on Cootes Paradise Marsh and the RBG. The letter urged an acceleration of GO Transit's promising expansion plans for Hamilton and Niagara.

On June 6, Gerten Basom and I outlined the HNC's position on the corridor to the City of Hamilton's General Issues Committee and urged the City to consult with the public - not just the corporate community - before reconfirming the City's support of a full-fledged corridor from Fort Erie to the GTA. We knew it would be an uphill fight as City Council had been under pressure from powerful pro-corridor forces, including the Hamilton Chamber of Commerce, the Hamilton International Airport, the Southern Ontario Gateway Council, and others.

To our disappointment, city council later reconfirmed its support for a full corridor, albeit with a caveat that it not pass through Flamborough or North Burlington, by 11-3, with two absent. Those opposing the full corridor were Mayor Bob Bratina and Councillors Brian McHattie and Brenda Johnson. I also submitted the HNC's views to the City of Burlington. On the positive side, Burlington and Halton continue to oppose the Corridor. Transportation Minister Kathleen Wynne appeared in July to rule out any route crossing the escarpment. We can't let our guard down. Much uncertainty and worry remains about the corridor, the various routes, and what effect the provincial elections may have.

As Ontario Nature representative for the HNC, I will continue to work with Ontario Nature to reinforce its support for our position on the corridor, as shown at the Ontario Nature 80th AGM in June. I thank my fellow directors for their help and support. I look forward to another rewarding year.

Treasurer's Report

by Jim Heslop

The past year has seen the usual wide range of activities from club members. They worked on preserving local flora and fauna, they did substantial work at the club sanctuaries, and can look back to accomplishments in land trust securement. Enough so that your Treasurer has had to scramble to keep up with it all! It gave me great pleasure to write

a journal entry to add the new Amaolo Nature Sanctuary to the club assets. Significant donations were received in two areas this year. The campaign to ensure the proper maintenance of the club sanctuaries in perpetuity was very successful. Donations through the club and directed to the Hamilton Community Foundation caused the Habitat Preservation Fund to grow by \$33,789. And

again this year a sizable donation was made to the Anita Dutka-Buchin Memorial Trust which is earmarked for a Wild Lands Acquisition Fund future purchase.

So, The Hamilton Naturalists' Club remains a vibrantly healthy organization with a healthy balance sheet. The audited Club's Financial Statements and Auditor's Report will be printed in the *Wood Duck* and posted to the club website. A more detailed report will be part of the October 3 Annual General Meeting. The continuing generosity of club members remains a critical component of the club finances, as your donations make possible our many and varied activities. The cost of meeting rooms,

printing, postage and administrative costs continues to grow to such a degree that we may have to dip into contingency reserves in the coming year. So, if you are contemplating donating to the club, earmarking a portion to the General Fund would be very helpful and much appreciated.

Again this year I would like to give a "shout out" to Marion Fletcher, our club volunteer Bookkeeper, for a great job in maintaining the HNC financial books of record. Also, I would like to thank Jim Stollard for standing in for me at the AGM while I was off on a birding trip.

Membership Director's Report

by Jean Stollard, Membership Director

During the 2010 – 2011 season, the HNC welcomed 26 new members. At present we have approximately 611 members based on 441 memberships. We also mail Wood Ducks to 59 non-members, consisting of libraries and other Clubs, which also share their newsletters and journals with us. These publications are displayed on a table at our monthly meetings and can be taken home to read at your leisure. The reason for the total number of members being only an approximation is that, while our database program automatically lists single memberships as one member and joint memberships as two, family memberships present a problem because they are also listed as two unless I enter the number of children who are part of the family. Since I don't always have this information, we likely have more members than the 611 counted by the database. If you are renewing a family membership, please write in the names of your children or

whoever else is part of the membership so that I can enter the correct number and get a better handle on just how many members we have.

I have enjoyed being Membership Director this year, and my thanks goes to those who helped out at the table or in other ways: Elaine Serena, Shirley Klement, June Franchetto, Michael Fischer, and, as always, my husband, Jim.

Please remember the importance of renewing early, so that you won't miss any issues of the *Wood Duck*. If you haven't renewed by the beginning of November, unfortunately, the November issue of the *Wood Duck* will be your last. You may renew at the monthly meetings and the Bird Study Group by visiting the Membership table or by PayPal.

Proposed Revisions to HNC Bylaw No. 1 Dated June 3, 2001

By Jim Stollard

The Board of Directors is proposing two changes to Hamilton Naturalists' Club Bylaw No. 1 which is the document that details the rules governing the operations of our Club. The first change in wording will allow us to discontinue publishing the Audited Annual Financial Statements of the Club in the *Wood Duck* newsletter. The second change, which is a change to the Club's dissolution clause, will allow the Club to continue to receive ecological gifts of property under the Environment Canada Ecological Gifts Program. These revisions will be presented for approval at this year's October 3, 2011 Annual General Meeting.

Publishing Audited Annual Financial Statements (AAFS) in the Wood Duck

The AAFS have grown substantially in size over the years and are now some 10 pages long. Published at normal size, they would take up much of the September issue of the *Wood Duck* leaving inadequate space for other needed articles and information. In recent years, the *Wood Duck* Editor has published the AAFS at reduced size, fitting in 4 pages of the statements on a single page of the newsletter. This reduced the space needed to two and half pages; however, the print was so small as to be nearly unreadable, even by a person with normal vision. Also, in recent years, we have posted the latest AAFS on the HNC website where they are accessible to all members with internet access. In addition, we always have printed copies of the AAFS available at the membership table during the October Annual General Meeting (AGM) and, at any time, a copy of the latest AAFS is available to any member who makes a request to the HNC Treasurer.

Furthermore, the Treasurer presents a more detailed report on the Club's financial position than is contained in the AAFS, at the October AGM.

The Board believes that the website and printed copy availability of the AAFS plus the annual Treasurer's report at the AGM give a proper reporting to the members of the Club's financial status and that it is no longer necessary to include the AAFS in the September Wood Duck.

The proposal is to change Section 6, The Treasurer, item c of the HNC Bylaw No. 1 which reads:

"be responsible each year for presentation of the audited Statements of the Club, following the annual audit, in the September issue of the Wood Duck, and at the Annual Meeting."

and to replace it with the following wording:

"be responsible each year for presentation of the Audited Annual Financial Statements of the Club, following the annual audit, on the Club internet website and at the Annual Meeting. The Treasurer shall make a printed copy of the current Audited Annual Financial Statements of the Club available to any member who requests a copy."

Revision to the Dissolution Clause

Environment Canada's Ecological Gifts Program (EGP) allows landowners to receive a charitable income tax deduction for the value of ecologically significant land which they donate to an eligible Ecological Gifts Program recipient (such as a land trust like the HNC). Recently, personnel at the EGP became concerned that the dissolution clause in the bylaws or letters patent of most land trusts was inadequate to ensure that the ecologically significant land gifts would be properly protected in the event that the organization was dissolved. The HNC was contacted and informed that our dissolution clause would have to be revised for the Club to continue to be an eligible EGP recipient.

As the HNC wishes to continue to be eligible to receive ecological gifts of land, the Board is proposing to change Section 12, Dissolution, of the HNC Bylaw No.1. The current wording which reads:

"The Directors are empowered to dissolve and wind up the Club and surrender the Letters Patent, or Charter, when, and if, the total membership of the Club, including the Directors and Officers, should fall below fifty (50)."

The Club shall use its funds only to accomplish the objects and purposes specified in these By-laws, and no part of said funds shall inure to be distributed to the members of the Club.

On dissolution of the Club, assets remaining shall be distributed as stipulated in Supplementary Letters Patent."

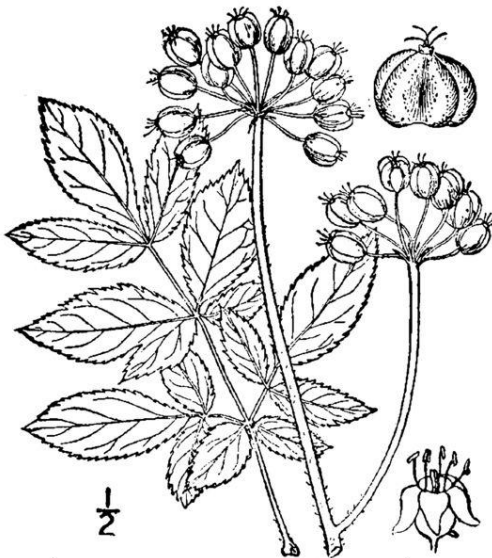
will be replaced with the following wording:

"The directors are empowered to dissolve and wind up the Club and surrender the Letters Patent, or Charter, when, and if, the total membership of the Club, including the Directors and Officers, should fall below fifty (50)."

The Club shall use its funds only to accomplish the objects and purposes specified in these By-laws, and no part of the said funds shall inure to be distributed to the members of the Club.

On dissolution of the Club, all ecological gifts received by the Club under the Environment Canada Ecological Gifts Program shall be distributed to one or more eligible Environment Canada Ecological Gifts Program recipients in the Province of Ontario before or separate from any payments of the Club's debts. All assets of the Club, other than ecological gifts, shall be distributed as stipulated in the governing dissolution clause found in the Club's Supplementary Letters Patent."

The Board believes that these changes to our Bylaw No. 1 are necessary and are in the best interests of the Club. We hope that all members will consider this matter carefully and will vote to approve the changes at the October 3, 2011 Annual General Meeting.



Sarsaparilla - *Smilax ornata*

Summary of Minutes of the HNC Board Meetings

by Joyce Litster

The following items were discussed on April 7, May 5, and June 23, 2011

Wood Duck Editor

Herman van Barneveld is the new *Wood Duck* Editor. He is a Biology and Science teacher at Guido de Brès Christian High School and has experience producing a small newsletter.

Natural Areas Inventory

The Ontario Ministry of Natural Resources Species at Risk Stewardship Fund will provide approximately \$80,000 to cover some of the work being done for the NAI. The funding will be spread over 3 years. Because of lack of funding earlier in the year, the 2011 work schedule had to be reduced. Work is being done in 13 areas.

HNC Letter to the Niagara/GTA Corridor Team Regarding concerns over Possible Corridor Routes

The Transportation Development Strategy on the NGTA Corridor is 257 pages long plus indices. The NGTA study team has produced a good analysis of the environment problems for whatever route is chosen. Gord McNulty will write a letter for the Club in response to the Development Strategy.



Hemlock Parsley (*Conioselinum chinense*)

Spooky Hollow's 50th Anniversary

The September issue of the *Wood Duck* will feature Spooky Hollow. Various club members have written articles to commemorate the Club's first sanctuary.

The Sanctuary Committee received Species at Risk funding in support of Eastern Flowering Dogwood, \$20,000 for 2011 and \$30,000 for 2012. Land Trust Co-ordinator Jen Baker is developing a work plan.

Frank Morley led two hikes at Spooky for the Norfolk NatureFest.

Environment Canada Pronouncement

The Hamilton Naturalists' Club is changing the Club's bylaws to provide better protection for gifts of land given to the HNC under the ecological gifts program. Environment Canada has requested the change as a safeguard to such lands should the Club ever have to dissolve. The membership will be asked to vote on the bylaw change at the Annual General Meeting.

Storage Space for HNC Documents

Jean Stollard, Joyce Litster and Lois Evans met with Hamilton Public Library Chief Librarian Ken Roberts, HPL Public Services Director Rebecca Raven and Councillor Brian McHattie. The HPL has expressed interest in archiving our documents, both those now stored in the Ontario Archives and those that have been accumulating in HNC members' homes. The HNC Storage Committee will consolidate our materials, and HPL Archivist Margaret Houghton will examine them to determine what is acceptable for inclusion in the HPL Archives.

HNC Sponsorship of Nature Guardian at Ontario Nature Youth Summit

The HNC is hoping to sponsor a young HNC member who would like to attend the ON Youth Summit this summer. The \$300 fee would come from our Education Fund.

Motions Passed

- That the Board approve payment of its remaining contribution to the Natural Areas Inventory Nature Counts 2 for 2011-1013 in May 2011, the 2011/12 financial year.
- That the Board appoint Herman van Barneveld to complete the term of former *Wood Duck* Editor Tracey Conley.
- That the HNC partner with Joanna Chapman in the Urquhart Butterfly Garden Project in Dundas under the following conditions: 1) That the HNC receive sufficient funding to pay for the garden's maintenance and development. 2) That the HNC and Joanna Chapman negotiate suitable partnership agreements as needed from time to time. (3) That the City of Hamilton continue to host the Butterfly Garden in Centennial Park in Dundas.

Minutes of the Annual General Meeting of the Hamilton Naturalists' Club - October 18, 2010

1. Call to Order

The Annual General Meeting of the Hamilton Naturalists' Club was called to order at 7:42 p.m. on Monday, October 18, 2010 at the Royal Botanical Gardens Centre auditorium.

2. Appointment of Chairperson and Secretary

Elaine Serena moved that Bill Lamond act as chairperson and Joyce Litster act as secretary for the meeting. Shirley Klement seconded the motion. **Motion carried.**

3. Quorum

Notice having been given to all members by means of the Wood Duck and there being at least 30 members present, the Chair declared that the Annual General Meeting was duly constituted.

4. Minutes of the Last General Meeting

Jean Stollard stated that the Board of Directors discovered that the names of two directors, Kevin Wright and Tracey Conley, were missing from Section 7, Nomination Committee Report in the *Minutes of the Annual General Meeting of the Hamilton Naturalists' Club – Oct. 5, 2009* article published in the October 2010 Wood Duck. The Board had further discovered that the statement of certification as true minutes at the end of these same minutes gave an incorrect date for the October 2009 Annual General Meeting of the Club. The *Minutes of the Annual General Meeting of the Hamilton Naturalists' Club* will be amended to add the names of Kevin Wright and Tracey Conley to the Nomination Committee Report and to give the correct date for this Annual General Meeting of October 5, 2009, in the statement of certification as true minutes of the meeting.

Jean Stollard moved that the minutes of the Annual General Meeting, held on October 5, 2009 be accepted as published in the October 2010 Wood Duck, with the inclusion of the above amendments. The motion was seconded by Peter Scholtens. **Motion carried.**

5. Club Activities for the Past Year

A summary of the Club's activities for this past year appeared in the October issue of the *The Wood Duck*. There being no questions concerning those activities or about Club activities in general, the balance of the meeting was confined to the legal requirements of our Annual General Meeting.

6. Treasurer's Report

a) Financial Statements

The Chairperson called upon Jim Stollard, who was representing the Treasurer, Jim Heslop, to present the Financial Statements for the year ending April 30, 2010. Unfortunately, Jim Heslop was not able to attend the meeting.

Following presentation of the Financial Statements for the fiscal year starting May 1, 2009 and ending April 30, 2010, Jim Stollard moved that the Treasurer's Report be accepted as published in the September 2010 issue of *The Wood Duck*. Elaine Serena seconded the motion. **Motion carried.**

b) Appointment of Auditor

Jim Stollard moved that Anthony Polzer, Chartered Accountant, be nominated as auditor for the fiscal year ending April 30, 2011 at a remuneration to be fixed by the Board of Directors, and the Board be hereby authorized to fix such remuneration. Lois Evans seconded the motion. **Motion carried.**

7. Confirmation of Actions of Executive – Omnibus Motion

Tara Nelson moved that all acts, contracts, by-laws, proceedings, appointments, elections and payments – enacted, made, done and taken by the Directors and Officers of the Corporation since the annual meeting of the Corporation held on October 5, 2009 and referred to in the minutes the meetings of the Board of Directors, or in the annual reports of the Corporation – be hereby approved, ratified and confirmed. There followed a discussion concerning the appropriateness of this motion considering that no one outside the Board had read the minutes or was familiar with the items they were voting on. Joyce Litster seconded the motion. The majority of members voted for the motion and 5 members voted against the motion. **Motion carried.**

8. Nomination Committee Report

The Chairperson called upon Past-president Jim Stollard to present the report of the Nominating Committee.

No further nominations having been received by the Secretary prior to October 1, 2010, as required by the Club by-laws, Jim Stollard moved and Rob Dobos seconded the motion that the following list of persons, who had previously consented, act as Directors of the Corporation until the first annual meeting of the Corporation, or until their successors have been elected or appointed, subject to the provision of the by-laws of the Corporation and the Business Corporations Act of Ontario 1982 namely: Bill Lamond, Terry Carleton (Conservation), Michael Fischer, Jean Stollard (Membership), Jim Heslop, Gerten Basom (Field Events), Joyce Litster, Warren Beacham (Sanctuary), Jim Stollard, Diane Green (Programme), George Holland (Bird Study Group), Elaine Serena (Volunteers), Tracey Conley (Wood Duck Editor), Gord McNulty (Dir. at Large), Lindsay Burtenshaw (Publicity).

The majority of members voted for the motion and no members voted against.

Motion carried. The proposed slate of Board members was declared duly elected.

Jim Stollard moved and Shirley Klement seconded that the following persons be nominated to hold office in the Club for the coming year or until their successors are elected or appointed:

Bill Lamond (President), Michael Fischer (Vice-president), Joyce Litster (Secretary), Jim Heslop (Treasurer), and Jim Stollard (Past-president).

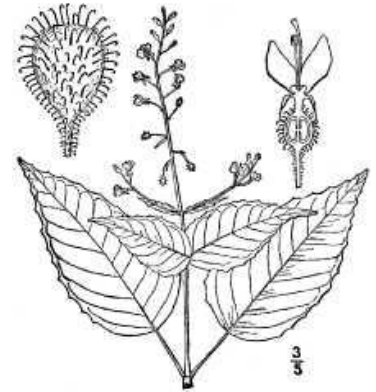
The majority of members voted for the motion and no members voted against.

Motion carried. The proposed slate of officers was declared accepted.

9. Adjournment

On a motion from Elaine Serena and seconded by Jean Stollard, the members voted to adjourn the Annual General Meeting at 8:20 p.m.

We certify that the above are the true minutes of the Annual General Meeting of the Hamilton Naturalists' Club held on October 18, 2010. (Original signed by: Bill Lamond, President and Joyce Litster, Secretary)



Enchanter's Nightshade (*Circaea quadrisulcata*)

Nature-deficit Disorder

April Meeting Report by Louise Unitt

When Fiona Reid, our originally scheduled speaker, was forced to cancel because of a family emergency, Barb McKean obligingly filled in for her at the April HNC general meeting. Barb brought with her a wealth of experience in nature interpretation and outdoor education. She has been employed by museums, national parks and school boards as an interpretive consultant, and has taught Nature Interpretation at Mohawk, Sir Sandford Fleming and Humber Colleges. Barb has been with the Royal Botanical Gardens since 1982, where she is currently Head of Education in the Biodiversity Programs Division. Her outstanding contributions have earned her several awards, including the Council of Outdoor Educators of Ontario's President's Award and Hamilton's Environmentalist of the Year Award for 2007.

The title of Barb's talk is borrowed from Richard Louv's seminal book, *Last Child in the Woods: Saving Our Children from Nature-deficit Disorder*, which describes how today's children are failing to connect with the natural world. Nature-deficit disorder is characterized by "a diminished use of the senses, attention problems, increased emotional disorders, and physical ailments." In times past, forming a connection with the land was a universal childhood rite that helped us develop a sense of place. An enthusiastic advocate for providing children with hands-on outdoor experience, Barb believes that a bond with nature is innate to people and integral to our development.

Our speaker asked the audience to recall the eager anticipation we used to feel as children on the last day of school, freed to explore our surroundings. Children today are more likely to look forward to playing

video games and watching TV. An enormous percentage of their free time is devoted to electronic devices, to a degree that borders on "a cult of worship." One study showed that children between the ages of 8 and 15 devote 53 hours a week to screen-based activities. That leaves little time - or motivation- to head outside. In *Last Child in the Woods*, Richard Louv quotes a fourth-grader who says, "I like to play indoors better 'cause that's where all the electrical outlets are."

The world children inhabit is far more circumscribed than was ours. In Sheffield, England, the RSPCA commissioned a study to measure the decrease in children's range of play across successive generations. On average, territories had dwindled from six miles for a great-grandparent to one mile for a grandparent to half a mile for a parent. As for today's

child, he or she was unlikely to venture past the end of the street!

Neither home nor school gives children much encouragement to discover nature first-hand anymore. Environmental education typically takes the form of classroom lessons, with minimal time outdoors. Whereas children once wandered unsupervised building forts and dams, they are now kept on a short leash. Although police statistics reveal a decline in child abduction rates since the 1970s, “stranger-danger” looms large in the minds of today’s parents. Nature too has been demonized through prominent reporting on harmful solar rays, West Nile Virus and Lyme Disease.

Parental attitudes aside, land-use decisions hinder access to nature. With the infilling of vacant lots and the loss of scrap remnants of forest, green space has become ever scarcer over recent decades. Children playing outside—an indicator of good urban habitat—is an infrequent sight nowadays.

Society is on high alert to the risks children face outdoors, but generally oblivious to the costs of a sedentary indoor lifestyle. The most visible of these is obesity, which is still on the rise despite the proliferation of organized sport among youth. Over a third of children are overweight, and half of that group are considered obese. Pre-diabetes is becoming more prevalent among youth, and doctors are seeing teenagers whose cardiac profiles would be expected in someone decades older. For the first time in recent history, life expectancy is being rolled back. Anxiety and depression are on the rise, and cases of attention-deficit disorder have shot up by 30%. In response, children are being placed in a “chemical straitjacket”: prescriptions for hyperactivity medications rose 50% between 2001 and 2004!

Unstructured group play in an outdoor setting fosters acquisition of social skills such as risk management, negotiation and teamwork. Proficiency in these areas is

prized by employers and can serve us well in our adult careers. The current decline in self-directed outdoor play is cutting down on opportunities for these interactions.

According to a 2007 British study, children recognized Pokémon characters with ease, but were hard put to identify many common British plants and animals. Barb also noted that dictionaries are sacrificing definitions related to the natural world, in order to make room for the explosion of internet-based terms.

Outdoor educators have reported that adults who take an interest in nature typically enjoyed it as children. Barb called for a show of hands from the audience: how many of us were attracted to nature before age eight? A majority of hands shot up, as you’d expect at a gathering of naturalists. An early attachment to nature instils in children an appreciation of nature that is the foundation for environmental stewardship. Her interest in nature was sparked early, thanks to a shortcut to school that traversed five acres of field and forest. As she followed the tracks of rabbits and foxes, Barb forged a lifetime connection with the natural world.

The walk to school is a time-honoured way for children to learn about their neighbourhood and its residents, but nowadays fewer children cover the distance on foot. When riding in cars, many children are too preoccupied with their electronic gadgets to observe the passing scene. As a result, many are unable to navigate their own community. Barb has witnessed spatial impairment among her children’s friends when driving them home. They are often unable to provide her with directions, even if their house is just a couple of blocks away. Children who fail to integrate into their community tend to take inappropriate risks in their teen years.

E.O. Wilson coined the term “biophilia” to describe our inborn affinity for the natural world. Research has shown that “forest bathing”—immersion in a forest or

natural setting—promotes stress reduction and measurable physiological improvements. Regular contact with nature has proven therapeutic for attention disorders, reducing the need for medication. The benefits are not fleeting: children who are exposed to nature will continue to draw on it for sustenance throughout their lives.

In a key Chicago study, researchers compared the influence of different window views on residents in public housing blocks. Some residents looked out onto naturalized sites, others onto barren concrete. A view of greenery was found to strengthen family cohesiveness and children’s academic achievement, while reducing strife and violence. Even modest amounts of green space significantly improved the quality of people’s lives.

Attention Restoration Theory is based on evidence that humans have two different kinds of attention: directed and undirected. In a world filled with intrusive sights and sounds, it’s easy to lose concentration when working on a task that requires mental effort, i.e. directed attention. A natural environment engages our undirected attention, thus allowing our directed-attention system to replenish itself.

Besides providing direct contact with nature, gardening exercises a very specific benefit through exposure to *Micobacterium vaccae*, a common strain of soil bacterium. *M. vaccae* has been found to raise serotonin levels upon inhalation, elevating mood and cognitive function.

Richard Louv’s *Last Child in the Woods* spawned an international movement to reconnect children and nature when it was published in 2005. Louv followed up by founding the Children & Nature Network, to support organizations that share his goals.

Fostering children’s connection with the local landscape has long been high on the agenda of the RBG, which offers

numerous opportunities for children to get acquainted with nature. To encourage families to build family nature time into their busy lives, RBG offers free weekend nature hikes to families. Barb was the driving force behind Back to Nature (BTN), an initiative focusing on ways to better connect children with the outdoors. Backed by the Ontario Trillium Foundation, whose funding got it off the ground, BTN is a partnership between RBG, Ontario Nature and Parks and Recreation Ontario. The network has reached out to other groups and now includes approximately 53 community organizations throughout Ontario. It is working to identify physical and attitudinal barriers to outdoor activity and to develop resource materials for parents and teachers. Naturalization of open spaces will be key to fulfilling BTN's goal of situating nature within walking distance of the home.

Nature's irregular terrain can be awkward to walk on for a child who is unfamiliar with the outdoors. And because of changing demographics, a growing

number of children have known only mowed lawn and pavement. The most rapidly growing segment of children consists of immigrants, many of whose parents are not well-disposed towards nature, and may even view it as threatening. Money, language and transportation issues raise further barriers between these youngsters and outdoor pursuits. RBG is addressing the problem through its Ecoleaders program, which introduces newcomer children and their families to nature in our area.

Students in Finland spend fewer hours in class and more time outdoors than any other country. Each 45-minute period of instructional time is followed by 15 minutes of recess. Finland's emphasis on green design and schoolyard naturalization has enabled it to achieve the highest academic success in the world, as well as a reduction in bullying. Where those methods have been tried here, the results have been similar.

Germany has replaced its standardized plastic playground equipment with rocks, logs and other natural elements. Their use

has been shown to encourage prolonged play, minimize conflict and enhance learning and creativity. Germany has also reinstated "forest kindergarten," a form of preschool education that is restoring kindergarten's outdoor roots. The pupils in this program are "light years ahead in every indicator."

On an individual level, we adults can share our love of nature with our children and grandchildren. "If a child is to keep alive his inborn sense of wonder," wrote Rachel Carson, he or she "needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement, and mystery of the world we live in."

In his latest book, *The Nature Principle: Human Restoration and the End of Nature-deficit Disorder*, Richard Louv shifts his focus to the adult-nature relationship as he examines nature's contribution to a balanced life. *Last Child in the Woods* kick-started a movement to connect children to nature; here's hoping Louv's latest will be as effective a catalyst for getting adults outdoors!

Fungal Diseases of Insects

May Meeting Report by Louise Unitt

"If you're squeamish about seeing mouldy insects, now's the time to leave." On that unusual note, Dr. W.D. (Bill) McIlveen, guest speaker at the HNC's May general meeting, began his presentation. One and all remained seated, proving that there was not a squeamish soul among us!

Fungus-insect interaction, Bill's topic for the evening, is but one of many aspects of the natural environment that has captured the interest of this all-round naturalist over the course of his career. Bill earned a B.Sc. (Agr.) and an M.Sc. from the University of Guelph, after which he obtained a Ph.D. in Plant Pathology at

Pennsylvania State University. Much of his professional life was spent investigating the effects of industrial emissions on soil and vegetation. While employed with the Ontario Ministry of the Environment, Bill increased his understanding of the complex ways in which living forms interact and evolve. Since retiring from the Ministry, he has been engaged in environmental consulting and remains active in many naturalist organizations and environmental monitoring projects.

Insects have long exploited fungi for food and habitat. In turn, various fungi are able to take advantage of arthropods for food

and dispersal. Bill's interest in their interactions was piqued when he began to research ways to control ergot during his Ph.D. studies. Ergot refers to a group of fungi of the *Claviceps* genus, and can be found growing on rye and related plants. He observed beetles of an *Acylomus* sp. feeding on ergot-infected flowers, which exude honeydew. This sticky, sugary liquid is an attractive food source for a wide range of insects. One of the chemical compounds secreted by ergot is lysergic acid, which has been used to ease childbirth. The drug LSD was first synthesized from ergot alkaloids.

Fungi provide nourishment for many kinds of insects. The larvae of fungal gnats are among several species of Diptera (a major order of flies) that feed on fungus. Members of the *Endomychidae* family, commonly referred to as the Handsome Fungus Beetles, also dine on fungus. Other fungus-eating families include the Silken, Pleasing, Round, Hairy and Polypore Fungus Beetles.

Several members of the order *Lepidoptera*, which includes butterflies and moths, also feed on fungus. The appetite of *Diomea*, a moth genus, is a problem for commercial mushroom growers. The butterfly *Prosotas dubiosa* is attracted to stinkhorns. Named for their foul smell, these mushrooms entice flies as well. Some insects - notably mound building termites in Africa and Asia, as well as many species of leaf-cutting ants in Central and South America - feed on the fungi they cultivate in underground gardens.

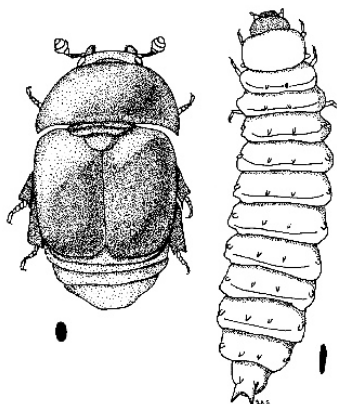
Bill next explained the role of arthropods (a group of invertebrates that includes insects and arachnids) in fungal transmission. Nitidulid beetles unintentionally carry fungal spores from infected trees to fresh wounds on healthy trees, an example of passive transmission. In phoretic transmission, a fungus is carried externally on an arthropod's exoskeleton, using the creature solely as a means of transportation. Mites are common vectors of certain fungi, which they transport phoretically. Some *Tarsonemus* mites are carriers of a wood fungus called Blue Stain.

Mycangial transmission occurs when an arthropod carries fungi in purpose-adapted structures called mycangia. The versatile Southern Pine Beetle carries two fungal species mycangially and one phoretically. Many species of bark-burrowing beetles inhabit trees, digging galleries in the trunk and feeding on fungi that they grow in their tunnels. When the beetles migrate, they infest a new tree with fungi. To illustrate mycangial transmission of Pine Blight, Bill showed pictures of fungal

spores oozing from the mycangia of a Mountain Pine Beetle.

There are many species of Blue Stain, which is named for the discoloration it leaves in the wood of infected trees. *Leptographium* fungi are important agents of Blue Stain disease in Scots Pine and other conifers. Most of these fungi are found in association with bark beetles that make their homes in conifers. Mountain Pine Beetle, for example, is known to transfer Blue Stain to the Ponderosa Pine.

Once a fungus makes contact with a host, it releases microscopic spores that germinate on the insect's surface. Environmental conditions will determine the success of a fungal invasion, for germination depends on specific humidity and temperature. Fungi penetrate the tough outer covering, or cuticle, and are absorbed into the insect's body. Fungal growth frequently emerges from the insect's body and joints, producing spores that will spread infection when dispersed by wind, rain or contact with other insects. As an invasion becomes established, the fungus spreads rapidly throughout an insect colony, causing a population to collapse within days.



Not all fungal invasions have such dire consequences for the insect. Bill used the relationship between *Septobasidium* fungi and scale insects as an example of fungus-insect symbiosis. Although trapped by the fungus, which grows over and covers the colony, the insects are still able to suck up

tree sap. Meanwhile, *Septobasidium* absorbs nutrients by penetrating the insects with specialized structures called haustoria. Newly hatched insects are mobile, and will spread the fungus when they begin feeding elsewhere on the bark. The association has advantages for both parties: The insects provide *Septobasidium* with food and dispersal in exchange for shelter and protection from predators and parasites. Fungi of the *Fusarium* and *Aschersonia* genera are also parasitic on scale insects; *Aschersonia* species attack whiteflies as well.

Fungal species in the class *Trichomycetes* form symbiotic relationships with insects. While little is known about their ecology, they have been identified in the digestive tracts of black flies. *Trichomycetes* is dependent on its host, which is neither positively nor negatively affected. We tend to think of symbiosis as a mutualistic relationship, whereby both parties gain from the interaction. According to Bill, however, symbiosis describes any two organisms living together: It includes parasitism, in which one benefits at the other's expense.

Bill reviewed a list of fungi that target spiders or insects; I will touch on several of them here. *Torubiella* and *Gibellula Pulchra* are spider pathogens, while *Akanthomyces* preys on spiders or moths, depending on the species. Members of the *Hirsutella* genus target spiders and insects, including beetles. *H. darwinii* is a spider specialist. There is interest in the use of *Hirsutella* in the biological control of insect and nematode pests. *Nomuraea rileyi* homes in on cabbageworms and armyworms, while *Hymenostilbe odonatae* attacks dragonflies.

Stonebrood, a fungal disease of bees, is caused by *Aspergillus fumigatus*, *A. flavus* and *A. niger*. Spores that germinate in the insect's gut quickly grow to form a collar around its head. *Ascophaera apis*, or beehive fungus, infests honeybees. *Aegerita* fungi specialize in scale insects, and *Paecilomyces tenuipes* is parasitic on *Lepidoptera* larvae.

Basidiomycete fungi attack *Hymenoptera* (one of the largest orders of insects), *Hemiptera* (an order that includes whiteflies, cicadas, aphids, planthoppers, leafhoppers, shield bugs, et al.), as well as Longhorned beetles. *Metarhizium anisopliae*, a fungus that thrives in warm, humid conditions, afflicts grasshoppers with green mould. Bill's photos showed *M. anisopliae* infesting a Brown-winged Stink Bug and producing green spores on a walking stick.

Laboulbeniales fungi are parasitic on insects, mites and arthropods. Members of this group, such as *Dichomyces biformis*, grow attached to the outside of the insect. They are extremely specific as to the insects they infect, to the point of showing a preference for an insect's left or right wing!

Some of the most effective fungi in the natural control of insects belong to the order *Entomophthorales*. Like *Laboulbeniales*, species of the *Entomophthora* genus are host-specific. They wreak a tremendous amount of mortality on many types of insect. A commonly seen infection occurs when *E. muscae* attacks adult *Diptera* like the House Fly. As the fungus multiplies, it distends an adult's body to the point where it bursts out between the abdominal segments. Evidence of *E. muscae* is commonly seen on dead flies, where yellowish bands of fungal spores form a characteristic striped pattern on a cadaver's abdomen. *Pandora neoaphidis*, a

related species, is a common pathogen of aphids.

Entomophaga grylli is a fungus that attacks *Acrida cinerea* and other grasshopper species. The fungus induces infected insects to crawl to the top of plants as they die, heads pointing upward, legs wrapped tightly around the stalks. The condition is known as "summit disease" and enhances dispersal of spores in the wind. Commonly known as "the aphid fungus," *Neozygites* disease is yet another member of the *Entomophthora* genus.

The recognition that most insect pests are susceptible to fungal attack has encouraged development of pesticides containing fungal pathogens. Many such products are now on the market. *Conidiobolus coronatus* is a fungus of the order *Entomophthorales* and a parasite of many insects. Surprisingly, in light of its ability to transmit infection to humans, the product is commercially available for use against termites. A related species called *Entomophaga maimaiga* was first introduced in the United States from Japan in 1910. Although it is a natural enemy of Gypsy Moth in its native home, for many years the fungus failed to manage the insect on this continent. In 1989, *E. maimaiga* inexplicably took effect and became a significant Gypsy Moth control agent.

Cordyceps fungi are fatal to the adults or larvae of numerous moths, beetles, ants,

wasps and spiders. *Beauveria bassiana*, a common soilborne fungus of the *Cordyceps* genus, has shown strong potential as a biocontrol agent. Unlike *Laboulbeniales* and *Entomophthorales* fungi, *Beauveria bassiana* parasitizes a wide range of hosts, attacking insects at every stage. Its victims include such important pests as aphids, grasshoppers, termites, thrips and whiteflies. (*Verticillium lecanii*, within the order *Hypocreales*, is also used to combat whiteflies.)

The Colorado potato beetle is another victim of infestation by *B. bassiana*. In turn, the fungus has been reported to act as host for another fungus, *Syspastospora parasitica*. A parasitic fungus whose host is another fungus is called a mycoparasite, and the three-way beetle-fungus-fungus association is known as a tritrophic interaction.

Scientists are on a quest to exploit the complexity of fungal molecules to develop medical applications for insect pathogens. *Cordyceps* products are commonly found in Chinese pharmacies, where *C. sinensis* is sold as a herbal remedy.

Who would have expected interactions between fungi and insects to be so many and varied! Many thanks, Bill, for a privileged view onto the world of fungus-insect symbioses.

Action to Combat Nature Deficiency Disorder

by Ronald Bayne

At the meeting of the Hamilton Naturalists' Club on April 11, 2011, Barbara McKean, Director of Education, Royal Botanical Gardens, spoke about a program to encourage children to become acquainted with Nature and the fascination of wild life.

Schools should be encouraged to include Nature Studies in the educational curriculum and especially to provide for outdoor exploration. Some inner city children are fearful of wildlife and forests and their parents perceive risk in allowing their children to play outdoors without

close supervision and restrictions. We in the audience remembered a more adventurous and exciting childhood.

When I grew up in Sherbrooke Quebec – population 30,000 at that time – during the depression years, there was no

television or expensive toys. Instead, we boys explored the local forest and fields together, searched streams for crayfish, minnows and “pollywogs”, and fished for bull pouts. We invented dangers such as wolves, bears and pirates while taking limited risks. In the spring the purple lilacs were covered with yellow Tiger Swallowtail butterflies, fragrant hedges were alive with Great Spangled Fritillaries and in the fall, the fields were full of Common Sulfur butterflies. At night, the streetlamps attracted masses of moths, and once in the morning, I found a pale green Luna Moth with wings like an angel.

One day, in a small woodlot at the top of our street, I flushed a Ruffed Grouse. They used to be called “fool-hens” because they were so fearless of humans. My father and I occasionally hunted for grouse in the woods of Megantic, the part of the province that borders on the state of Maine. We were accompanied by a local farmer who, I noticed, had lost the end of one thumb. The story was that he had been riding in the back of a cart with a loaded gun between his knees, the butt on the floor and his thumb across the muzzle. There was a jolt, the gun went off, and so did the end of his thumb. How terribly thrilling to hear about it!

On one of our trips, we crossed the border into the USA....without permission! We found ourselves in a long, straight corridor, about 25 ft wide, surrounded by forest for hundreds of miles in all directions. Running down the middle of the corridor were vertical steel posts on each of which was printed US – CAN BOUNDARY. There was no one else about, the only sound was the sighing of the wind in the trees; we stepped over the line.

It was easy to get lost in those woods so we had to be careful. We heard that a hunter once got lost late in the year and had fallen asleep when he sat down to

rest. He never woke up! When he was found, he was only a few hundred feet from the CPR railway tracks that cut through the forest of Maine on the way from Montreal to St John NB. Unfortunately, the trains passed infrequently or he would have heard them and known he was near the tracks. Hearing that story, I realized that Mother Nature expected me to learn about risks and take care of myself.



We lived close to nature, eating fruit and vegetables from the local farms, milk and cream from the local dairy. Wood stoves provided heat, water came from the river (where ice was cut in winter to be stored in sawdust and used in refrigerators in summer). Nature was a generous provider but one had to learn the skills needed to benefit from this abundance.

Mother Nature could also be cruel and we were not her only concern. Life existed in many forms and some were not friendly towards us. My mother died from a ruptured appendix when I was five. There were no antibiotics. Children died of diphtheria, measles, scarlet fever and typhoid fever. There were no vaccinations. There was only a local Isolation Hospital where children afflicted with these diseases stayed for several

weeks to prevent the spread of contagion. Many young people died of tuberculosis. Several epidemics of poliomyelitis passed through our area, making summer a hazardous time. In Catholic Quebec contraceptives were illegal and abortion was a sin. Families of 10 or more children were not uncommon, because having a large family was considered “natural”. There were many children available for adoption.

Natural resources were abundant, but only the farmers realized the need for replenishment. With the development of cities, people demanded more and more of these resources without concern for after-effects. Forest harvesting was unrestricted, pulp mills released their toxic residues into the rivers, and asbestos mining devastated large areas, creating a major health hazard not recognized at that time. Pollution was growing without restriction and was not recognized as dangerous. The result was contamination and sterility. Nature’s retribution is still to come.

Only now are we able to see, but still we deny what is evident, refusing to limit our demands. In a way, we are all children who need to learn a different attitude towards nature, an attitude not of demand, but of respect. Now is the time for adults and seniors to excite in young people an interest in the wonders of nature, not just with television programs, great as they are, but by actual involvement of children with adults in nature projects. They need to learn not how to avoid risks, but how to manage them, and how to achieve satisfaction by observing without harming wildlife. By engaging our children with nature, we can combat Nature Deficiency Disorder while giving them a freer and more adventurous childhood.

A Flight of Common Green Darners



by Bill Lamond

On August 16, 2011, I witnessed a flight of Common Green Darners (CGD) that was unprecedented for me. This occurred while I was taking in my son Eric's soccer game at the John Wright soccer complex (four fields) in south Brantford along Birkett Lane, on the Grand River floodplain. This complex is in front of the flood control dike and hence is floodplain that cannot be developed. The land here is excellent for wildlife and it would have been preferable if it had remained natural land instead of a series of soccer pitches. However, the kids have to play soccer somewhere and there is still a great deal of natural floodplain habitat left surrounding the fields. I suppose over a decade ago, this was all under agriculture so I suppose the wildlands that are here now are a bonus.

I arrived with Eric about 6:15 pm and immediately observed a few darners flying low over the soccer fields, hawking insects. I was without binoculars and initially I could not ID any of them although, of course, I knew they were mostly likely CGD. I decided to walk the top and sides of the dike to look for butterflies and dragonflies until the game started at 6:30. The dikes are large – 6 m high, 8 m wide at the base and 3 m wide at the top – and are covered in flowering plants, especially alfalfa which is a good nectaring source for butterflies. Unfortunately the Grand River Conservation Authority mows the dikes too often during the year, at times turning them into a long sinuous lawn. The dikes had been mowed probably a month previously and the recent rains had caused a lot of new growth such that there were lots of flowers. It was kind of late in the day but I was surprised at how

few butterflies I was seeing, although I did see one Buckeye and more darners. I couldn't help but think that if the dikes were only mowed once annually in late October, that the habitat would be so much better for insects and other wildlife. Something to pursue with the management of the GRCA.

I soon heard the referee's whistle to start the game so I hurried back to the soccer fields for kick-off. It was an ideal night to be outdoors. It was about 25 C with a very light wind and mostly sunny, but with wonderful cumulous clouds ringing the horizon. The lighting was great too – at my back – and I could now easily ID the darners here as CGD. Their green jackets and yellowish-green faces were very obvious. The game started and so too did the dragonflies. As the game progressed I noticed that the numbers of feeding CGD over the field was increasing. Soon after, a large number of Bank Swallows descended over the fields and started hawking insects. There were well over 200 Bank Swallows and it was interesting that not one of these swallows made any sound at all in contrast to their very vocal nature in the spring and early summer.

At around 6:45 the number of CGD was noticeably getting much larger. With each passing minute there were more darners. The Bank Swallows were patrolling 10 m and up and the darners were 10 m or lower. It was fascinating. Everyone around me on the sidelines was commenting on the darners and the swallows (sparrows to some). Of course it was impossible not to notice, as many of the darners were flying at eye level or lower and I wondered if it was a distraction for the players. It certainly

was a distraction for me and I could not focus on the soccer game. All the while the darter numbers kept on building – maybe a couple of hundred over the field at this point – until at some time, maybe a few minutes before 7 p.m., the darners all started flying, seemingly purposefully, in one direction. They were flying almost due east about 5 m above the ground. I have no idea how broad this migrating wave was but it at least spanned the length of the soccer field and was likely much broader. I estimated at the peak of this movement – around 7 p.m. – that at least 10 darners were passing a plane the length of the soccer field every second. This pace kept up for at least five minutes when the numbers began to diminish gradually, and by 7:15 they were trickling by at the rate of one darter every 3-5 seconds. By 7:30 p.m., even though weather conditions had not changed one bit, the event was over. It was a return to the original scenario when I had arrived and there were just a few darners hawking insects over the field.

I tried to estimate how many CGD there had been. During the peak of the movement, at least 3000 individuals passed in a 10 minute period. Before and after this peak, maybe another 2000 or so. It all happened so fast I really wasn't prepared to count, so an estimate of 5000 individuals is the best I could do but there could easily have been twice this figure. It was also completely a CGD phenomenon. I did not see another species of dragonfly in the mix and I had a good look at many of them.

So where did all these green darners come from? The floodplain area here is quite large and extends about 2 km to the

west and covers an area of about 2 square km, although much of this is in corn and/or soybeans. I'm assuming that all these darners were resting locally within the floodplain by day, hanging on herbaceous vegetation, and that they became active after 6:30 p.m. So how did they get to the floodplain in the first place? I have no answer for this. Whether these were locally raised or migrated into the area is unknown although the latter scenario seems more likely. Now, where were they going?

Again, who knows? But the direction of flight would have taken them into more floodplain habitat near the Brantford landfill and The Oxbow.

It is well-known that the Common Green Darter is a highly migratory species. At Point Pelee N.P. you can often see thousands along the west beach and tip area. However, I was impressed that I was able to see this spectacle away from a migration hotspot, essentially right in my "back yard".

The pulsar at the center of the image is orbited by an object that is about the mass of Jupiter and composed primarily of carbon; effectively a massive diamond. The orbit, represented by the dashed line, would easily fit inside our Sun, represented by the yellow surface. The blue lines represent the radio signal from the pulsar, which spins around 175 times every second. Courtesy Swinburne University

Hamilton Study Area 2011 Birdathon Big Day

By Rob Dobos

One of the more challenging activities that many keen birders participate in is doing a "big day", trying to find as many bird species as possible within a 24 hour period in a given area. Some will attempt their big day in a large area, such as a province or state, and others may do it in a more localized or regional area, such as a county or local checklist area. While I have never done an Ontario big day, for years I have been doing a big day in the Hamilton Study Area (HSA), a circle with a 40.2 km radius centered at Dundurn Castle in Hamilton.

Big days are often (but not always) done as a fundraiser by collecting pledges per species (or a flat rate) to support some charity, the most popular one in these parts being Bird Studies Canada's (BSC) Baillie Birdathon. This year, as part of the Baillie Birdathon, the Hamilton Naturalists' Club (HNC) promoted a local celebrity birder, Dave Don, to help raise funds for BSC and the HNC. Dave asked me to be part of his Birdathon team, along with Cheryl Edgecombe and Barb Charlton. This is a summary of our big day which was done entirely within the HSA. The results of the fundraising efforts are summarized elsewhere.

Doing a successful big day requires a number of factors to come together: planning a good route, assembling a team of birders with some skill at finding and identifying birds, good weather on count day, and of course a lot of luck! On the first aspect, planning when to do it is almost as important as where. The Baillie Birdathon can be done anytime during the month of May. From experience with doing big days in the HSA over the years, I know that, to maximize the potential number of species that can be found, I have to do it between May 20-25, which typically falls around the Victoria Day weekend. This is when a large number of migrant species are moving through the area, in particular the Neotropical songbirds such as warblers and flycatchers. It is also not too late in the month for some of the earlier passerine migrants, as well as some lingering waterfowl species that winter in our area in large numbers. By this time in May, the majority of breeding species are also back on their breeding territories.

The typical strategy for an HSA big day in May is to start during the night to listen for calling nocturnal species (marsh birds, owls), search for breeding birds on territory from dawn to mid-day, look for

migrants and waterbirds during the afternoon, and end with additional birds on territory in the evening until dusk. The key for planning a route is this: hit a number of high quality habitats, touch base on sites that are known to have certain species, and waste a minimal amount of time traveling between sites. I have been using a basic route for a number of years which does this, with some minor tweaking and refinements each year, and has produced good results. Another key element is to do some advanced scouting in the week or two before the count day, in particular to confirm whether certain rare breeders have returned to known sites, or to check out hangouts for shorebirds and waterfowl. This helps to refine the route right up to count day. The itinerary is planned out to the minute, and to be successful one needs to stick to the schedule. There are no breaks for restaurants – bring all the food and drink you need – and pit stops are few and brief.

In selecting the day for our Birdathon, we intended to do it during the Victoria Day weekend, with Sunday, May 22 being our ideal day. Since most of our team works during the week, it would have to be the weekend, and Sunday works best since

typically Sunday morning is the quietest time in terms of human activity such as traffic and walking. Less traffic allows us to better hear birds singing or calling from roads. Fewer people generally means less disturbance for birds and for us. It also gives us the holiday Monday to recuperate before going back to work. However, we kept an eye on the weather forecasts, and it was showing rain for part of Sunday. Rain would be a problem if it occurred during the morning when we are trying for birds on territory, as most songbirds don't sing much during rain. The forecast for Saturday was looking much better, with no rain, low winds (also important when listening for singing birds) and a high of about 26 °C (warm temperatures in the morning are also key for inducing bird song). The winds were to be southerly overnight between Friday to Saturday, which is favourable for nocturnal migration. This could be a mixed blessing, since we were just coming out of a prolonged period of a stationary low pressure system over our area for almost a week, which produced rainy conditions that had grounded large numbers of passerine migrants along our lakeshore sites. The clearing conditions and south winds would likely allow many of these migrants to move on, but could also bring in a new crop of migrants behind them. The trouble is the weather would not likely ground them for Saturday. What it would do is allow many birds to arrive on their territories. So, it is a tradeoff between having birds back on territory versus finding migrants along the lakeshore sites. Our route is designed to focus on the breeding sites, as relying on migrants is more risky. Unfortunately, rarely do the conditions line up that we have favourable weather for both finding many breeders and lots of migrants on the same day.

So, we decided to go with Saturday, May 21. We met at 3:30 a.m. in Dundas and headed for West Flamborough. Our first stop a few minutes later was for Eastern Screech-Owl at a reliable site which responded promptly to our call broadcast. We then tried for marsh birds at two

wetlands. A wetland at the corner of Conc. 6 and Valens Rd. produced a calling Sora and American Bittern which we had staked out. On to the Safari Rd. Wetland east of Kirkwall Rd., were the chorus of Gray Tree Frogs was almost deafening, but we managed to get Virginia Rail and to our surprise two calling Least Bitterns. We didn't hear the American Bittern known to be present here, so we were glad to have gotten it at the previous stop. This demonstrates the wisdom of having backup sites for many species.

By 4:30 a.m. we were at the Rockton Sparrow Field site on Kirkwall Rd. at the south end of the Hyde Tract. Several American Woodcocks were peenting and doing their aerial displays. We were hoping for a Whip-poor-will to start calling at pre-dawn from the Hyde Tract, as this has been the only reliable site for this species in the HSA the past several years, but none were heard. There was no wind so sounds were travelling for long distances, and we were also hoping for a calling Great Horned Owl which I've heard from this area in previous years, but again no luck. This species can be a tough one to get on this date, as most juveniles will have left their nests by mid-May so known nest sites earlier in the spring are not reliable. This would end up being one of our big dips. Our first of several Grasshopper Sparrows on the day gave its high buzzy call.

Then we had a bit of a drive to our next stop at 5:15 a.m. at Grass Lake near Glen Morris, the furthest reach of our tour of the HSA. This remarkable wetland is a fine place to listen to the dawn chorus, and our species list started to quickly grow with common species and highlights such as Sandhill Crane, Common Moorhen and Pied-billed Grebe. At a nearby wooded swamp, typical species were added as the sky brightened, along with gobbling Wild Turkeys.

Our route back towards Flamborough included a few quick stops such as the large pond at the Onondaga Farms where a quick scan revealed three Green Herons

(our only ones on the day) but no Hooded Mergansers which often use the Wood Duck next boxes here. Then, at a stop near Sheffield for Red-headed Woodpecker, as luck would have it I spotted one sitting at the top of a dead snag in the woodlot, which we were all thrilled about since several previous attempts at this site earlier in the week proved fruitless.

The next major stop was at the Hyde Tract for a walk through this predominantly coniferous Agreement Forest which has northern affinities. Highlight species here included a perched Broad-winged Hawk, Ruffed Grouse, Red-breasted Nuthatch, Golden-crowned Kinglet, Blue-winged Warbler, Mourning Warbler, Scarlet Tanager, Pine Siskin, and best of all a singing Olive-sided Flycatcher. From here, a stop near Westover produced a singing male Prairie Warbler that I had staked out previously, one of the highlights of the day. Next, Conc. 8 through the Beverly Swamp produced Northern Waterthrush, White-throated Sparrow and Alder Flycatcher. Then along Lennon Rd. through the Fletcher Creek Swamp Forest, other "northern" species such as Winter Wren, Nashville Warbler, Black-and-white Warbler and Canada Warbler were added. At a nearby stakeout on private property (permission granted) we viewed a family of one adult and three juvenile Common Ravens in a nest on a hydro tower, a nice treat.

Shorebird habitat during spring in the HSA is sorely lacking most years, and our best chances were a few wet fields resulting from heavy rains this spring. One such field on Middletown Rd. had fewer birds than when scouted a few days previously, but did have two American Pipits as a bonus.

By mid-morning, we had headed to the Dundas Valley for several target species. Unfortunately, a stakeout for a Clay-colored Sparrow off Powerline Rd. which I had found the previous day did not cooperate. We had also missed this species at a few sites earlier in the

morning where they have traditionally occurred, so this one ended up being an unexpected dip. We did get Hooded Warbler near Martins Rd. after some persistence, and a Louisiana Waterthrush near Lions Club Rd. was cooperative.

By noon, we were heading to Hamilton Harbour. We added Osprey as a drive by with a bird on a nest near Hwy 403 and Hwy 6. At Woodland Cemetery, we were able to pick out a Brant with our spotting scopes across the Harbour at Bayfront Park, which saved us about a half hour that it would have taken to drive to the park and walk out to see it. A few passerine species were also added here. A few waterfowl species were added at LaSalle Marina and Sioux Lookout Park in Burlington. At Shoreacres, our sense that passerine migrants were thin was confirmed, however a few species were added. While scanning the lake from here, I spotted two large brown ducks on the water which proved to be female Common Eiders! This is a very rare species in Ontario, and hadn't been seen in the HSA since 2001, so this was a great surprise and definitely the best birds of the day by far.

A quick stop at Appleby Creek off Lakeshore Rd. produced a Cooper's Hawk on a nest and a singing Tufted Titmouse where one had wintered. At Bronte, the Suncor Pier had a lingering Iceland Gull. At Shell Park, again migrants were not plentiful but a couple species were added. After getting the Red-necked Grebes at Bronte Harbour, a Merlin perched on an antenna on an apartment building was another pleasant surprise.

A fast drive back down the QEW towards Hamilton Harbour produced a few waterbird species plus the Peregrine Falcons at the Lift Bridge. Windermere Basin was a disappointment in that mudflats created as a result of the ongoing dyke work (part of a wetland habitat creation project) held lots of promise for shorebirds, but only a small flock of Dunlin were present. A couple duck

species were added. A stop at Green Rd. to scan the lake proved very fruitful, as we added both Surf Scoter and Black Scoter, plus an adult Lesser Black-backed Gull, all late lingering "winter" species.

Fifty Point C.A. is another key site for passerine migrants, but again few were found. A few species were added in the woods and out on the lake, so it wasn't a total bust. The old Grimsby Sewage Lagoons were too high for any shorebirds, and only a few ducks were present and not some of the species that were there the previous day. We did get our only Orchard Oriole of the day here.

From here, we headed up to Saltfleet above the Escarpment, although we were running about 45 minutes behind our schedule, as it was past 7:30 p.m. and daylight would soon be disappearing. We managed to get a few of our target species, Upland Sandpiper, Northern Harrier and Vesper Sparrow. We had only a few migrant shorebird species up till then, but the flooded fields on 5th. Rd. E. provided three additional species – Semipalmated Plover, Lesser Yellowlegs and Solitary Sandpiper –the latter two which flew in and landed while we were there. The sedge meadows here had a calling Wilson's Snipe the previous day, but it would not cooperate this day.

With little daylight left, we headed for our last major stop, Cootes Paradise. On the drive there, we did a recount of our list, and to our surprise, found out that we had somehow missed counting three species and were currently at 161! With several possibilities before us at Cootes, we felt we had a reasonable chance to break the big day record for the HSA of 165 species. But, we were running out of time and light. We headed to Princess Point, feeling this would give us a fairly good vantage to scan Cootes and the sky overhead for anything going to roost. We were hoping for Common Nighthawks over the Burlington Heights or over the North Shore of Cootes, but alas, we could not turn one up. It was also too late to see

the resident Bald Eagles. However, Barb and Dave independently spotted a Great Egret roosting on Hickory Island with the herons and cormorants in the fading light. This was another surprise bird and proved to be our last species, number 162.

We made a futile attempt to find a Great Horned Owl at a nest site at the foot of Dundurn St. at the Escarpment in the dark. However, we did see a nice Milk Snake on the trail here. After a last-ditch attempt for nighthawks over Westdale and Dundas, our luck had run out along with our stamina, and at 10:00 p.m. we packed it in. After spending 18.5 hours non-stop and driving 335 km – Cheryl did most of the driving – we were more than happy with our result.

It is always interesting to look back and see what "expected" species we had missed or dipped on, and here is a sampling of those: Blue-winged Teal, Northern Shoveler, Green-winged Teal, Bufflehead, Hooded Merganser, Bald Eagle, Ring-necked Pheasant, American Coot, Ruddy Turnstone, Semipalmated Sandpiper, Short-billed Dowitcher, Wilson's Snipe, Black-billed Cuckoo, Yellow-billed Cuckoo, Great Horned Owl, Common Nighthawk, Whip-poor-will, Pileated Woodpecker, Yellow-throated Vireo, Marsh Wren, Gray-cheeked Thrush, Black-throated Blue Warbler, Bay-breasted Warbler, Wilson's Warbler, Clay-colored Sparrow, Lincoln's Sparrow, and White-crowned Sparrow. This is another 27 species we missed, some of which were seen by members of our group the day before and day after the count. Of course, many of these are offset by the many unexpected species that we encountered that day. Nonetheless, it does point to the potential of having a truly big day in the HSA of possibly over 170 species someday when everything goes right. This is motivation to try again next year!

In closing, I want to thank my team members for a memorable day of birding with great company and lots of laughs.

A Planet Made of Diamonds

By Mario Carr

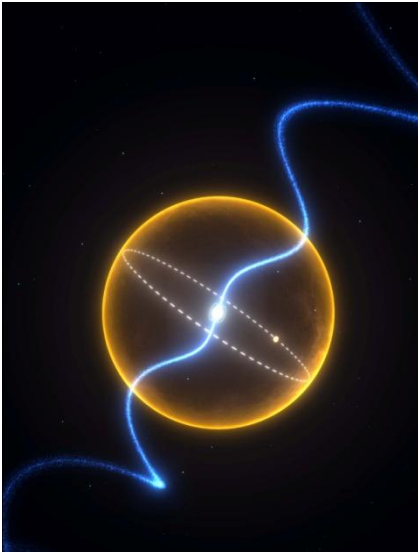
Attention De Beers and other diamond miners.

There is a planet out there made entirely of diamonds just waiting to be plundered.

There is only one problem though; it's 4,000 light years away!

Astronomically speaking, it's right in our back yard. It's also an eighth of the way towards the centre of our galaxy, the Milky Way, in the constellation Serpens (the snake).

The discovery was made when astronomers led by Matthew Bailes from Swinburne University of Technology in Melbourne, Australia found a pulsar known as J1719-1438 and its companion planet.



The pulsar at the center of the image is orbited by an object that is about the mass of Jupiter and composed primarily of carbon; effectively a massive diamond. The orbit, represented by the dashed line, would easily fit inside our Sun, represented by the yellow surface. The blue lines represent the radio signal from the pulsar, which spins around 175 times every second. Courtesy Swinburne University

A pulsar is about the size of a small city at 20 km in diameter. Like a light house it is a beacon. As it spins, instead of sweeping out a beam of light, it emits radio waves

that are picked up by radio telescopes back on Earth. This newly discovered pulsar spins rapidly – an unbelievable 10,000 times a minute – and is known as a millisecond pulsar. Astronomers noticed that the signals were modulated indicating the gravitational pull of a small companion planet orbiting the pulsar.

The planet makes a complete orbit around the pulsar every two hours and 10 minutes and is 20 times as massive as Jupiter. Its outer layers have been stripped away and it is mostly made of oxygen and carbon existing as diamond.

Here are some important events for October stargazers. Most are listed in the Hamilton Amateur Astronomers calendar.

Planet watching

Mercury isn't easily observed this month. Venus is low in the south west and sets shortly after dusk. Mars rises near midnight and is high in the south east at dawn. Jupiter rises after dusk and sets around morning twilight.

Saturn is lost behind the Sun and can't be seen. Uranus rises near sunset and is high in the southern sky after midnight. Neptune is high in the south eastern sky during evening twilight and sets in the west around 3 a.m. Pluto is low in the evening south western sky and sets around 10 p.m.

Oct. 1 – Creation of NASA in 1958.

Oct. 3 – First Quarter Moon

Oct. 5 – Sputnik 1 was launched to be the first satellite in space.

Oct. 8 – Draconids meteor shower peak. This is normally a minor meteor shower but this year it's expected to be good. It's created by debris burning in the

atmosphere from Comet Giacobini-Zinner.

Oct. 11 – This month's Full Moon is known as the Hunter's Moon.

Oct. 12 – The Moon is at apogee or furthest from the Earth this month at 406,434 km.

Oct. 14 – Hamilton Amateur Astronomers annual general meeting at 7:30 p.m., Hamilton Spectator building, 44 Frid St., Hamilton. Free admission with door prizes. An optional donation of non-perishable food items will be collected for local food banks.

Oct. 19 – Last Quarter Moon

Oct. 21-22 – The Orionids meteor shower peaks and up to 20 meteors per hour can be seen from a dark location. It's best viewed after midnight and is also visible Oct. 17-25. Debris from Comet Halley burning in the atmosphere creates this meteor shower.

Oct. 25 – Cassini discovers Saturn's moon Iapetus in 1671.

Oct. 26 – New Moon. The Moon is also at perigee or closet to the Earth for the month at 357,052 km.

October 28 – Jupiter is at opposition. It's also a good time to observe the planet since it is fully illuminated by the Sun.

For more information, please see the Hamilton Amateur Astronomers web site at www.amateurastronomy.org or call (905) 627-4323. *Mario Carr is the HAA director of public education and a member of the Hamilton Naturalists' Club. He can be reached at mariocarr@cogeco.ca.*

He also has a blog at <http://theskythismonth.wordpress.com/>



Noteworthy Bird Records, March 2011



by Rob Dobos

Total number of species recorded in the HSA during 2011 to March 31: **142**. Underlined species or dates require documentation by the Hamilton Bird Records Committee. Capitalized species require documentation by the Ontario Bird Records Committee. For species marked with “#”, all reported records are listed. For all other species, only highlights are listed. Note that the species order follows the most recent American Ornithologists’ Union checklist and supplements.

Observers: David Brewer (DBr), Jacob Bruxer (JBr), Barb Charlton (BC), Barry Cheriére (BCh), Jim Cram (JC), Robert Curry (RC), Martin Daly (MD), Jeni Darling (JDa), Sandy Darling (SD), Rob Dobos (RD), Aidan Don (AiD), Dave R. Don (DD), Dave K. Donn (DKD), Jim Dowall (JD), Cheryl Edgecombe (CE), Dean Gugler (DGu), Richard Hardman (RHa), Brandon Holden (BH), Eric Holden (EH), Kyna Intini (KI), Mark Jennings (MJ), Marcia Johnson (MJo), Tony Johnson (TJo), Bill Lamond (BL), Cody Law (CL), Rick Ludkin (RL), Lou Marsh (LM), Spencer McGregor (SMG), Kevin McLaughlin (KM), Matt Mills (MM), Frank Morley (FM), Peeter Musta (PMu), George Naylor (GN), Niagara Peninsula Hawkwatch (NPH), Heidi Rizzo (HR), Elaine Serena (ES), Glenda Slessor (GS), Nancy Smith (NS), Paul Smith (PS), Robert Stamp (RS), Chris Street (CS), Tom Thomas (TT), Mike Veltri (MV), Rob Waldhuber (RW), Pam Watts (PWa), Angie Williams (AWi), Ken Williams (KWi), Brian Wylie (BW), many observers (m.obs.).

Legend:

* -first occurrence for the year
F -first occurrence for the migration

L -last occurrence for the migration
HSA -Hamilton Study Area
SM –singing male
terr. –territorial bird

Plumages, etc.:

m. -male
f. -female
ad. -adult
ba. -basic
alt. -alternate
imm. -immature
juv. -juvenile
1st yr. –first year

County/Region/City:

Brant [*BR*]
Haldimand [*HD*]
Halton [*HL*]
Hamilton [*HM*]
Niagara [*NG*]
Peel [*PL*]
Waterloo [*WT*]
Wellington [*WL*]

Snow Goose#: One white morph at Conc 5 & Fairchild Creek [*HM*] Mar 14 (JD); two white morph over Dundas [*HM*] Mar 18 (RS).

Ross’s Goose#: One ad. white morph at Smithville Sewage Ponds [*NG*] Mar 6 * (GN; RW).

Cackling Goose#: One past Fifty Rd [*HM*] Mar 17 (KM); five at Conc 5 & Fairchild Creek Mar 20 (RD,CE,DD).

Canada Goose: 1000 at 8th Rd E at Vinemount Swamp [*HM*] Mar 12 (KM); 1500 at Conc 5 & Fairchild Creek Mar 20 (RD,CE,DD).

Trumpeter Swan: Five at Conc 5 & Fairchild Creek Mar 6 (RD,JBr,MM); eight at Dundas Marsh [*HM*] Mar 13 (DKD).

Tundra Swan: 19 over Dundas Hydro Pond [*HM*] Mar 4 F (MD); 56 on Hamilton Harbour off LaSalle Marina [*HM*] Mar 5 (RC,GS); 255 over Dundas Hydro Pond Mar 6 (RD,JBr,MM); birds at Conc 5 & Fairchild Creek: 26 –Mar 12 (RD,BC), 58 –Mar 13 (BL), 15 –Mar 20 (RD,CE,DD); 25 over Dundas Mar 12 (RD); birds past Beamer C.A., Grimsby [*NG*]: 18 –Mar 13 (NPH), 25 –Mar 15 (BH,EH *et al.*), 39 –Mar 17, 20 –Mar 19, 18 –Mar 20 (NPH); 118 over Dundas Mar 14 (RD); 100 at Snyder Rd E of St. Anns [*NG*] Mar 14 (NS); 39 at Bronte [*HL*] Mar 18 (MJ); six at Puslinch Village [*WL*] Mar 18-21 (DBr); 225 over Saltfleet [*HM*] Mar 19 (RD *et al.*); 124 over Ruthven Park, Cayuga [*HD*] Mar 20 (RL); 57 over Sioux Lookout Park [*HL*] Mar 21 (MJ).

Wood Duck: Two m. at Dundas Hydro Pond Mar 6 F (RD,JBr); six at Conc 5 & Fairchild Creek Mar 20 (RD,CE,DD); 15 at Dundas Marsh Mar 21 (DKD).

Gadwall: 99 at Dundas Hydro Pond Mar 27 (RD,MM,JBr).

American Wigeon: Six at Dundas Hydro Pond Mar 6 (RD,JBr), and nine there Mar 27 (RD,MM,JBr); seven at 8th Rd E & at Vinemount Swamp Mar 19 (RD *et al.*); seven at Conc 5 & Fairchild Creek Mar 20 (RD,CE,DD).

American Black Duck: 14 at Green Mt Rd Quarry [*HM*] Mar 26 (RD).

Blue-winged Teal: One m. + one f. at Desjardins Canal, Dundas [*HM*] Mar 27*-29 (RD,MM,JBr).

Northern Shoveler: 72 at NE Shore of Harbour [*HM*] Mar 11 (RD); 44 at Dundas Marsh Mar 22 (DKD); 17 past CCIW [*HL*] Mar 29 (RD); 25 at Windermere Basin [*HM*] Mar 31 (RD,CE).

Northern Pintail: 19 at Dundas Hydro Pond Mar 14 (RD); 20 past Beamer C.A. Mar 15 (BH,EH *et al.*), and 11 there Mar 17 (NPH); five at Green Mt Rd at Vineland Swamp [*HM*] and 23 over QEW & Dewitt Rd [*HM*] Mar 19 (RD *et al.*); 26 at Conc 5 & Fairchild Creek Mar 20 (RD,CE,DD).

Green-winged Teal: Ten at Ridge Rd E of 8th Rd E [*HM*] Mar 19 (RD *et al.*); 17 at Conc 5 & Fairchild Creek Mar 20 (RD,CE,DD).

Canvasback: 250 off N Shore of Harbour Mar 5 (RC,GS); six m. at Grand River at Brantford Golf & Country Club [*BR*] Mar 6 F (BL); two at Dundas Hydro Pond Mar 14 (RD).

Redhead: 34 at Desjardins Canal, Dundas Mar 4 (MD), and 20 there Mar 16 (MM); 380 at N Shore of Harbour Mar 11 (RD).

Ring-necked Duck: 14 off N Shore of Harbour Mar 5 (RC,GS); one m. at Grand River at Brantford Golf & Country Club Mar 6 F (BL); 12 at Dundas Hydro Pond Mar 16 (MM); six at Green Mt Rd Quarry Mar 19

(RD *et al.*); 18 at Conc 5 & Fairchild Creek Mar 20 (RD,CE,DD); 48 at Dundas Marsh Mar 21 (DKD).

King Eider#: One 1st yr. m. off Fifty Point C.A. [*HM/NG*] Mar 12 (KM).

Surf Scoter: Two m. + one f. off LaSalle Marina Mar 11 (RD); 25 off Green Rd [*HM*] Mar 26 (RD).

White-winged Scoter: 100 off N Shore of Harbour Mar 5 (RC,GS).

Black Scoter: Three f. off Fifty Rd Mar 17 (KM).

Long-tailed Duck: One m. at Green Mt Rd Quarry Mar 19 (RD *et al.*).

Hooded Merganser: 15 at Desjardins Canal, Dundas Mar 6 (RD,JBr); 35 at Dundas Marsh Mar 27 (JBr).

Common Merganser: 35 at Dundas Hydro Pond Mar 14 (RD).

Ruddy Duck: Four at Dundas Hydro Pond Mar 16 (MM).

Ring-necked Pheasant#: One m. + one f. at Highland & Tapleystown Rds [*HM*] Mar 6 (RW), and one m. + one f. there Mar 30 (MV); one m. at Felkers Falls C.A. [*HM*] Mar 14 (KWi,AWi); one m. at 1st Rd E & Mud St [*HM*] Mar 19 (RD *et al.*); one at Green Mt Rd & 3rd Rd E [*HM*] Mar 29 (MV).

Ruffed Grouse#: Up to three at Westover Rd N of Conc 8 [*HM*] Mar 1-31 (PS); one at Dundas Valley C.A. [*HM*] Mar 20 (SMG).

Wild Turkey: Up to 28 at Westover Rd N of Conc 8 Mar 1-31 (PS); 10 at Lynden Rd S of Hwy 8 [*HM*] Mar 13 (BL).

Red-throated Loon#: One past CCIW Mar 7 * (RD); four off Burlington Ship Canal [*HM/HL*] Mar 19 (RD *et al.*); two off Green Rd Mar 26 (RD).

Common Loon: Birds past Beamer C.A.: 2 –Mar 20 F, 2 –Mar 21, 2 –Mar 30 (NPH); one on Harbour off Bayshore Park [*HM*] Mar 31 (RD).

Pied-billed Grebe: One at Desjardins Canal, Dundas Mar 6-14 (RD,JBr; m.obs.), and two there Mar 16-27 (MM; m.obs.).

Horned Grebe: One at Desjardins Canal, Dundas Mar 10-27 (MD; m.obs.); 12 off LaSalle Marina Mar 15 (PMu); two off Burlington Ship Canal and three off Fifty Point C.A. Mar 19 (RD *et al.*); six off Bronte Harbour Mar 25 (DD); 20 on Harbour off Bayshore Park Mar 31 (RD).

Red-necked Grebe: 32 off Bronte Harbour Mar 25 * (DD); 170 off Stoney Creek Lakeshore [*HM*] Mar 26 (RD); 14 on Harbour off Bayshore Park Mar 31 (RD).

Double-crested Cormorant: Six at NE Shore of Harbour Mar 9 (PS); ten past CCIW Mar 15 F (RD).

Great Blue Heron: One over York Rd, Dundas [*HM*] Mar 3 F (RD); 10 on nests at a heronry at Lower Baseline & Trafalgar Rds [*HL*] Mar 12 (HR); three on nests at a heronry at Indian Line Rd & Chiefswood Rd [*BR*] Mar 20 (RHa); nine past Beamer C.A. Mar 21 (NPH).

Black-crowned Night-Heron: One ad. at Bronte Marsh [*HL*] Mar 20 F (MJ).

BLACK VULTURE#: One at Beamer C.A. Mar 29 * (BCh); one over Dundas Mar 30 (BW) may have been the same bird.

Turkey Vulture: Birds at Beamer C.A.: 897 –Mar 18, 436 –Mar 26, 573 –Mar 27, 588 –Mar 28, 616 –Mar 29, 400 –Mar 30 (NPH); eight at a roost in a yard at Tweedsmuir Ave, Dundas [*HM*] Mar 2 (MM).

Osprey: One over Grimsby [*NG*] Mar 24 * (CL).

Bald Eagle: One ad. + one 4th ba. on a nest at N Shore of Cootes Paradise [*HM*] Mar 1-31 (DKD; m.obs.); two 1st ba. at CCIW Mar 1-3 (RD); a total of 30 birds counted at Beamer C.A. Mar 3-26, including 7 on Mar 15 (NPH); one ad. at a nest on Grand River, Brantford Mar 6 (BL).

Northern Harrier: One at Beamer C.A. Mar 7 F (NPH).

Sharp-shinned Hawk: One at Beamer C.A. Mar 5 F (NPH).

Cooper's Hawk: One at Beamer C.A. Mar 8 F (NPH).

Red-shouldered Hawk: One at Conc 6 E of Kirkwall Rd [*HM*] Mar 13*-15 (SD,JDa; PMu); one at Westover Rd N of Conc 8 Mar 14 (PS) may have been the same bird and which likely overwintered; birds at Beamer C.A.: 3 –Mar 14 F, 152 –Mar 19, 132 –Mar 20 (NPH).

Red-tailed Hawk: 254 at Beamer C.A. Mar 19 (NPH).

Rough-legged Hawk: One over Appleby Line & New St [*HL*] Mar 3 F (CE); nine at Beamer C.A. Mar 19 (NPH).

American Kestrel: One at Beamer C.A. Mar 17 F (NPH).

Merlin#: One at Sheffield Rd N of Conc 4 [*HM*] Mar 12 (RD,BC); one at Dundas Hydro Pond Mar 14 (RD); one at Beamer C.A. Mar 18 and one there Mar 28 (NPH).

Peregrine Falcon#: Birds at Beamer C.A.: 1 –Mar 1, 1 –Mar 18, 1 –Mar 29 (NPH); two ad. at Burlington Lift Bridge [*HM/HL*] Mar 1-31 (m.obs.); one at Dundas Marsh Mar 29 (DKD).

American Coot: 10 on Harbour off Bayshore Park Mar 11 (RD); one at Conc 5 & Fairchild Creek Mar 13 F (BL); three at Desjardins Canal, Dundas Mar 16 (MM); nine at Windermere Basin (RD,CE) and 21 on Harbour off Bayshore Park (RD) Mar 31.

Sandhill Crane#: Four at Beamer C.A. Mar 19 * (NPH); two at Grass Lake [*WT*] and two at Dean's Lake, Beke Rd [*WT*] Mar 20 (RD,CE,DD); one at Ruthven Park Mar 26 and one there Mar 30 (RL); one at Hwy 403 E of Brant County [*HM*] Mar 31 (DD).

Killdeer: One at Ruthven Park (RL) and one at Fairview St, Burlington [*HL*] (CS) Mar 10 *.

Wilson's Snipe: Two at 3rd Rd E & Highland Rd [*HM*] and two at Green Mt Rd W of 6th Rd E [*HM*] Mar 19 * (CE *et al.*).

American Woodcock: One terr. at Governors Rd W of Brant County line [*BR*] Mar 10 * (DGu); three terr. at N Shore of Cootes Paradise Mar 12 (RD).

Thayer's/Iceland Gull#: One ad. past Fifty Rd Mar 17 (KM).

Glaucous Gull: One 1st yr. at CCIW Mar 3-16 (RD); one 1st yr. at LaSalle Marina Mar 9 (KI); one imm. off Fifty Point C.A. Mar 19 (RD *et al.*).

Long-eared Owl#: One at Bronte Creek Prov. Park [*HL*] Mar 5-15L (MJ).

Belted Kingfisher: One at Beamer C.A. Mar 21 F (NPH).

Pileated Woodpecker: One at Beamer C.A. Mar 17 (NPH).

Eastern Phoebe: One at Beamer C.A. Mar 21 * (NPH).

Northern Shrike#: One at Brock Rd S of Conc 4 [*HM*] and one at Ainsley Rd E of Lynden Rd [*HM*] Mar 6 (RD,MM,JBr); one at Conc 10 W of Valens Rd [*HM*] Mar 11 (BC); one at Valens Rd S of Reg Rd 97 [*HM*] Mar 12 (DD,AiD); one at 10th Rd E & Dofasco Trail [*HM*] Mar 26 (RD).

Common Raven#: Two over Dundas Hydro Pond (RD,JBr) and two at Conc 5 & Fairchild Creek (RD,MM,JBr) Mar 6; one at Conc 8 E of Westover Rd Mar 8-9 (PS); birds at Beamer C.A.: 1 –Mar 8, 1 –Mar 15, 1 –Mar 20, 1 –Mar 24, 1 –Mar 27 (NPH) may have involved the same bird, including one over Grimsby Mar 28 (CL); a pair building a nest on a hydro tower near Fletcher Creek Preserve [*WL*] Mar 11 (TT); a terr. pair at Conc 5 E of Brock Rd [*HM*] Mar 13-14 (TT; JD,JC).

Horned Lark: 30 at Fallsview Rd W of Sydenham Rd [*HM*] and 30 at Lynden Rd & Conc 4 [*HM*] Mar 6 (RD,MM,JBr).

Tree Swallow: One at Bronte Harbour Mar 22 * (MJ); one found freshly dead in a nest box at N Shore of Cootes Paradise Mar 25 (ES *et al.*); four at Ruthven Park Mar 29 (RL).

Tufted Titmouse#: One at Ruthven Park Mar 1 (RL).

Brown Creeper: One at Beamer C.A. Mar 31 F (NPH).

Eastern Bluebird: One m. at Bronte Creek Prov Park [HL] Mar 6 (MJ); seven at Dundas Marsh Mar 7 (DKD); three past Fifty Rd Mar 17 (KM).

MOUNTAIN BLUEBIRD#: One f. at Ridge Road Estate Winery [HM] Mar 19*-24 (CE,BC,RD,DD; m.obs.) provided the second record for the HSA.

Hermit Thrush: One at Hidden Valley Park [HL] Mar 6 (DD,AiD); one at Powerline & Paddy Green Rds [HM] Mar 27 (FM,PWa).

Bohemian Waxwing#: 75 at Fletcher Creek Preserve Mar 6 (DBr), and one there Mar 12 (DD,AiD); 28 at Foreman Rd N of Reg Rd 97 [HM] Mar 11 (BC); up to 57 at Valens Rd & Conc 6 [HM] Mar 12-19 (RD,BC; m.obs.); 20 at Kirkwall Rd N of Conc 5 [HM] Mar 20 (RD,CE,DD); 50 at Sayers Mills [HL] Mar 20-21 (LM).

Fox Sparrow: One at Ridge Rd Estates Winery Mar 19 * (CE).

White-crowned Sparrow: Three at Dickenson Rd at East Mountain Rail Trail [HM] Mar 16 (FM,PWa).

Lapland Longspur#: 30 at Great Lakes Blvd N of Rebecca St [HL] Mar 24 (MJ).

Snow Bunting: 200 at Fallsview Rd W of Sydenham Rd Mar 6 (RD,MM,JBr); 32 at Great Lakes Blvd N of Rebecca St Mar 24 (MJ).

Please send your bird records for Apr-May 2011 by Oct 10 to:

Rob Dobos, 21 Sunrise Cres., Dundas, Ont., L9H 3S1; ph: (905) 628-0297; e-mail: rdobos@cogeco.ca

Eastern Meadowlark: Two at Hwy 403, Brantford [BR] Mar 12 * (BL).

Rusty Blackbird: One m. at 5th Rd E at Vinemount Swamp [HM] Mar 15 F (RC,GS).

Common Grackle: One at St. George St, Brantford [BR] Mar 1 (BL).

Brown-headed Cowbird: Ten at Plains Rd, Aldershot [HL] Mar 1 F (RD).

Purple Finch: One f. at Westover Rd N of Conc 8 Mar 18 (PS).

White-winged Crossbill#: Two f. + one m. at Riverrun Park, Mississauga [PL] Mar 20 (TJo,MJo).

Common Redpoll: 50 at Middletown Marsh [HM] Mar 1-5 (BC); 40 at 11th Rd E & Ridge Rd [HM] Mar 19 (RD *et al.*); one m. at Ruthven Park Mar 24 (RL); two at Westover Rd N of Conc 8 Mar 31 (PS).

Hoary Redpoll#: One at Rock Chapel [HM] Mar 11 (SD,JDa); one at Carlisle [HM] Mar 13 L (TT).

Pine Siskin: 15 at Middletown Marsh Mar 1-5 (BC); six at Shell Park [HL] Mar 6 (MJ).

New Membership Director Needed

Your knowledge and enthusiasm are needed on the HNC Board.

The Board of Directors manages the activities and finances and oversees the operation of the Club for the mutual benefit of its members.

We are looking for an interested individual who has a love for preserving our environment and natural spaces, and wants to help make this Club run smoothly. The Board is action-oriented; it conducts time-limited meetings; it is fiscally accountable and responsible; it makes decisions by consensus and inclusion and provides mentorship and ongoing support to new board members. We meet weekday evenings, 10 times per year, September to June, rotating our meetings amongst various directors' homes. As we handle our issues, we learn a lot about nature and environmental issues in Hamilton/Burlington and vicinity and have a good time doing it.

We are seeking a Membership Director to join the Board at the October 2011 Annual General Meeting or at a later date, if necessary. The Membership Director records the new and renewed memberships in the Club using our custom membership database, staffs the membership table at Club Monthly Meetings and sends out the Club E-Newsletter, along with a few other related tasks. For further information or to volunteer, please contact Past President Jim Stollard at 905-634-3538 or at jjstollard@sympatico.ca.

Bird Study Group Our meetings start at 7:30 p.m. but Shade-grown coffee is served from 7:00. This is a social time. The Burlington Senior Centre is located off New St. just behind and to the west of Burlington Central Library. The Curling club and Burlington Little Theatre are in front of it on New St. If you come south on Guelph Line, you turn right at New St. and turn right just past the Library. Oct 24 Studying Birds in Amazonian Ecuador by Jen Sinasac Nov. 7 Birds and Dinosaurs by Jody Allair Dec. 5 Social and Marketplace

E v e n t s C a l e n d a r

Upcoming Field Events	Monthly Meetings	Other Events
<p>Saturday, Oct. 8, 2011, 10:00 a.m. Plan B Organic Farms Tour Join us for a fall tour at Plan B Organic Farms in discovering fresh organic fall produce and how the farm is run. Share in the harvest! An honorarium of \$5.00 per person will be paid to Plan B. The farm is located at 1377 5th Concession West, West Flamborough, north of Peter's Corners. www.planborganicfarms.ca For more information contact Gerten Basom gertenb@shaw.ca.</p> <p>Saturday, October 15, 2011, 7:30 .am. (Rain date, October 16th) Spooky Hollow Visit and Fall Work Day Meet at the Egg and I Restaurant for breakfast at 7:30 a.m. (at the junction of Hwy #53 and Hwy#2), then it's off of to our Carolinian forest sanctuary, Spooky Hollow, for a day out exploring the woods and some trail maintenance. Bring a lunch. Contact Sanctuary Director, Michael Fischer (905) 526-0325.</p> <p>Sunday, Oct. 16, 2011, 8-11 am. Bird Banding at Haldimand Observatory It's a great time to see a variety of fall migrants and winter residents at the banding lab. Come watch the experts and hold a bird in your hand to see the beautiful plumage, before letting it fly away. Bird banders will provide info. Meet at 8:00 a.m. in the parking lot at Ruthven Historic Park on Hwy #54 between York and Cayuga. Bring a picnic lunch and hike the trails. Event will cancel in the event of heavy rain. Call Rick Ludkin at (905) 765-4963.</p> <p>Saturday, October 29, 2011, 10:15 a.m. North Shore Trail Hike</p> <p>Saturday, November 1, 2011, 1:30 p.m. Looking for Late Wildflowers</p> <p>Sunday, November 6, 2011 Annual Fall Bird Count</p> <p>Please check www.hamiltonnature.org for more details.</p>	<p>October 3, 2011 Annual General Meeting + Presentation A Naturalist's Tour of Ushuaia, Antarctica, South Georgia, and the Falkland Islands by Geoff Carpentier. Join Geoff as he takes you on a trip of a lifetime to visit four unique destinations - Ushuaia at the southern tip of South America is the gateway to the Antarctic, hosting unique wildlife, both land and water based. The Falkland Islands, still suffering the impacts of the war with Argentina, is a haven where wildlife and people live side by side in harmony. Nestled south of Africa, South Georgia Island, administered by the British, is home to albatrosses, millions of penguins and myriad seals and whales. Antarctica is a land of mystery that has claimed many lives over the centuries, has hosted devastating seal, whale, penguin and krill hunting forays and today is under siege from the impacts of climate change. Learn what its like to visit each of these locales and how the wildlife is doing.</p> <p>November 14, 2011 Seeking Safe Passage for Amphibians Across Roads by Barb Beasley Over 40 years ago, people were alarmed by large numbers of road kill on Switzerland's highways and started building tunnels for amphibians. Through trial and error, Europeans, the British and, more recently, North Americans have been coaxing frogs and salamanders to go under roads rather than over them. Barb will talk about her efforts to create an effective tunnel system after monitoring the movement patterns and highway mortality of six species in coastal B.C.</p> <p>Dec. 12, 2011 CBC's <i>Geologic Journey - World</i>. bringing geology to the nation's living room 12-Dec-11 Nick Eyles</p>	<p>Royal Botanical Gardens is proud to unveil the fall 2011and winter 2012 Speaker's Series. Most presentations are on the fourth Thursday of each month, from September to May. Cost for the series: Members: \$105; Non-members: \$125. Individual lectures: Members: \$15; Non-members: \$18. Upcoming lectures:</p> <p>* Learn about the Lake Ontario's Round Goby Invasion: Two Strikes Against Ecosystem Health. Thu. Nov. 24; 7 to 8:30 p.m. with Dr. Sigal Balshine, associate professor at McMaster Univ.</p> <p>* Trees in a Nutshell – Thu. Oct. 27; 7 to 8:30 p.m. with Ernie Grimo, Southern Ontario Nut Growers.</p> <p>Other Programs at RBG</p> <p>* Find out what Wicked Problems (regarding Climate Change) the world is up against on November 4;</p> <p>* Listen for Coyotes howling Nov. 19;</p> <p>* Take home a squirm of worms in a composting kit October 23.</p> <p>These educational Public Programs and more for you / for your family are on offer October and November at Royal Botanical Gardens; see www.rbg.ca for costs and other details and online registration, or call (905) 527-1158 ext 270. Pre-registration required for most programs.</p> <p>Halton Forest Festival Check out www.conservationhalton.ca, click on <i>Parks and Recreation</i> and then on <i>Events Calendar</i> for more info on</p> <p>* Saturday, October 15, 2011: Forest Festival Fun Day</p> <p>* Wednesday, November 9, 2011: A Look at the World's Forests (IYF Workshop)</p> <p>* many other events</p>

"The Incredible World of Bugs" exhibit coming to the Maplevue Mall in Burlington on October 27 – 29, 2011

This exhibit toured Ontario last year to great acclaim, given its educational and scientific value. It reflects the passion of John G. Powers, a retired Waterloo Regional policeman, and his 50 years of insect study. John is extremely articulate and passionate and an effective teacher. School groups and other groups are welcomed, but group visits should be scheduled with the respective mall officials. This show is a must for everyone! John can be reached in Cambridge at: (519) 653-2002
<http://www.orkinCanada.ca/en-ca/news/articles/incredible-world-of-bugs>

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