



THE BULLETIN

March 2009 No. 479

2008-2009 EXECUTIVE

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Chair of AstroNats	Heidi DeBond

Events calendar

Botany Group	Monday April 6, 2009. 12:30pm. Topic: TBA Location: TBA
Bird Group Meeting	Wednesday April 8, 2009. 7:30pm Topic: TBA Location: TBA
Executive Meeting	Tuesday April 14, 2009. 7:30pm Location: Phyllis Rawlinson
General Meeting	Thursday April 16, 2009. 6:00pm AGM & Pot Luck! Speaker: Christina Sharma Topic: Creating Habitat in Residential Areas and Parkland Location: Richmond Hill Presbyterian Church

Check for more Events and Outings on Page 2

Richmond Hill Naturalists 2009 Executive Committee Needs YOU!

The Richmond Hill Naturalists organization exists and functions due to the efforts of its executive committee as well as the many other volunteers who help out at all of our events and general meetings.

All guest speaker arrangements, all the special club events, club trips and outings, the monthly publication, publicity, the website, the management of finances, the tracking of memberships - this all happens because of a dedicated team of individuals who are working together behind the scenes.

As is customary at this time of year with the Annual General Meeting in April the club has the opportunity to elect a new executive to carry on the operations of the club. Some years there are a few jobs available and other years there are more. This happens to be one of those years when there are many positions available.

This happens from time to time due to a number of reasons: some members have served for a good many years and simply feel it is time to step down and make way for new talent, others may have carried on in a leading role because no one was available to replace them after the customary 2 year term. At the same time we are fortunate that a core group of the committee will continue allowing for a smoother transition for the new executive and continued successful operation of our organization.

...continued on P.3



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

Address Correspondence to: **Richmond Hill Naturalists, P.O. Box 32217, RPO Harding, Richmond Hill, ON, L4C 9S3**

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

Bulletin Advertisers have been selected because of their relevance to member interests.

Members are encouraged to patronize our advertisers and please mention that you saw their ad in our Bulletin.

Change of Address: Any change of email or street address should be sent to Mike Turk who prints the envelopes for the Bulletin mailing. See the Executive List for contact information.

Editor: Lloyd Helferty

Mailing Database: Mike Turk

Distribution: Athena Antiochos

MEMBERSHIP IN RHN

The *Membership Application Form*, is available at each General Meeting from Mike Turk, or in our club brochure, available from any executive member. You may also sign up or renew at <http://www.rhnaturalists.ca/membership/>

NEW MEMBERS:

- none -

Meet new members at club events and say Hello!

EVENTS FUTURE



- **Monday April 6, 2009. 12:30pm. *Botany meeting.***



- **Saturday March 21, 2009. 8am.** Keele and Oak Ridges Trail. Ron Fleming Celebrate the vernal equinox with a ***Morning hike along the Oak Ridges Trail.*** We'll walk eastward from Keele Street into the scenic Seneca College campus looking for spring arrivals like Turkey Vulture, Killdeer, Meadowlark, and Red-winged Blackbird. Pack a snack, your binos, and proper boots for potentially muddy conditions. Meet Ron beside the stile that sits on the West side of Keele Street, one km north of 15th Sdrd. (i.e. well past the entrance to Mary Lake). In the event of any confusion, phone Ron on his cell at 416-278-5811.



- **Saturday March 28, 2009. 8am.** Join Mike Van den Tillaart for a ***Tour of the Newmarket area*** with stops at the north end of Bathurst Street for waterfowl, the Holland Marsh area for Horned Larks, Pintail, and Tundra Swans, Ravenshoe Road in Keswick for harriers and herons, plus other nooks and crannies along the way in search of other interesting spring arrivals. Meet Mike at the Tim Horton's in NE Newmarket (404 plaza on the north side of Davis Drive and east of Leslie Street). Bring binos and proper footwear. This trip will likely extend into the early afternoon so pack a lunch too.



- **Friday April 3, 2009. 9:00pm.** Richmond Hill ***Astronats*** – Astronomy Night Sky Viewing at Phyllis Rawlinson Park, North of 19th Avenue off Leslie Street, Richmond Hill.



- **Wednesday April 8, 2009. 7:30pm. *Bird Group meeting.*** Details to be announced to group members.



- **Tuesday April 14, 2009. 7:30pm. *Executive Meeting*** at the Phyllis Rawlinson, Robert Holland Centre.




- **Thursday April 16, 2009. 7:30pm. *General Meeting – RHN AGM & Pot Luck!*** Christina Sharma from Project CHIRP will talk to us about "Creating Habitat in Residential Areas and Parkland" see www.projectchirp.com/ The meeting will take place at the Richmond Hill Presbyterian Church, Wallace Hall. 10066 Yonge St., North of Major Mackenzie Dr., West side. For info contact Marianne Yake at 905-883-3047, or visit www.RHNaturalists.ca.




- **Saturday April 18, 2009. 10am. *Waterfowl Viewing Day*** presented by M-T-M Conservation Association at the Tiny Marsh Interpretive Centre. Guided hikes will take place from 10 a.m. until noon and at 2:30pm. At noon hour you can enjoy a BBQ lunch at a very nominal cost. At 10:30 a.m. and 1:00 p.m. there will be some Children's Nature Workshops and at 1pm there will be a guest speaker - Suzanne Robinson, Species at Risk Biologist with the Ontario Ministry of Natural Resources who will make a presentation on the local Piping Plover program. Admittance to the marsh property is free. For further information please contact 705-322-2200 or e-mail at mtm@csolve.net.





 - **Saturday April 25, 2009.** 9am. Annual **Mill Pond Park Cleanup** - traditional cleanup by Naturalists and area residents. Meet at the Mill Pond Park gazebo.


 - **Saturday May 23, 2009.** 8am. **Introduction to Birding** by the Richmond Hill Naturalists. Attention bird group members. Plan to attend this outing to demonstrate your skills for budding local bird lovers. Bring binoculars and guide books. Meet at Mill Pond Park gazebo.


 - **Sunday May 31, 2009** - annual **Mill Pond Splash** Eco Nature Festival - plan to attend this one day event sponsored by Don Watershed Regeneration Council, TRCA, Town of Richmond Hill, Evergreen/Walmart and the Richmond Hill Naturalists. This eco nature festival takes place at Mill Pond Park in Richmond Hill from 12 to 4 PM.


Please note: Richmond Hill Naturalists welcomes anyone to volunteer as an outing leader.


 - **Tuesday March 24, 2009.** 7pm. **Corridor Park Open House** and Presentation also Elgin West Country Club in the Palisade Room. 11099 Bathurst Street (North on Elgin Mills on the East side). Get up to date on what has been achieved to protect and restore the Oak Ridges Corridor Park and what's happening in 2009. Give your thoughts and ideas on what you would like to see on the Oak Ridges Corridor Park East Lands (Jefferson's Forest). Find about the Oak Ridges Corridor Park Stewardship project and how you can get your hands dirty helping to protect and restore this important natural area. Formal 20-minute presentation begins at 7:10 p.m., with the opportunity for informal discussion afterward.

 - **Tuesday March 24, 2009.** 7:30pm. **Solar Power Public Meeting!** Help to bring Solar Energy to Thornhill -- and help make our community a leader in Markham, York Region and Canada! Thornhill Community Centre, 7755 Bayview Avenue (at corner of Bayview & John), Thornhill. Go to <http://thornhillsolar.ourpower.ca> for information and to sign up for our community program. Signing your name and providing information does not oblige you to purchase anything – but does provide you with an opportunity to be on the forefront of a renewable energy revolution in Ontario! Come out and support us! Mark it in your calendars now! If you have any questions about the meetings, please contact thornhillsolar@ourpower.ca.

 - **Thursday March 26, 2009.** 8:30am to 3pm. **Ecological Action Conference** at the Aurora Civic Centre, 1 Municipal Dr, Aurora. Over 200 students attending schools in Aurora and neighbouring municipalities will have the opportunity to learn about pressing environmental matters in our times and what we as students can do. With an additional aspect of increasing attendance by providing a live online feed of the opening ceremonies. For more information and to register, please go to: www.yenyr.com

 - **Saturday March 28, 2009.** 10:30am to 12noon. **Organic Lawn Care** (for the cheap and lazy) Workshop. Go organic and your weeds will panic! These workshops include a presentation, displays and draws for prizes. Register by calling 905-508-7012 x.230, or dropping by any community centre. Rouge Woods Community Centre Beech Room, 10 Shirley Drive, Richmond Hill.

 - **Tuesday April 7, 2009.** 7:30pm. The North American Native Plant Society presents **Todd Irvine** speaking about "**Native Trees of Southern Ontario**". This is an arborist's photo introduction to the native trees of Southern Ontario. Helpful tree identification tips and basic tree physiology will be covered along with some personal anecdotes. Toronto Botanical Gardens, 777 Lawrence Ave., Toronto. \$5:00 Members; \$10:00 Non-members.

 - **Thursday April 16, 2009.** 7pm - 9pm. **Amphibian Adventures** at the Bathurst Glen Golf Course. Learn about the lifecycle of these amazing creatures with a presentation and guided hike through the Oak Ridges Corridor Park to listen in on the action. Space is limited to 25 participants - please register early to avoid disappointment. Registration at www.trcastewardshipevents.ca. 12481 Bathurst St., approx. 1km south of King Rd.

 - **Wednesday April 22, 2009.** **Earth Day.** Celebrate the Earth for it is precious and we have only one.

 - **Saturday May 9, 2009.** 10am–12pm. **Stewardship Day** at the Oak Ridges Corridor Park. Celebrate spring by lending a hand with some environmental projects around the park. We will be building bird boxes, mulching and

planting trees. Learn more about the park and the wildlife that live here with interactive displays and a hike. Refreshments and door prizes for participants. Meet at the parking lot off Old Colony Rd. at the east end of the trail.

Contact Julie Hordowick - jhordowick@trca.on.ca or 416-661-6600 ext. 5644 for more information or to register.
- **Saturday May 30, 2009. Ontario Nature's AGM**, Bruce County, Southampton. In partnership with the Huron Fringe Birding Festival at MacGregor Point Provincial Park.



- **Friday June 5 to Sunday June 7, 2009. Carden Nature Festival.** Wildlife Seminars, Presentations and Great Food. For additional information www.CardenGuide.com/Festival or call (705) 326-1620 for a free brochure.

- **Saturday and Sunday June 13 & 14, 2009. All day. Windfall Ecology Festival.** Speakers on a variety of environmentally friendly topics and demonstrations on subjects from sustainable businesses to geothermal heating. Over 100 vendors lined along the path in Newmarket's Fairy Lake Park. Over 20 performers take to the world music stage. Kids eco-activities. For more information please visit <http://www.windfallcentre.ca/index.php?st=2>.

Please remember to turn off your light for Earth Hour, Saturday March 28 at 8:30pm and join the Astronats for Star Viewing. Please check www.rhnaturalists.ca for updates.

MEMBER SUBMISSIONS

Common Goldeneye and Green-winged Teal Birding Group Article for March

The Goldeneye (*Bucephala clangula*) is found in most of Canada except the extreme north. They breed in the lakes and rivers of the boreal forest. Nests are made in tree cavities two to 15 metres off the ground. The female lays 7-10 eggs which are olive green to blue-green. Incubation is by the female for 28-32 days. The young are born with eyes open and body covered with down. The young led to water by the female where they are able to feed themselves. The young need another 56 to 66 days before they are able to fly.



The diet of the Goldeneye is crabs, crayfish, shrimplike crustaceans, aquatic insects and in the fall seaweed and other plant life. They are divers and prefer to feed in water less than 3 metres deep. It is a diver and will go as deep as 3 metres to seek food. The Goldeneye migrates in November in the far north and in December from the southern areas of the summer range. The male Goldeneye is 40 to 50 cm long. It is recognized by its black head with dark green gloss and a white oval white patch below the eye. The upper body is black and mostly white underbody. The female has a brown head and a brownish grey body.

Green-winged Teal (*Anas crecca*) is the smallest of dabblers. They are found in all parts of North America except the very far north and a band of states south of the Great Lakes. The spring migration takes place mostly in April from their wintering grounds in the southern half of the U.S. In the fall their peak migration takes place in September and October. Their habitat is shallow lakes, wetlands, beaver ponds and near slow flowing rivers.



The female builds the nest made of grasses and weeds, lined with down in meadows, brush, or open woodland on the ground within 60 metres of water. The nest usually has 6 to 9 eggs and require an incubation period of 20 to 24 days. The young leave the nest within a few hours and leave the nest with the female to look for their own food. They fledge in about 35 days.

The diet of the Green-winged Teal is mostly plant material as seeds of grasses, sedges, pondweeds etc. They also eat aquatic insects, crustaceans, mollusks, tadpoles and fish eggs.

The Green Teal is about 30 to 40 centimetres in length. It is the smallest of the dabblers. The male has chestnut brown head with a dark glossy green patch from the eye to the nape. Brown feathers cover the back and the sides a buff white with heavy dark spotting. The females are dark brown on the back and the body is a mottled buff. The females have a white band around the chin.

The Richmond Hill Naturalists Needs YOU

...Continued from Page 1

This year the following positions are available to any member in good standing of the Richmond Hill Naturalists:

- **Secretary** - our group has suffered by not having this vacancy filled for over a year. Record keeping and filing are an important part of any well run organization. If you enjoy using these skills you will make a valuable contribution to our club.

- **President or Co-Chair** - Marianne our current president has completed a double term going well beyond the usual 2 years. The president chairs the executive as well as the club general meetings. We give a tremendous word of thanks to Marianne for the unceasing dedication she has brought to this role, her love of nature that always shines through and the strong leadership she has provided in leading the fight to save the DDO. We believe she will continue this fight. We will never be able to replace Marianne but we need to fill the position of president.

- **Vice-president** - This position is an entry leadership role assisting the president and preparing for a future role as president. You bring organization and management skills from your private/professional life into community service. A position with the Richmond Hill Naturalists is sure to augment your experience.

- **Field Trip Coordinator** - This person takes a leading role in planning field trip outings for the club members with the help of other trip leaders drawn from members of the club or other experts outside the club. Your job will be to produce an outing schedule with meeting places, dates times in conjunction with the trip leaders. The schedule will be posted in the club bulletin and on the website.

- **Publicity** - Nancy Zalman filled this position for the past year. She brought much creativity with colourful posters and flyers for posting in local community centres and libraries. The person coming to this role will continue to make use of local media to help promote club events and outings. This is a very important outreach for our club and is instrumental in attracting new members as well as making the Naturalists known to the local community.

- **Environmental Issues** - This position is under discussion and is to be separated from the job of president since it seems in recent years these roles have been combined, again due to a shortage of available resources. The club recognizes that while one of its mandates is the protection of nature, it is equally for the enjoyment and education of nature. We enjoy it, we experience it, we learn from it, we actively seek its protection.

- **Director of Fundraising** - Much of the clubs recent work has required access to substantial funds well beyond the provision of simple membership fees. In recognizing this and to be able to continue such valuable work the executive has reached a point where this position is necessary. We are seeking the nomination of an experienced and motivated person to fulfil this role.

- **Web Blogger / editor** - We are looking for someone to assist Rod Potter with regular updates of the club web site with interesting nature and environmental topics which would be of interest to all of our members. The club web site can be a more powerful tool for getting information out to our members and also for attracting new members. Rod has promised to give a workshop on using the website in the near future so for those keeners out there please stay tuned.

- **Bulletin Editor** - This position is available for someone who would be interested in publishing and editing the Naturalists Bulletin. In this day and age of online downloading - 'a bird in the hand is still worth two in the bush' - (sorry), but that's just how many members feel about having their hard copy bulletins and it is a great display tool for the club - something tangible that we produce. We thank Lloyd Helferty for the great job he performs, which at times can be a challenge with looming deadlines, and the inevitable late copy material. Lloyd has no doubt honed his craft to a fine art and would be quite willing to pass along his tricks to an up and coming editor.

- **Membership Coordinator** - This person is responsible for maintaining the clubs membership list with up to date address and contact information as well as sorting out complaints regarding missed bulletin issues. You work closely with the treasurer to resolve outstanding membership fees. As well you are responsible for bulletin distribution and member name tags. It is absolutely important to members that we track their information accurately and exercise utmost security with their contact information. Mike Turk can tell you everything you need to know to be expert at this job just as he is.

- **Ontario Nature Representative** - This person's role is to represent our club at the Ontario Nature regional meetings where an exchange of information takes place between the regional groups and the Ontario Nature organization. It is a great opportunity to learn what other nature groups are doing and about the larger conservation issues in Ontario.

After performing a great job for many years in this role Diana Piche has indicated she needs to step down. She faithfully led the Christmas Greeting Cards campaign each year for the club helping to raise needed funds. We thank Diana for all her efforts and know she would be glad to show you the ropes.

All of the above positions share something very important and interesting. You will become part of a dynamic team of individuals, who share a passion for nature, come together once a month to discuss ideas and make decisions about the operation of the club. You will meet new people, make new friends and perform an invaluable service to your fellow members of the Richmond Hill Naturalists as well as residents of the community.

We understand that change is good and necessary for an organization to grow. You may have ideas about the direction of the club. This may be your chance to make a contribution. You may have retired from an earlier executive committee but now you are rejuvenated and able to bring fresh energy back to the club executive. You may be a student interested in nature and the environment and are looking for some experience working with people. We look forward to receiving new nominations and inquiries for the above mentioned positions. Don't delay in contacting the nomination committee, the sooner the new executive committee is in place the sooner you will be able to get to the dessert table at the AGM. Call or email Marianne Yake, Diana Piche or myself, Tom Waechter, if you have any questions or think you want to get involved. You may wish to encourage someone else you know has potential.

THIS IS YOUR CLUB and YOUR CLUB NEEDS YOU!!

- Tom Waechter - member of the executive since 1993.

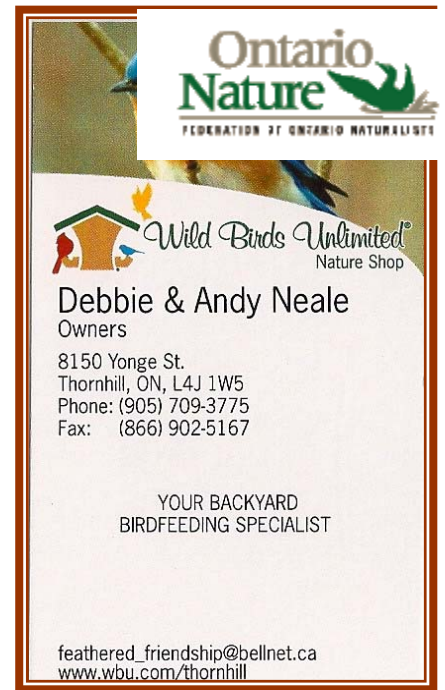
Do you know someone who has made a significant contribution to the Oak Ridges Moraine?

The Monitoring the Moraine project partners are soliciting nominations for the 2009 Moraine Hero Awards. Nomination deadline is March 31, 2009. This year's categories are:

Community Champion; Landowner Champion; Proactive Approaches; Municipal Leadership; Collaborative Efforts

The awards will be presented at the Oak Ridges Moraine Community Well-being Symposium on April 30 and May 1 in the City of Kawartha Lakes. For more info, visit:

<http://www.monitoringthemoraine.ca/MoraineHeroes/MH2009.htm>



NATURE NEWS

A pesticide free Ontario will soon be a reality!

As of April 22, 2009, Ontario's Cosmetic Pesticide Ban will come into effect, no longer allowing the sale or use of more than 80 pesticide ingredients and over 250 toxic products on lawns for cosmetic purposes! Included in the ban are such common weed-killers as 2,4-D and Glyphosate (Round-up). By banning the sale of these products, this provincial legislation overrides even the most stringent municipal bylaws, protecting the environment and the health of all Ontarians.

How big a victory is this? Quebec's ban -- the gold standard till now -- prohibits 20 pesticide ingredients. Ontario will ban four times as many! And as for the U.S. -- they can't even agree to ban 2,4-D.

So this legislation is truly the best on the continent.

For more information on this new legislation, visit: <http://www.ene.gov.on.ca/en/news/2009/030401.php>



Oak Ridges Corridor Park and Jefferson's Forest



Whether it's creating a butterfly garden in your yard, planting trees in the community, going for a hike or helping to create habitat for birds, stewardship is about being a good neighbour with nature! With the Oak Ridges Corridor Park (ORCP) nearby, Richmond Hill residents have a beautiful piece of nature right on their doorstep.

The ORCP is a 1057 acre (428 ha) piece of the Oak Ridges Moraine, located between Bathurst Street and Bayview Avenue, in the community of Oak Ridges. The Province of Ontario acquired the ORCP in 2004 to protect these ecologically sensitive lands. A walk along the park's main trail offers views of its colourful meadows, peaceful forests, and clear kettle lakes. Home to more than 70 species of wildlife, the park serves as a bridge connecting natural areas to the east and west of Richmond Hill, allowing wildlife to travel safely through the area.

The ORCP is enhanced by 482 acres (195 hectares) owned by the Toronto and Region Conservation Authority (TRCA) east of Bayview. The lands, locally referred to as Jefferson's Forest, are much loved by neighbours who hike, bike and snowshoe on the many informal trails. The property is also home to a variety of wildlife and plants, many of which are rare in this area.

EVENTS PAST

Ernest Julius Hugo Redelmeier

It is with great regret that we have learned that Ernest Redelmeier died in January peacefully after a mercifully brief encounter with cancer.

He was 90 years old. Ernest, and his wife Flavia, have been members of the Richmond Hill Naturalists for well over thirty years. Ernest was keenly interested in all aspects of Nature and diligently and quietly attended the many General Meetings of the Club. He had an operation many years ago which somewhat disabled his vocal cords, but he endured the effects patiently and in good humour and continuing interest in the Club. During the early period of his membership he was a member of the Executive Committee of the Club. Ernest was very active on his farm, the Don Head Farm, west of Richmond Hill where he raised cattle and sheep.



He also served the Richmond Hill community with distinction. He was a major force in the establishment of the York Central Hospital.

He was also a member of many organisations, such as the High School Board, the Art Gallery of Ontario, the Ontario Agriculture Association and the Royal Canadian Institute. He will be greatly missed by many of us in the community.

- Theo Hofmann

GENERAL INTEREST

The Suburban "project" is Over

<http://www.thestar.com/article/596879>

In a keynote address that stunned builders, American author, public speaker and social critic James Howard Kunstler outlined his vision for the not-so-distant future last weekend at the Canadian Home Builders' Association annual conference. The future will include a return to locally grown food, a resurgence of small cities and towns and an end to the days of "Happy Motoring" and the car-dependent society as world oil production declines, he said.

Kunstler warned that his talk, "**Peak Oil and the Business of Home Builders: Get Ready for the Future**," would deliver a harsh message, but that it was coming from a U.S. point of view. Peak Oil is the term used to describe the time when the global production of oil has reached its maximum and then begins a terminal decline. When that will happen is a matter of debate; some claim it could be one year or 30 years away; some believe it's happening now.

Kunstler said we are "in the zone" for what he calls the "*Long Emergency*", a challenging and turbulent transition away from fossil fuel dependency.

The current global "fiasco" has been created by a "crisis of complex systems," warns the former staff writer of Rolling Stone magazine and author of *The Geography of Nowhere*, and *The Long Emergency*, which talks about surviving the end of oil. It's not just about running out of oil, says Kunstler, but the collapse of systems like banking, commerce and manufacturing.

"We (the U.S.) now have a zombie banking economy, on life support on the pretense that it is still capable of doing business," said Kunstler. "In a desperate attempt to keep this titanic catastrophe from going down, capital is disappearing into a black hole." To adapt after Peak Oil, we will have to change the way we feed ourselves, he said. Food will have to be grown locally with more human labour, as large-scale farming and long-distance transportation of food will no longer be affordable. There will no longer be the availability of petroleum-based products for fertilizers, etc.

"We are going to have to use rural hinterlands again for food production," Kunstler said, which means it can't be used for housing. Car-dependent suburbs will no longer be a desirable place to live, destined to fail "in terms of holding their value, in terms of logistics," according to Kunstler.

"I think we've seen the end of the project of suburbia. It's over, we just don't know it yet," said Kunstler, who claims suburban living "is at the heart of the problem. We've poured the national treasure into it ... we've invested our identity into that way of life and can't imagine letting go of it." He believes that with the end of "happy motoring," as cars become too expensive to own and operate, people will move to small towns and cities. Big cities will contract too, as people move to smaller communities seeking more meaningful lifestyles. Highrises, he said, were an indulgence of the cheap oil days and will become too costly to operate.

The future will be in low and midrise walk-up buildings of up to seven stories, he said. That wasn't the only bad news Kunstler had for condo developers. He said they must stop "throwing away land" along waterfronts for condo buildings. That land will be needed for harbours and shipyards as inland waterways become "extremely important again" as shipping becomes the most economical way to transport goods.

Kunstler is a proponent of New Urbanism, a movement which favours human-scale, walkable neighbourhoods, similar to those developed prior to World War II. "We're fortunate that New Urbanists have been in the trenches for 20 years," he said. "From now on, there is no New Urbanism, only Urbanism."

Kunstler even had a cautionary message about "green" energies. "I'm not against it," he said, "but we're all going to be disappointed as it will not allow us to operate North America in the way we've become accustomed to. We are not going to have giant wind farms everywhere." For one, he said, oil is used to produce the components needed to build solar panels and wind turbines. As well, the U.S. will not be able to afford to fund ambitious green initiatives.

Kunstler did offer some glimmers of optimism, however. For one, he said the resurgence of towns and small cities will likely foster the creation of places people care about and an end to "places not worth caring about" such as sprawling suburbs, strip malls and mega-parking lots populated with big-box stores. He said builders should think about doing projects on individual urban building lots, rather than on a large scale.

"Start thinking about doing it smaller, with a finer grain." He also said it's critical (that) efficient passenger rail systems be restored, as they will be crucial to transportation: "I will categorically predict we won't have the aviation industry as we know it within five years." Kunstler said there are some things to be excited about, such as the opportunities for innovative ideas and new local business. He said Americans, especially, have been depending on wishful thinking for things to happen, and have falsely believed it's possible to get something for nothing.

We are entering a new period of responsibility.

- submitted by Marianne Yake, President

Wind energy near Algonquin Park

A wind energy development, which includes 48 large wind turbines, is planned for 2500 hectares adjacent to the border of Algonquin Park near the East Gate. This project will be a beacon and reminder to all who visit the park of where our electricity will come from in the future.



The proposed Whitney Wind Farm Project would be sited entirely on Crown Land adjacent to Algonquin Provincial Park and the Upper Madawaska River Provincial Park, and is managed by the Province of Ontario. Both visitors and residents of South Algonquin are in favour of renewable energy.



AstroNats

On Friday March 6 the astronomy group of the Richmond Hill Naturalists met at Phyllis Rawlinson Park in the evening to see **Comet Lulin**. Telescopes were provided to allow for both amateur and professional astronomer to navigate the night sky.

Come to future events to see with your own eyes! Journey across the universe and see Saturn, the Orion Nebula, the Moon, and the wonderous galaxies and other splendours that will amaze you!

The Carl Sagan Portal

<http://www.carlsagan.com/>

This is an absolutely delightful website. Inspiring and humbling. Check out the "ideas" page and also read the poster "Pale Blue Dot" here: <http://planetarysociety.stores.yahoo.net/planetary-store-326.html>

The mission of the Carl Sagan Foundation:

"Awakening one billion people to our relationship with the Cosmos by 2009, the four hundredth anniversary of Galileo's first look through the telescope. We are a team of writers, filmmakers, producers, researchers, engineers, educators and artists who, with a growing list of partners across science, communications and finance, seek to address this disconnect."

Carl was a hero of the environment and the environmental movement. He had an urgent concern for life on this planet. Carl was a world historical figure who beckoned us to leave the geocentric, narcissistic, "supernatural" spirituality of our childhood behind and to embrace the vastness – to come of age by taking the revelations of the modern scientific revolution to heart.

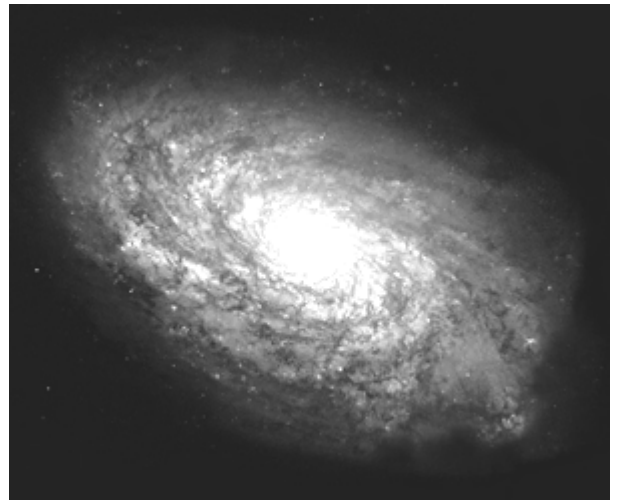
Carl played a leading role in the exploration of our solar system. He added to our knowledge of the atmospheres of Venus, Mars and the Earth. He opened the way to new branches of scientific investigation. He attracted more people to the scientific enterprise than perhaps any other human being and he was a conscientious citizen of both the Earth and the cosmos.

It was back in the late '50's that Carl first started thinking about planetary atmospheres. He was writing his Ph.D. thesis on "Physical Studies of the Planets." His thesis included his discovery of the surprisingly high temperature of Venus and his correct explanation that it was caused by a runaway greenhouse effect.

Early on he began to wonder what would happen if our own moderate greenhouse effect here on Earth were to intensify as it had on Venus. He became one of the first scientists to sound the alarm on global warming and other forms of inadvertent climate modification, including the potential consequences of a major nuclear war which he named "nuclear winter".

It was nearly fifty years ago that Carl began his life-long research on the origin of life and the search for life and intelligence elsewhere in the cosmos. Back then, research on the latter subject was effectively a form of professional suicide. The scientific community viewed it as a subject beneath its dignity. Only a handful of courageous scientists, Carl among them, dared to jeopardize their careers by doing such research. Today as the numbers of newly discovered extra-solar planets steadily mount, the field of astrobiology flourishes.

Even earlier, the notebooks he filled in his teens were suffused with a passion for the values of science and democracy. He viewed the error-correcting mechanisms built into both the methodology of science and into the constitution of the United States as being on a par with the domestication of fire, the invention of agriculture and writing; among the most precious innovations ever devised by our species.



Carl believed that science must always remain scrupulously faithful to the most rigorous possible methodological standards but that we shouldn't shrink from the spiritual implications of its insights. He dreamed of a civilization rooted in our dawning understanding of nature, where skepticism and wonder went hand in hand.

Learning is now viewed as a lifelong pursuit. And yet, our most dazzling entertainment capabilities are reserved for material that is largely substance-free. Meanwhile the real-time unfolding of the grandeur of the universe is treated as an aside; blandly reported, if at all. Science is posing formidable challenges to some of our most ancient assumptions and fundamental precepts. Its two-edged by-product, high technology, offers us unprecedented opportunities even as it tears at the intricate fabric of nature. We need a heightened level of scientific awareness to protect the environment that sustains us.



On 20 December 2008 Ann Druyan wrote:

"I have more hope this December than in many years. The campaign against science in the United States may be ending. We may be about to get a government that respects our laws, one that may act to protect our future."

BIRD OBSERVATIONS

Please submit Bird Observations using our electronic database, which can be found at: www.rhnaturalists.ca/bird_sightings_form.php

Submissions can be sent by e-mail to:

Sightings@rhnaturalists.ca or birds@rhnaturalists.ca

Written submissions can be sent by surface mail to:

Gene Denzel, 9 Idleswift Dr., Thornhill, ON L4J 1K8

Bird observations are viewable online or, if you prefer to receive a paper copy of this month's bird observations, contact Marianne Yake at 905-883-3047.

Evolution of Intelligent Design

This short item may be extremely important because it identifies a mechanism by which a single cell organism can rewire its own DNA and thereby the information that it passes on to its offspring.

On February 17, 2009 a Canadian-led study has discovered a new mode of disease evolution, giving scientists another way to identify and assign risk to emerging diseases.

Scientists at McMaster University in Hamilton, Ontario as well as the University of Melbourne and the University of Illinois found bacteria can develop into illness-causing pathogens by rewiring its own regulatory DNA, the genetic material that controls disease-causing genes in a body. Previously, disease evolution was thought to occur mainly through the addition or deletion of genes.

Bacterial cells contain about 5,000 different genes, but only a fraction of them are used at any given time," said McMaster University Assistant Professor Brian Coombes, who led the research. "The difference between being able to cause disease, or not cause disease, lies in where, when and what genes in this collection are turned on. We've discovered how bacteria evolve to turn on just the right combination of genes in order to cause disease in a host."

With infectious diseases on the rise, the finding has implications on how new pathogens are identified in the environment, he said. "This opens up significant new challenges for us as we move forward with this idea of assigning risk to new pathogens," Coombes said. "Because now, we know it's not just gene content -- it is gene content plus regulation of those genes."

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