

The Biosphere Beacon



November 2012

Annual Report 2012

by Brian Craig, President LPWBRF

On behalf of the Long Point World Biosphere Reserve Foundation Board of Directors I would like to thank all our members and partners who have supported the Foundation during this past very productive year.

With financial support from the Long Point Causeway Improvement Project (LPCIP), Norfolk County has scheduled the installation of 3 eco-passages for November 2012. A more detailed report from coordinator Mr. Rick Levick is included. Our Foundation administers the LPCIP on behalf of representatives of the following organizations and individuals who have put a tremendous amount of effort in moving the project forward over the past 6 years: Bird Studies Canada, Long Point Bay Anglers' Association, Long Point Country Chamber of Commerce, Long Point Region Conservation Authority, Long Point Waterfowlers' Association, Long Point Waterfowl, Norfolk County, Norfolk Field Naturalists, Norfolk Land Stewardship Council, Ontario Ministry of Natural Resources, Ontario Ministry of Transportation, Upper Thames River Conservation Authority, Toronto Zoo, Citizen Members: Jim Abbey, Dr. Dave Ankney, Robert Scott, Stephana Johnston.

Our Foundation is one of the lead proponents for the Explore Norfolk Trails initiative, which will be constructing a website illustrating the many trails in Norfolk County. Over 10 agencies, non-governmental organizations, and businesses are collaborating on this project. Funding is also being sought to prepare a hard copy map of the trails. A report from Project Manager Payden Shrubbs-Elliott is included.

Our Foundation received financial support from Environment Canada to re-inventory our biodiversity monitoring plots in Norfolk County. Ms Mallory Carpenter has been engaged to complete the inventory and analyze the data. Supervisor Nick Wilson's description of the project and expected outcomes are included.

Our salamander monitoring project continues well into it's second decade. The steadfast efforts of volunteer Jim Wilson are to be commended. Jim is responsible for the longest dataset in Canada of these excellent indicators of forest health.

The Ontario Power Generation / Long Point Region Conservation Authority (LPRCA) / LPWBRF Forest Corridor and Carbon Sequestration Project is now in

its eleventh year. To date, over 1200 acres have been restored to Carolinian forest and tall-grass prairie, with the support of local landowners. I wish to acknowledge the pronounced efforts of Mr. Paul Gagnon of the LPRCA who has been employing traditional and innovative restoration techniques to advance conservation in Norfolk County.

The LPWBRF was successful in a 4.5K proposal to TD Canada Trust Friends of the Environment to support the Port Rowan Sewage Lagoon Restoration Project. The restoration project is being led by the LPRCA with support from Norfolk County, Ontario Ministry of Natural Resources, Norfolk Land Stewardship Committee, Ontario Ministry of Agricultural and Rural Affairs, Bird Studies Canada, Nature Conservancy of Canada and Ontario Power Generation.

Our Foundation has initiated a charter sponsorship program which is proving to be very successful. Over 15 businesses have embraced the program and have made a commitment to the six principles: 1. Conserve the natural resources of the region 2. Develop the economy in an environmentally friendly way 3. Support and preserve cultural heritage 4. Minimize

Continued on page 2



President's Report ~ Continued

impacts to the environment 5. Contribute to a healthy community 6. Raise awareness about the Long Point World Biosphere reserve. I would like to thank those businesses for their financial support and commitment to sustainability in the LPWBR. Mr. Garrett Reid is leading the sponsorship campaign on behalf of the Foundation and can be contacted at garrett@exploregreen.ca for further information.

Our coordinators organized a successful research forum this year at Long Point Waterfowl. Dave Reid's article describes many of the papers presented at the forum.

Due to fiscal restraints the government of Canada terminated its funding to the Canadian Biosphere Reserve Association which in turn impacted our Foundations ability to continue the employment of Dave and Garrett Reid as our coordinators. On behalf of the Board of Directors, I would like to thank Dave and Garrett for their leadership and for advancing the tenets of the biosphere reserve program in our community.

This past year's collaboration and productive partnerships with committed and dedicated agencies, organizations and individuals is advancing biodiversity conservation, creating jobs, and facilitating research, monitoring and education in our community – I thank you all!

The Foundation will be launching a new and improved website on December 1, 2012 – be sure the check it out! Please let us know what you think!

www.longpointbiosphere.com

Causeway Ecopassages Update

Rick Levick, Project Manager, Long Point Causeway Improvement Project



a safe way to travel between the Big Creek Marsh and Long Point Bay rather than risk being killed crossing the 3.6 kilometre-long road. One of the passages will also restore a water connection between the Big Creek Marsh and Long Point Bay

In early October, Norfolk County Council awarded a \$238,973 contract to Anders Contracting Ltd. of Waterford for the construction work and approved a \$58,000 contribution to the \$465,000 project. This total includes a second contract for up to \$24,000 with local contractor Steve Armstrong to install new fencing to link the ecopassages with the existing barrier fencing. Armstrong and his crew have already installed and maintained more than 4,000 metres of fencing along the Causeway over the past four years.

The Long Point Causeway Improvement Project Steering Committee has been working with Norfolk County and its consulting engineers, Stephen Burnett

and Associates (SBA) for the past two years to secure the necessary approvals for the project. This work has included the preparation of Environmental Assessments at both the federal and provincial levels, several studies required by various government agencies as part of the approvals process, and negotiations with these agencies. All told, the cost of the approvals process has been about \$150,000, accounting for nearly one-third of the project's total cost.

Another \$50,000 was spent on design and engineering, tendering and construction management services provided by SBA.

The Long Point Causeway Project Committee and supporters commends the hard work by Norfolk County's Public Works department and SBA on this project as well as County's financial contribution to help cover the unexpectedly high costs of the entire approvals process.

Construction of three ecopassages under the Long Point Causeway is expected to begin in mid-November and take about three weeks to complete with as little traffic disruption as possible between Long Point and the mainland.

The ecopassages will provide turtles, snakes, frogs and other small animals with





Right to left: Paul Gagnon, LPRCA, describing forest restoration techniques to Heather Surette, LPRCA; Steve Hounsell, Ontario Power Generation, Cliff Evanitski, General Manager, LPRCA, and Lindsay Adams, Ontario Power Generation

The Re-inventory of Our Forest Monitoring Plots

by Nick Wilson

In 1995, the LPBRF established five long term forest monitoring plots in the surrounding forests. The plots are a hectare in size and all the trees with a diameter of 4 centimetres or more are identified, measured and mapped. Every 3 – 5 years the plots need to be re-inventoried. The LPBRF has received funding this year from the Science Horizons Program to hire a recent science graduate to re-inventory the plots.

Mallory Carpenter is a recent graduate from the Masters in Science program at Memorial University in St. John's Newfoundland. She grew up in London Ontario and received an Honours Bachelor from Lakehead University. Mallory will be using her

science education and experience to re-inventory our terrestrial vegetation plots. She will be collecting information about changes in diameter, mortality of trees and updating maps and tree tags. The data will be compared to that of past analyses completed in 2003 and 2008. Mallory is also hoping to collect GPS data from the plots to use in GIS programs and integrate it with other remotely sensed data.

This long-term tree health and mortality data is valuable to our partners such as local organizations interested in forest health. The information gathered is also helpful in the on-going climate change studies by Environment Canada and the Smithsonian Institute.



Mallory Carpenter tagging a tree in Wilson Tract.



Explore Norfolk Trails Initiative

Payden Shrubb-Elliott, Project Manager



The Long Point Region Conservation Authority is excited to announce the approval of funding from the Ontario Trillium Foundation to design and build a new trails website for Norfolk County. Aptly named, the Explore Norfolk Trails (ENT) Initiative began last winter with the conception of the idea and the development of a proposal to the Ontario Trillium Foundation for funds to make the website a reality.

The Explore Norfolk Trails Initiative is a collaboration between many organizations in Norfolk County, including The Long Point Region Conservation Authority, Norfolk County, the Long Point World Biosphere Reserve Foundation, Bird Studies Canada,

Haldimand-Norfolk Health Unit, the St Williams Conservation Reserve Community Council, Ontario Parks (Turkey Point and Long Point Provincial Parks), Ontario's South Coast Wineries and Growers Association, Turkey Point Mountain Bike Club, Long Point Eco-Adventures, Burning Kiln Winery, Norfolk Land Stewardship Council, Norfolk Alternative Land Use Services and the Lavender Growers of Norfolk. All of these organizations participated in the proposal development process and provided letters of support for the project.

Once completed, this website will be an interactive site profiling the multi-use trail systems in and through Norfolk County that informs viewers about Norfolk County's natural and cultural heritage and encourages residents of, and visitors to, Norfolk County to actively enjoy our natural capital, culture and cultural heritage.

The ENT collaborative will oversee the development and management of this website which will be a key tool in helping to promote trails and green space in Norfolk County and will be linked to our partner websites to better promote various aspects of tourism in the county.

The creation of this website will aid in the tourism sector and it will also help to foster

a better cultural/environmental stewardship attitude in Norfolk County. With the wealth of trails and trail types (walking, driving, paddling, etc.) that we have available, a new avenue for delivery of these trail systems was needed. The promotion of trails in the county to its residents will help to increase their cultural and environmental stewardship by informing residents about the various ecosystems and cultural diversity in the area, and the practices that have been put in place to protect these important facets of our community.

Trails are also a key part of tourism now, as people are looking for more reasons to get outside and be active. The promotion of the trail network within Norfolk County will help to draw visitors to the area and give them more reasons to stay in the area for an extended period of time.

The Explore Norfolk Trails collaborative would like to thank the Ontario Trillium Foundation for funding this project; in addition, we would like to thank all of our partner organizations for all of their in-kind donations.

For more information on the Explore Norfolk Trails initiative, please contact Payden Shrubb at payden.shrubb@norfolkcounty.ca.

Speaker Peter Zuzek for LPWBRF AGM November 22, 2012

The Long Point World Biosphere Reserve Foundation will be holding its Annual General Meeting on Thursday, November 22 at 7:00 p.m. at the Backus Education Center.

This year's guest speaker is Mr. Peter Zuzek, a world-renowned coastal geomorphologist, in the employ of W.F. Baird & Associates Coastal Engineers Ltd. His talk will provide an explanation of coastal littoral cells and key physical process in the coastal zone, with emphasis on erosional processes along the north shore of Lake Erie. Mr. Zuzek has conducted detailed studies of coastal processes along both sides of the Point Pelee Peninsula and will provide examples of the serious impact of the human disruption of coast processes. Of great importance to our Long Point Peninsula and community, Mr. Zuzek will describe the benefits of an integrated approach to coastal management and how cooperation between government

agencies, communities and non-government organizations, can resolve resource issues.

Mr. Zuzek, MES, CFM, P.Geo. has twenty years of professional experience with hazard investigations and coastal zone management studies on the world's oceans, lakes, rivers and watersheds. He manages large multi-disciplinary projects at Baird and Associates, which investigates natural hazards in the coastal zone, resolves resource conflicts, and engages stakeholders. Mr. Zuzek has pioneered new techniques to simulate long-term coastal evolution, model flooding and erosion hazards, and quantify the associated economic damages. He obtained a Master's degree in Geography from the University of Waterloo, is a registered Professional Geoscientist in Ontario, and a Certified Floodplain Manager. Mr. Zuzek is presently the Vice-President of the Coastal Zone Canada Association, which

advocates for the integrated management of our coastal resources.

New members are welcome. For additional information please contact Brian Craig at (519) 582-4264.



Mr. Peter Zuzek at the tip of Point Pelee National Park, which used to extend over 1km into Lake Erie prior to human alterations in the littoral cells on the east and west sides of the Point Pelee Peninsula.



Research & Conservation in the Biosphere!

by Dave Reid, Senior Project Coordinator



The Long Point World Biosphere Reserve is a virtual living laboratory for many researchers. As sharing the information is an important part of any research, the Long Point World Biosphere Reserve Foundation hosted a forum at the Long Point Waterfowl Education and Research Centre on March 26, 2012. The first presenter, Research Technician, Dragan Galic, spoke of the American Chestnut tree that once dominated the forests of Long Point Country and provided food and lumber for early settlers. Listed as “threatened” to go extinct by conservation experts, the chestnut was almost wiped out from its native range across eastern North America by the chestnut blight. The University of Guelph campus near Simcoe is working with the Canadian Chestnut Council to select for disease resistance by cross breeding those few “mother trees” still surviving in local forests. Some promising results were shared.

About 50 people attended the forum and heard from Dr. Scott Petrie of Long Point Waterfowl on their involvement in a wide variety of applied science relating to waterfowl and wetlands conservation. Long Point Waterfowl are also involved in outreach and education about conservation to the youth of our area. For example the inaugural “Duck Day” of 2011 will be held annually on the 4th Sunday in September, so plan to stop in at the Long Point Waterfowl Research & Education Centre off Turkey Point Road for some fun and games that will appeal to the whole family.

Mhairi McFarlane spoke on the Nature Conservancy of Canada’s (NCC) mandate

to manage for biodiversity and increase habitat size and natural corridor connection on our countryside. They have natural area conservation plans for the 7,500 acres of land recently purchased in Norfolk County. Assistant Professor Daria Kosciński of the University of Western Ontario spoke on her research about the genetic structure, abundance and behavior of swallowtail butterflies in Norfolk. While there are four different species of swallowtails in the area including Black, Giant, Spicebush and Eastern Tiger, her research focused on the latter two. The Spicebush Swallowtail produces young on either Sassafras trees or Spicebush shrubs while the Eastern Tiger’s larval tree is the Tulip tree. Her research team concluded there was a high degree of genetic diversity in local populations of both species. They are good flyers, moving easily through forest and open areas but seem concentrated along forest edges.

National Biologist, Jack Imhof of Trout Unlimited Canada, spoke on the impacts of dams on our waterways. While acknowledging the cultural heritage of dams and their associated mills, which helped European settlement in Long Point Country, Jack emphasized the challenge of celebrating this cultural heritage while restoring our natural heritage of free flowing stream systems. Dams have a life expectancy of 50 – 100 years during which they harm naturally flowing streams through warming, nutrient enrichment, altered sediment movement and blockage of fish migration. Old dams present a huge liability to dam owners. Examples of where community dams have been removed and

free flowing stream systems have been restored were presented including the Wingham Flats Ecological Park on the Maitland River in Huron County.

The unusual dynamic duo of an MNR biologist and a Drainage Superintendent presented together on some of the innovative projects they partnered on from the headwaters of Big Creek down to the Inner Long Point Bay. MNR’s Water Resource Coordinator, Dave Richards and Norfolk County’s Peter Bryan-Pulham together spoke on wetland drain restoration, using the Drainage Act to benefit conservation and the importance of a vegetative buffers between working lands and flowing streams/ditches to protect water quality. They acknowledged the good work of the Long Point Waterfowler’s to create more open water in the Crown Marsh and the benefit this has to fish and wildlife. A community collaborative to transform the old Port Rowan sewage lagoons into a wetland and upland habitat restoration site with interpretive trails was featured in their presentation.

Dr. John Spoelstra, Research Scientist with Environment Canada, spoke on his research that traced the source and fate of nitrate nutrients in groundwater. By using “stable isotope tracers” he is able to identify the source of nitrate pollution, be it human sewage, artificial fertilizers or livestock manure. Interestingly one of the main indicators of human sewage is the presence of artificial sweeteners in the groundwater!

Assistant Ecologist with Ontario Nature, Laura Robson completed her Master’s thesis with the University of Ottawa while studying Eastern Hognose snakes locally. Listed as “threatened” to go extinct by conservation experts, Norfolk County is home to one of two populations remaining in Ontario (the other is found along Georgian Bay and the Oak Ridges Moraine). Growing to 125 cm total length and weighing as much as 1 kg. this snake specializes in eating toads. Laura recommended three actions to protect Eastern Hognose snakes; 1) identify and protect sand dune habitat where they like to burrow and nest; 2) maintain open sand barrens where they feed and sun bath, and 3) improve edge habitat by adding wood chips and logs to enhance their habitat.

Another dual presentation included Mark MacNeil, the ALUS Business Development & Research Coordinator and Jon McCracken, National Programs Director



with Birds Studies Canada. They spoke on Norfolk Alternative Land Use Services (ALUS): Growing Nature's Benefits on Norfolk Farms. To date 103 farm families in Norfolk have implemented 367 projects to retire over 800 acres of marginal farmland to conservation. ALUS has invested in research to measure the benefits of nature provided by such projects including improved pollination, fish & wildlife habitat improvement, thriving under extreme weather events, building of organic carbon storage in soils and grassland bird revival. Preliminary research of breeding bird abundance on ALUS grassland projects,

NCC reforestations and regular farmlands in 2011 showed promising results - with the presence of Bobolinks and Meadowlarks, listed as endangered in Ontario and Canada, on ALUS projects.

Audrey Heagy, chair of the St. Williams Conservation Reserve Community Council spoke last on the many research opportunities on the two large forest tracts (1,038 ha.) that make up the Conservation Reserve ... the Zavitz Tract (Nursery Tract) and White Tract (Turkey Point Tract). The former St. Williams Forestry Farm was designated a Conservation Reserve in 2004. A management plan for the property

was completed by the MNR in 2005 and due to their lack of capacity to manage the property, a community council of volunteers was formed that year to take responsibility for managing for the public good while enhancing the natural features of the properties – e.g. It contains the 4th richest prairie and oak savanna in Ontario. The community council hopes to implement the 2009 – 2018 operational plan that includes vegetation management to enhance these prairie and savanna features.

The 2013 Research and Conservation Forum is scheduled for March 2013.

Charter Sponsorship Program

by Dale Vranckx

The Long Point World Biosphere Reserve Foundation has initiated a Charter Sponsorship program which is proving to be very successful. Over 15 businesses have embraced the program that will help to showcase businesses and recognize organizations and individuals that commit to Biosphere principles.

The Charter Sponsorship program will help to sustain the non-profit activities of the LPWBR Foundation in our community.

Become a Charter sponsor in our growing community of dedicated members who are proud of our Biosphere designation.

Sponsorship benefits include website advertising and promotions, supporting local LPWBR initiatives, and improving your business image.

Sponsors will also receive a certificate plaque, our principles and practices document, our quarterly newsletter, an invitation to our annual Research and Information Sharing Forum as well as to our Annual General Meeting.

Charter members pledge to conserve the natural resources of the region, develop the economy in an environmentally friendly way, support and preserve our cultural heritage, minimize adverse



Garrett Reid showing a Charter Sponsorship plaque.

impacts on the environment, thereby contributing to a healthy Biosphere Reserve community.

Garrett Reid is leading the sponsorship campaign on behalf of the Foundation and can be contacted at garrett@exploregreen.ca for further information.



Long Point World Biosphere Directors



Brian Craig, President - Brian recently retired from the federal government as a restoration ecologist with Parks Canada

Agency and a Senior Science Advisor with Environment Canada. He sits as a volunteer Director with the Canadian Biosphere Reserves Association and the Carolinian Canada Coalition. In his spare time Brian enjoys restoring 50 acres along Big Creek to Carolinian Forest and tall grass prairie with his partner Paula. Brian and Paula also enjoy guiding kayak and canoe trips on Big Creek for Long Point Eco-Adventures during the spring, summer and fall.



Paula Jongerden, Vice-President - Having recently retired from my full-time career as a Registered Nurse, I work

only occasionally now. I am pleased to be able to devote more of my time to the Long Point World Biosphere Reserve Foundation.

I live near Langton, on the banks of Big Creek and am happily reminded - everyday - how privileged we are in Norfolk County, to be surrounded by such beautiful and important environments.

As Chair of the Long Point Causeway Improvement Project Committee, I feel that not only is the goal of the Causeway project of significant benefit to wildlife and to a fragile ecosystem, but it is a perfect example of the essence of the Foundation's Mission - people working together towards a balance with nature.



Gregg McLachlan is a communications, web design and social media consultant based in Norfolk County. Prior to starting

his own consultancy, he enjoyed a very successful career working in local media. In 2007, he launched WorkCabin.ca, Canada's largest environmental job posting website that is now used daily by leading nonprofits and businesses to attract exceptional talent.



David Okines - I was born and raised in Britain but have spent most of the last 20 years in North America, most of it in Canada. I have always been interested

in nature and I am a biologist by trade, specializing in birds. I moved to the Long Point area in 2003, when we bought a 50 acre natural area near St. Williams. Most of

my work involves bird banding, including a 12 year stint as the Station Manager at the Prince Edward Point Bird Observatory in Prince Edward County, Ontario. In my spare time I enjoy bird watching, fishing, hunting and other natural history pursuits. I am a member of several local organizations such as the Long Point Fish and Game Club, Norfolk Field Naturalists and Bird Studies Canada.



Shirley Rothery has been active in the Norfolk Community since 1989 when she and her husband, Mike, first discovered and

enjoyed Norfolk as a vacation spot. They retired to Port Rowan in 2001 and have been active in the area since then. Shirley is currently a member of the following groups;

- Board of Directors of the LPWBRF
- Board of Directors Norfolk Field Naturalists and their representative on the LPWBRF Causeway Improvement Project
- Port Rowan South Walsingham Heritage Association
- Port Rowan Park Planning Committee
- Norfolk Woodlot Owners Association
- Bird Studies Canada Volunteer in the Feeder Watch Program and the Marsh Monitoring Program.

Shirley enjoys gardening at her 53 acres site close to the St. Williams Forestry and Ecology Centre. The site has been planted with trees and tall grass prairie under the LPWBRF Forest Corridor project.

Peter Selk is a native of Toronto but also a lifelong Long Pointer, having spent time at Long Point every summer since 1948. He has been a Long Point property owner since 1988. He is a retired chartered accountant and business executive, and has served as President of the Long Point Ratepayers' Association since 2009.



Payden Shrubb, Director (on leave of absence) is a recent graduate of the Masters of Forest Conservation Program at the University of Toronto and she has an undergraduate degree in Environmental Studies from the University of Waterloo. She has spent the past 4 summers working at Long Point Eco-Adventures as a guide and program coordinator, and is currently

the project manager for the Explore Norfolk Trails Initiative. Payden enjoys travelling, the outdoors and is a member of North Shore Runners.

Madaline Wilson was farm raised and remains on the land in Charlotteville. She was an elementary school teacher for 33 years. In 2000, she purchased a house in Port Rowan and opened Abigail's Bed and Breakfast as a new millenium project. She has served on church, education and community boards most of her adult life.



She enjoys her family, gardening, cooking and crafts and sewing of all kinds. She hopes to see new advances with this board- a new experience.

Nick Wilson - I am a grade 8 teacher with the Thames Valley District School, with a background in science and geography. I have had the pleasure of volunteering with the LPBRF for the past 16 years. I first got involved with the Biosphere during the establishment of the forest monitoring plots and the salamander monitoring project, which I continue to help with. For the past 6 years I have been a board member where I have served as the secretary for the past year. I enjoy volunteering my time with the Biosphere Reserve as I enjoy working with, and sharing ideas with, the other board members as we work to spread the message about the LPBRF.



Dale Vranckx - I have been a Director with the LPWBR Foundation since 2010.



I live in St. Williams with my wife Angeline and family who have been intimately involved since 2005 in our family farm - Blueberry Hill Estates - that overlooks the Long Point World Biosphere Reserve. We have developed our farm operation to include our Blueberry Farm Market with 'pick-your-own' option, farm tours, the Fruit and Vegetable Tech Exchange, a maple sugar bush operation, a conference hall, and a soon to open café and winery. I have developed a sustainable philosophy farm operation and was awarded an Innovation Award by the Provincial Government in 2007. My farm was Local Food Plus Certified Sustainable in 2009. I have a passion to educate other growers to become sustainable and environmentally responsible.