

Conservation Matters

Fall 2018

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25 Years of service !

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Charting New Ground

It's now 25 years since the Thousand Islands Watershed Land Trust, initially the Thousand Islands Heritage Conservancy, began permanently protecting habitat in this region. We've worked with dozens of landowners on dozens of conservation projects over those years – and no two projects have been the same. This year has us breaking new ground, again.

Until now, almost all project properties have been undeveloped land. They've been small islands, or sections of islands with forest and shorelines in natural states. They've been forests and wetlands that connect to parks and other conserved areas, and have critical habitat for the extremely diverse plants and animals on the Frontenac Arch. But this year it happens that we've had the pleasure of working with landowners of four properties that add fields and farming to the conservation equation. And, it's been a rewarding eye-opener.

One farm project is featured in another article in this newsletter. Ironwoods Organics has become an ecological demonstration farm opportunity, with research into soil health, recordings of species and species at risk and education programs. The three others have taken the route of donations of the properties to TIWLT. Why the interest in fields into the conservation mix? It's because this mosaic landscape of farmland and forests and wetlands and lakes and streams and all of the edges of these habitats are each places where nature lives and interconnects. The healthier each of these habitat types are and could become, the healthier will be this landscape in total.

Two of the new properties have fields that are cut for hay. We'll continue to work with the farmers that are haying, and time the cuts to be made at the end of July. On one of these properties, that's the practice already, and there are several bobolinks and eastern meadowlarks nesting and raising broods there as a result. Both of these grassland nesting bird species are now rare and becoming rarer throughout their range. Hayfields, to them, are the 'prairie' habitat they must have. Nesting on the ground, the hatched chicks can't survive a June mowing. A delayed cut lets them fledge and fly. The haying then becomes a tool to manage grassland habitat. TIWLT will introduce the delayed cut strategy to the second farm, and help attract bobolinks and meadowlarks – and fireflies and bats as well – to TIWLT's conservation work.

The third property has a field that was hayed until a couple of decades ago. We'll be assessing a best strategy for it's future well-being and conservation contribution.

All of these properties also have forests and wetlands. And they all have a number of species at risk and are high value towards the conservation of this region's very high biodiversity. At the same time, the conservation work has brought the land trust into new territory, of sorts. Severances, surveys and issues like payments to municipalities for parkland have added new complexities. In 2019, the Thousand Islands Watershed Land Trust will revise its conservation strategy, and will lay new plans to ensure that it will always have the ways, means and people-power to guarantee the conservation of nature in the watershed of the Thousand Islands.

Why Land Trusts?

If not now, WHEN?

When you're hearing the news about you might ask "What can one person a lot. You can reduce fossil fuel use with power, and electric cars - a practical use plastic, buy local food wherever



Bobolink- Threatened Species

If not us, WHO?"

climate change and species decline, do?" Turns out one person can do quite geothermal, Bull Frog green electric choice now. You can stop using single possible, and switch to LED lighting.

And you can also support the work of land trusts to fight Climate Change.

Land trusts fight climate change. We preserve habitats and the plants and trees that clean our air and sequester carbon. TIWLT has been doing it for 25 years and we've preserved over 4,600 acres with the help of many generous donors as well as area organizations and government agencies, such as those partners listed below. We are your neighbours, working outside governments but with the benefit of CRA and IRS charitable receipts for 100% of the land's value, and can move more quickly than governments.

Not only do Land Trusts combat climate change, but while preserving habitat we also protect species at risk. A UN study released in October reported that an estimated 60% of the animals on this earth have been eliminated since 1970. There are lots of reasons for that and many of them the result of political decisions. We can't control politics and policy decisions, but we can conserve land forever. So when you are helping the land trust to buy land or when you are donating land, you are helping the planet, directly.

We are currently accepting the donation of three farms for a total of 250 acres where we found, so far, 16 species at risk. When the donations are complete, we'll organize a walk and show you the treasurers people have chosen to conserve as a part of their legacy. These people are trying to do the right thing – and are succeeding. Not many of us have land to donate, but all your cash donations and your personal involvement in the land trust makes the property donations possible. Sometimes we have the opportunity to buy highly significant land. But even if the landowner gives us the land, each property can cost between \$7,000 - \$20,000 for appraisals, severances, surveys, legal fees, accounting, etc. Not every landowner is in a position to help with those costs. To add to that, we need a conservation fund to keep our promise to safeguard the land forever.

This fall, a few generous people donated to our new Seed Fund which will help pay donation or purchase expenses. We appreciate the civic-mindedness of Douglas and Blu Mackintosh, Susan Jane Ross and two others. If we are able to get grants to repay expenses, help from the landowners, and on-going donations, we will be able to continually renew the fund. We hope it will be perpetual and at the ready when important properties come along.

So if you're been wondering 'why land trusts?' we hope you have a few answers now. We're your neighbours who are trying to do the right thing alongside you. Together we can help Canada reach the international commitment to preserve 17% of Canadian land target before 2020. (Canada currently is at 11%) We're the group that can move fast on the ground to help landowners reach their goals in conservation.

All the best to you and yours for a wonderful holiday season and new year. Bring your families for a walk or a paddle in the spring. We'll show you lands that make a real difference to climate change and habitat for species at risk in Canada.

Partners in Conservation:

American Friends of Canadian Land Trusts
The Adirondack to Algonquin Collaborative
Charleston Lake Association
Charleston Lake Provincial Park
Environment and Climate Change Canada
Friends of Charleston Lake Provincial Park
Land Conservancy of Kingston, Frontenac, Lennox and Addington
Leeds-Grenville Stewardship Council
Ministry of Natural Resources and Forests
Nature Conservancy of Canada
Ontario Land Trust Alliance
Ontario Nature
Rideau Waterways Land Trust
Save the River
Thousand Islands Area Residents' Association
Thousand Islands Association
Thousand Islands Land Trust
Thousand Islands National Park
Frontenac Arch Biosphere Network
Frontenac Arch Biosphere Foundation



and **YOU?**

Ironwood Organics

is a small farm near Athens. It is a diverse, certified organic farm where the health of the soils, hedgerows, woodland areas and wetland are an integral part of growing healthy and nutritious crops.

Chris Wooding, who owns and operates the farm, provides the following report.

We should have known that something was up when early spring was warm enough to coax the apples blossoms and hazelnut catkins into spring growth, only to be plunged back into the polar vortex. Notwithstanding the sporadic growing season, the rest of the farm activities were a resounding success.

Tours

We continued with the on-farm tour program that was focused on themes of ecosystem services, climate change impact and biodiversity. The monarch tours, and the evening firefly sessions were a notable highlight.

Bats

During the summer, we participated in a provincial bat monitoring program that was coordinated by the Ontario Land Trust Alliance. (OLTA). At emergence, we would walk a predefined transect, and record the species and counts of the nocturnal mammal. At peak summer (i.e. peak insects) we were thrilled to record 7 different bat species. Over the summer we recorded some 9 gigabytes of high frequency recording. We look forward to the results of the analysis as OLTA sifts through the data over the winter.



We did notice that the bats were primarily found along the edges of the fields. These ecotones create a thermal buffer between the woods and the open fields (cooler in the day and warmer in the night). This intern concentrates the insect populations. The adjacent forests also provided roosting habitat.

PPB

For nearly a decade we have been a research farm, first with the Pacific Institute for Climate Solutions studying climate adaption of heritage potatoes. Recently we embarked on a Participatory Plant Breeding (PPB) project with the University of Manitoba. We select 1 oat variety, 4 wheat crosses, and 3 potato crosses. The goal of the cereal breeding is to narrow and stabilize a regionally adapted population over 3-4 years. The potatoes breeding is to take @350 unique potato crosses and select them down, saving only those that taste, grow, store well and show good disease resistance. This year we have them selected down to 26 varieties. In addition, we are taking true potato seeds (TPS). These are tiny fruit that set, much like a cherry tomato). Each seed is a unique 'random' selection of genes, that represent the parents complete breeding history.

The Thousand Islands Watershed Land Trust supports Ironwood Organics in a formal partnership agreement, along with a major Canadian Charitable Foundation. You can find out more about Ironwood Organics by visiting their web site. ironwoodorganics.ca

A WALK IN THE WOODS

with Shaun Thompson

The Thousand Islands region contains some of the most interesting and diverse landscapes in Canada. Settled within the southern portion of the Frontenac Arch, or Axis as it is also known, it is an area where elements of surrounding ecological regions come together to influence the life that abounds here. Combine that with its variable bedrock composition, several soil types and the influence of a number of connected lakes and rivers and the stage is set for all sorts of natural surprises.

So it was no wonder that I was excited when asked if I would be interested in surveying one of the larger properties with a conservation easement in partnership with TIWLT and generously funded by OLTA (Ontario Land Trust Alliance). To make the proposition even more tempting, the purpose of the survey was to determine what species at risk (SAR) lived here and assess the availability and condition of habitat available. With approximately 900 acres of highly variable terrain, surrounded by two lakes and dotted with wetlands, the possibility of interesting finds was high. This was right up my alley – how could I say “no”?

Day one started off well. It was a beautiful May morning and there were a number of species that I wished to focus on, particularly reptiles known to be active at this time of year after a long winter of dormancy. Also newly arriving migrant birds would be best observed at this time of year. Many of the year’s plant growth would be erupted enough to be visible and identifiable as well. Lots of possibilities lay ahead so it didn’t take long to get the long legs in gear.

It wasn’t ten minutes into the morning and I had my first thrilling find. No, it wasn’t some rare or endangered thing, but rather a common sight these days in many areas of southern Ontario. The situation itself made it a bit unusual. While clambering up the first of many steep, rocky slopes I would encounter this summer, I flushed a wild turkey off her nest. The fact that it was only four feet from my face when it bolted, and flew within inches of my right ear made it comparable to having a ruffed grouse explode out of the deep snow between your snowshoes on a cold winter

morning’s solo hike. The experience reaffirmed three things in an instant.

One was just how big these birds are. The others were that my old ticker was just fine and that this was going to be a winner of day no matter how the rest of it panned out.

The next hour kept bringing more interesting finds. A pair of Red-shouldered Hawks and their nest was located in typical habitat by following clues given by calls and flight behaviour. Shortly after



booking it out of their territory, with 'mom' escorting me for several hundred metres, I came to a steep, rocky cliff with large boulders tumbled along its bottom. The main interest at first was the small wetland at the outflow of what was a drainage route for collected moisture. I thought, "A good spot for Eastern Ribbonsnakes or turtles perhaps"? The formation of large boulders caught my eye and drew me in their direction. As I stuck my head between several of them that formed a bit of a cave environment, I received my second heart test for the day. Out blasted a turkey of another kind – the vulture type - too fast and too close to get a good look at her as she whizzed by. The nest, containing one egg, was not much to look at. It was but a bare scrape on the ground under the shelter of overhanging rocks. The smell was quite memorable however. I had read about it but never had the "pleasure". In all truth however, as rank as the odour was, the experience was quite enjoyed – by me at least.

West end of extensive talus feature

The rest of that first day held no more startling moments but did provide some satisfying and significant finds in the way of SAR. A couple of endangered plants, a Blanding's turtle and an unexpected sighting of a pair of West Virginia White Butterflies made the SAR search part of the day a good success. The day also gave me a good feel for the rest of the property and the potential it held for the survey days to come. It left me quite enthused, hopeful and looking forward to the next day. It also left my legs in a shocked state. I had not had such a good workout for a couple of years and combined with the steep slopes and cliffs they were cramping up all the way home and made me wish my truck did not have a standard transmission!

Rock covered in Walking Fern

Several other days were spent surveying and each day (or night) resulted in new finds – and happier legs. So far a total of twenty-four SAR have been documented as using the property. In addition, a number of rare and interesting species were observed. But it is not just the hunt for rare species that exhilarates in work such as this but the media and context within which the work is conducted. Mature forests with huge specimens of hickory, oak, pine and maple were everywhere. Fascinating (at least to me) wetlands were logically thrown into the mix, connected to one another or to one of the large lakes and doing their part to provide moisture, habitats and diversity. Sharp,



somewhat intimidating, cliffs and steep rocky slopes not only dominated the lakeshores but formed impressive vistas and interesting habitat niches within the interior. It truly is an interesting property and a shining example of the watershed's landscape. In the back of your mind at all times is the encouraging fact that through foresight and generosity of landowners such as these and organizations such as TIWLT and OLTA it will remain intact and healthy for a long time to come. Continue Shaun's article here - don't know how to link pages yet - He had tw30 pix also but I haven't gotten them out of his article

Notes From the Recent Ontario Land Trust Gathering.

Note: The Ontario Land Trust Alliance is our umbrella organization, supporting land trusts throughout Ontario

Aichi Targets

Canada has committed to 19 of the possible 20 AICHI targets (Convention on Biological Diversity) to be met by 2020 under the Convention on Biological Diversity. The OLTA Gathering noted that National Marine Conservation Areas (in addition to terrestrial and fresh water habitats) count against Canada's goal to preserve the 17% of land conserved international target. There is an initiative to declare a marine conservation area in Eastern Lake Ontario and so we discussed the possibility of extending it to include some areas in the Thousand Islands. Land Trust. See: cbd.int/sp/targets

Uncounted Conservation Areas

Indigenous, Land Trust, Conservation Area, Municipal and other (private) conservation properties are not currently included in Canada's inventory. MNRF commissioned a study "Exploring Barriers and Opportunities Project" regarding the need to acknowledge more of these privately protected areas.

A First Nations advisory council called the Indigenous Circle of Experts (ICE) has provided a support document (We Rise Together, March 2018) - a Pathway to achieve Canada Target through the creation of Indigenous Protected and Conserved Areas in the spirit and practice of reconciliation.

Area-Based Conservation

The need to co-ordinate actions among conservation groups was emphasized in order to enhance areas of connectivity. (areas where high value acreages can be targeted together as opposed to individual corridors between only two higher value plots). The UN Convention on Biological Diversity characterizes these areas as "Other Effective (area-based) Conservation Measures (OECM's), An expert panel has been struck to provide guidance.

Evaluation Criteria

The International Union for the Conservation of Nature (IUCN) lists many resources that may be helpful in further developing our selection and management criteria: e.g. Red List of Threatened Species, Living Planet Index, Global Wild Bird Index. New indicators will include "Commercial Demand for Species" and Spread of Invasive Species".

We need to consider that we have all three conservation categories directly or indirectly under our control (terrestrial, fresh water and marine) and therefore we need to review our mandate.

There are other references for criteria including the International Union for Conservation of Nature, and the Canadian Council on Ecological Areas (CCEA - a government NGO). In addition to the North American and Canadian (domestic) criteria e.g. Species At Risk (SARS), CCEA "tool and assessment criteria", Nature Conservancy of Canada (NCC), Ontario Nature. All of this simply illustrates that there is a big picture (international) and a local picture (Canada, Ontario, and program specific (EcoGift), plus our American Friends of Canadian Land Trust criteria. Much effort is going into simply harmonizing the language, criteria and support resources of the multitudinous initiatives, participants. The cost of accessing data e.g. mapping tools has dropped considerably, but the learning curve and hardware costs are still significant. We can benefit from positioning ourselves within the context of these programs and criteria to achieve specific objectives by leveraging the

benefits that our properties have to achieving the goals of these programs and the support they may provide (recognition, funding etc.).

Temporal Context

It is important to note that nearly everyone involved thinks and acts in the present context with very little attention paid to the dramatic changes effected by climate change despite our “in perpetuity” responsibility. The language of the standards and practices and our agreements needs to start addressing the flexibility to manage properties under the shifting sands of the future or we will put ourselves and our successors in an untenable position. For example it may be beneficial to cut a tree despite the gut feeling that we do not want to cut trees. We need to develop guidance for tree-age (triage for trees). There are many timber and non-timber forest products that can be sustainably harvested and carbon sequestration can be enhanced by improving biodiversity and bio-value.

Climate change and therefore species transition is happening much faster than anticipated. Little guidance is available to help conservation efforts related to assisting climate and habitat loss-induced migration e.g refugees, resilience, invasive species etc. One of the key crisis criteria for land trusts moving forward is ‘what happens if a property loses its “significant” biological status’? Loss of significance status may occur much sooner than anticipated since virtually all climate change estimates have been too conservative according to the latest findings (e.g. Nature # 563 - 2018, - ocean heat uptake is 60% more than anticipated). Most estimates use linear projections and do not factor in tipping points. Climate change and its impact are not linear and are subject to many potentially catastrophic tipping points which can dramatically accelerate climate chaos and therefore greatly accelerate ecosystem chaos.

Carbon Sequestration

Under the Sustainability umbrella carbon credits would help meet sustainability goals while providing a stewardship revenue stream. It was noted that two Ontario Land Trust properties have been certified, indicating that other Trusts may follow. We know of only two large land trust tracts in the U.S. that are certified. Some new studies and evaluation tools are available (e.g. TD Bank report, I Tree estimation tool).

High Resonance Marketing

The do’s and don’t’s of talking points were discussed emphasizing the value of using more productive (higher resonance, receptivity to the audience) language to build trust, and avoiding language that has little or negative value. All of the power point presentations are available on the OLTA website (olta.ca) including this one with a list of suggestions. The usual hint to use more social media (e.g. Facetime, Twitter, Instagram etc.) was thrown out to the elder care-ready audience although there were a surprising/refreshing number of younger folks at this years gathering.

Eco Health

A session noted that there has been an uptick in scientific reporting on the value of a nature immersion experience such as a slow walk in the woods or a window view, or even a picture of a natural setting. Various initiatives have sprung up to commercialize this trend “Forest Bathing, Forest Therapy”, revving up the old endorphins and serotonin, or just the “N” (nature) vitamin. On the less commercial side, to just bring more attention to the benefits e.g. (Eco-Health Ontario). The flip side of the benefits is the dis-benefits e.g. “The illness cost of Air Pollution”.

