



The Woodland Observer

Enjoy Nature!

Nipissing Naturalists Club

June 2011

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Forest Biomass for Heat & Electricity

By Andy Venable

Megan Smith, project manager of Biomass Innovation Centre at Nipissing University visited us last month and spoke to us about the use of biomass and its use in renewable energy. Although she was only able to scratch the surface of this immense project, Megan was very informative and provided us with pamphlets and publications to further our knowledge on this subject.



Megan Smith;

Biomass is "plant material, agricultural wastes, animal residues, industrial residues, sewage and municipal wastes". Biomass is considered a clean source of energy due to the fact that it uses renewable resources that offset carbon emissions made from combustion. It is safe for the environment and can potentially be smokeless if burned properly.

The Biomass Innovation Centre is concerned primarily with solid wood biomass for biofuel, using wood pellets and chips to heat homes. One of the reasons for this is the fact that we are in Northern Ontario which is part of the Biomass Belt Region. Northern Ontario has great potential for creating green energy - we have all the necessary technical and industrial resources available to us. Ontario has trained workforces, mills and factories capable of conversion to biofuel. All of this can happen within 100 kilometres from practically every city and town in Northern Ontario, making biofuel not only sustainable, but local as well.

Megan and her team are currently working towards this end with the aid of Nipissing University, along with manufacturers, the forestry industry, local and provincial government and business experts. If successful, North Ontario can be an example to the rest of the country that this can work to our advantage not only environmentally, but economically as well.

Wood pellets contain no additives, and are very safe economically and environmentally to create. Wood is first ground, and then dried to 10% moisture content. It is then hammered and sent through a pellet press. The material is then forced through a press under high temperatures causing the release of natural lignin in the wood. The lignin acts as a glue to hold the pellets together.



Typical biomass

During Megan's presentation she had mentioned that Sweden has made significant changes in their policies concerning biofuel and sustainable energy - they have begun importing biomass from other nations. Sweden is profiting from this not only because they have begun to become bio-economical, but neighbouring nations are paying them to take their biomass. Sweden may not be an ideal economical example for Canada, due to our size and the fact that the U.S. is the only neighbouring country, however, our country can take steps towards becoming at least partially self-sustaining.

We would like to thank Megan for speaking to us. We hope that her work continues so that we may someday have a self-sustaining North Ontario.



Can't figure out what's going on here...? See page 6!

Exciting News!
The Nipissing Naturalists Club has presented a cheque for \$1,000 to the Laurier Woods is Growing campaign!!!

Into Nature, in the KNOW...

By Melanie Alkins

After listening to Fred Pinto's presentation in March on the major Chimney Swift population and their amazing acrobatics that we have right here in North Bay, I felt, that as Naturalists, this is something we should know about and experience. As such, I thought it would be cool to do a feature article each month highlighting unique natural features in our area. Thus, in light of the fact that it is the year of the Forest...I thought, what better way to start off the series of articles than by writing about Red Spruce, *Picea rubens*.

North Bay is home to the most northerly and westerly red spruce population in Ontario and Canada, respectively. It is hundreds of kilometers away from any other natural red spruce population in the province. The stand is located at the northern edge of its range and more specifically, just North of the City along Highway 11N.

The stand can be described as containing a core area of mature to over-mature trees surrounded by scattered individuals throughout the adjacent forest. The site was once identified as a Candidate Area of Natural and Scientific Interest but was never designated provincially significant due to its small size. It has however, been designated as a High Conservation Value on the Nipissing Forest and is being managed accordingly.

Naturally, red spruce occurs across the temperate forests of the Southern Appalachian Mountains, the Adirondacks, the Maritime forests of Maine, Nova Scotia, New Brunswick, and across the St. Lawrence into the Laurentian Mountains of Quebec. The species had only been officially documented in Ontario in the late 50's. Areas where red spruce has been positively identified in the province are illustrated on the map, following:

Our local stand of red spruce has unique genetic characteristics which are important not only for the species



survival but for managing future forests in the current changing climate, literally and from a forest management perspective (selection or partial cutting preferred as opposed to

clearcutting). The stand has also been important to the Nipissing Forest as a natural seed source, and has been used to not only increase the amount of red spruce in the Nipissing Forest, but also to regenerate the previous most westerly stand, once located north of Thessalon, which was previously cleared for the construction of Highway 129.

Red spruce is known for its longevity (+400 yrs) and durability as a shade tolerant species. It thrives by invading small "locally protected" openings or by persisting in the understory until a natural opening occurs. They are typically found as pure stands but can also be found within forests mixed with eastern white cedar, balsam fir, black spruce or along shorelines. In addition to being a shade tolerant species, red spruce prefers acidic soils.

Red Spruce has a variety of uses from Christmas trees, pulp, paper, it is an excellent tonewood, and is used in many higher-end acoustic guitars, the sap can be used to make spruce gum, and the leafy red spruce twigs can be boiled and used for making spruce beer!! Gotta try that one!!! Red spruce is the Provincial tree of Nova Scotia where it is revered as a saw log and by the pulp and paper industry.

So, how do you identify a red spruce? There are several indicators that allow one to differentiate between red spruce, black spruce and white spruce. A quick and easy guide to discern between the three native spruces can be seen below. This guide was put together by the Guylaine Thauvette, MNR Nipissing Area Forester with a few additions from me. Note, due to the rarity of this species in our area, the North Bay MNR District Office would be interested in learning about other natural stands locally. Please contact Guylaine Thauvette (705-475-5539) if you are aware of a natural stand(s).

Following Information : **R** = Red Spruce, **W** = White Spruce, and **B** = Black Spruce



Silhouette

R=Wide crown with branches turned up at the ends – pagoda like or “see through” branching.
W=Wide crown with branches extending straight out, not turned up at the ends bushy, irregular, and non “see-through” branching.
B=Narrow crown, branches sweeping down.

Bark

R=Furrowed, large plates, grey with pink and grey under the bark. **W**=Medium plates, light grey with pink under the bark. **B**=Small plates, dark brown, with olive green under the bark.



Needles

R=Curved, soft, bitter taste.
W=Straight, stiff and sharp, mellow taste.
B=Straight, soft, mellow taste.

Into Nature, continued on pg 3...

Calendar of Events

Next General Meeting

Tuesday, June 14, 2011 at 7:00 p.m.

Topic: Rare Plants & Habitat of Newfoundland's Limestone Barrens

Speaker: Julie Robinson, OMNR Planning Intern

What would you do if the entire world's population of a plant existed only in your backyard? Julie will lead us through a discovery of the unique wonders of the endangered plants and globally-rare habitat of the Limestone Barrens of Newfoundland. She will explain how field research and stewardship is helping to combat the threats of human disturbance, herbivory and climate change for three endemic plant species; Long's braya (*Braya longii*) (endangered); Fernald's braya (*B. fernaldii*) (threatened); and the Barrens willow (*Salix jejuna*) (endangered).

Bio: Julie Robinson is a graduate of Nipissing University (B.Sc. in Environmental Biology & Technology), Canadore College (Environmental Protection & Compliance Technician) and Memorial University (M.Sc. in Conservation Biology). Her graduate research focused on examining the effects of human disturbance on the rare plants and habitat of the Limestone Barrens of Newfoundland. During her time in Newfoundland, she worked directly with the Limestone Barrens Species at Risk Recovery Team to develop conservation strategies for the Barrens willow and two *Braya* species. Within recent years, Julie has worked with the Canadian Wildlife Service as a consulting biologist, for the Municipality of Latchford developing W.J.B. Greenwood Provincial Park, and presently for the Ministry of Natural Resources, North Bay District, as a Land Use Planning Intern in the Planning and Information Management Team.

Sunday, July 10, 2011

Dragonfly Count / Outing

Meet at 9 a.m. at the North Bay Information Centre.

Brent has about five extra nets. Bring your own nets, field guides, close focusing binoculars, hand lens and other equipment if you have them. Bring sandals, rubber boots, water shoes, swim suit or waders for exploring shallow creeks. Also bring a lunch, sunscreen, and bug spray. If we have any experts from out of town join us, we will split up into groups, otherwise we will have one group.

For more information, contact Brent Turcotte, (705) 472-3335, brentturcotte@yahoo.com

Welcome! - New Member

Douglas Brisebois.

North Bay Hunter's and Anglers Property Tour with Al!

By Melanie Alkins

In March, an outing took place at the North Bay Hunter's and Angler's property just northeast of the City. Al Dobbs gave me an enthusiastic tour of the property and bush that is home to a wonderful tolerant hardwood forest. Hats off to Al for his patience and tour guide abilities! It was a wonderful spring day, the snow cooperated and we even heard a few feathered friends.



Al Dobbs, and Melanie's dog Bodhi. Photo taken by Melanie Alkins.

Thanks again Al, for the great tour!!!



Into Nature - con't

Cones

R=Ovoid-oblong, thickened at the top and tapering to point, light-colored – located distally out on the ends of the long branches, never along the bole of the tree.

W=Cylindrical shaped, blunt-tipped.

B=Stubby, ovoid pointed, but with tip withdrawn, very round when open -dark purple cones – always clustered close to the main stem (stand at bole and look up... will see cones all the way up).



Main Limbs - **R**=Thick **W**=Medium **B**=Thin

Buds - **R**=Hair do not cross at the end of the bud. **W**=No hairs. **B**=Hairs extend and cross at the end of the bud

Monthly Bird-Bash

Saturday & Sunday:

June 11 & 12, July 30 & 31, Aug. 27 & 28, Sep. 10 & 11
Spend some time observing our local birds and report on how many species of birds you saw. Submit reports to Dick Tafel, rtafel@sympatico.ca or 705 472-7907.

Birdwing Meeting

Fourth Tuesday of each month at 6:30 p.m. The summer meetings are held outside! Meet at the Information Centre next to the Dionne Quints home, and we'll go to wherever the birds are!

Yellow-bellied Sapsuckers

By Andy Venable

Editors Note: Due to technical difficulties last month, Andy's speaker synopsis was not printed. Thank you for your persistence in getting this to us, Andy!

It was a great pleasure to listen to Doug Tozer on the quality of selection of logged and unlogged forests for breeding of the Yellow-bellied sapsucker. Doug was definitely informative and energetic and kept us entertained the entire presentation. He also brought along some of the tools he used for his research which I found to be very creative.



Yellow-bellied sapsuckers are a type of woodpecker that make their homes in cavity trees and are most successful in beach and aspen with heart rot. They feed and arthropods but, like their name suggests the also feed on tree sap, leaving shotgun looking holes in the trees.

Yellow-bellied sapsuckers are troubled due to the fact that they mainly use trees in declining health, which are often

felled because of selection logging. Health risks also play a factor for loggers and snags are also logged for safety reasons. Bears have been found to play a large factor in the survival of sapsuckers. They have actually been found climbing trees and digging out the eggs and young, and Doug had video evidence to prove it.



While Jeremy and my classmates took a walk in the Canadore trails we in fact saw lots of the same evidence. Many trees had been chewed open on many trees

that were once woodpecker nests. According to Doug many nests failed in the first year due to black bears.

If we could save a minimum of ten heart rotted trees per hectare, preferably aspen, the chances of survival of yellow bellied sapsuckers would greatly increase, according to Doug.

Once again we would like to thank Doug Tozer for his presentation. I personally found it to be very applicable to everything I am currently learning in school right now. We would also like to congratulate him and his wife on the birth of their new child and wish them well in the future.



Earth Day Hike in Mashkinonje

By Angela Martin

Many of us have learned not to listen to the weatherman, unless dangerous weather is coming or one would never go outside and enjoy nature. The forecast for our hike was 60% chance of showers. We had our hike and some hiked further afterwards; we were not showered upon. Twenty- two people came for our hike, including two families, each with two children. The inquisitive minds of the young added to the enthusiasm of the day.



We hiked the Heron, Bobcat and Atakas Trails. One of the many ponds is Cranberry Pond, where the remains of a draft dodger cabin can be seen. It was also a good stop for lunch. Superintendent, Chuck Miller told us of the significance of this area.

The woods and ponds were alive with plant and wildlife. Trailing arbutus was in flower, pale corydalis was two inches high and the always present three kinds of reindeer lichen were of interest. Fortunately Dr. Peter Beckett was with us to tell us about the orange slim mold, there were a few varieties along the way. Woods frogs and spring peepers kept us amazed. Painted turtles, water and garter snakes were in clear view. We saw and heard yellow-rumped warblers, Sandhill cranes, Canada geese, ring-necked ducks, buffleheads, yellow-bellied sapsuckers, northern flickers, winter wren,

great blue heron, red-breasted nuthatch, bufflehead, chipping sparrow, common loons and northern harrier.

Every time we have a hike, we experience new and wondrous events in our natural world. There are many neat places to visit in our area. The Mashkinonje trails make it easy to experience a variety of different habitats. They are free, please come and experience them.

Orange slime mold; hikers on the trail. Photo's by Angela Martin.



Wildflower Walk

By Karen Major

Despite the overcast beginning to the day, Sunday turned out to be absolutely gorgeous for my wildflower walk. Roy McMartin joined me for a 3 1/2 hour walk. There are numerous wildflowers blooming now and Roy was avidly taking photos of them all and documenting their names. Some were new plants to him and others were known to him. Some of the plants we saw were Rose Twisted Stalk, Chokecherry, Blue Bead Lily, Foam Flower, Kidney Leafed Buttercup, Hawthorn Flowers, Dwarf Raspberry, Sarsaparilla, Red Bane Berry and Bunch Berry. The Red Currant, Black Chokeberry and Indian Cucumber Root are very close to flowering. Another couple of days of sunshine and they'll be out.



Great Blue Heron; photo by Karen Major

We stopped at the bunkie to look out at the beaver pond and see if the Great Blue Herons were around. One of the parents was standing on the nest, so we decided to crawl through the bush and see if we could get some photos of it. Of course, just as we're climbing down the hill (under the cover of brush and trees) to get close enough for a photo, the bird took off. Roy and I sat waiting patiently for around 3/4 of an hour but it didn't come back to the nest. We could hear and see at least one chick moving around in the nest, so we knew the parents weren't too far off. After waiting that long, we decided to leave and not bother them anymore, so we went down to the shoreline of the beaver pond to start heading home. This made for a little easier walking. The painted turtles were sunning themselves on the logs in the water and numerous dragonflies were darting about. We even saw one exuvium, left from a dragonfly hatching out, hanging on a piece of grass. After a quick stop back at the bunkie to pick up some photo equipment that we left there and a cool glass of water, we headed back to the house.

The bugs weren't too bad. Some mosquitos would torment us when we'd stop for Roy to take flower photos and the black flies were around, but I've seen worse. The sun was shining, the day was warm and Roy and I enjoyed our walk and all our sightings.

Note Cards:

The 2010 Photo Contest winning photos have been made into note cards. They can be used for any occasion; birthday, get well, congratulations... All 8 cards come in one package including envelopes for just \$10. Ask to see them... they are beautiful!

Contact: Lois Filion 476-9665 to place your order.

Citizen Scientists and Days Well Lived Wanted!!!

By Melanie Alkins

Hi folks, before we sign off for the summer thought I would put a plug in to my citizen scientists friends

It is that time of year again when the birds are back! And what better way to spend the day, or evening for that matter, getting out and enjoying the cool chattering and acrobatics of the chimney swift, the incessant yet rare call of the whippoorwill or the majestic call of the loon??!!

If you are up for a cool and rare adventure there are several monitoring programs going on in the area that could use your support! It can be as simple as paddling around on the lake....or even just making note of the birds on your lake over the course of the summer and watching to see if they have fledged young; or it could be touring around the city investigating the wonderful architecture of our chimneys and whether or not they are playing host to some lovely chimney swifts; or it can be as easy as touring to and through some lovely pine barrens to hear the call of the whippoorwill!!

If you are interested in either of these programs let me know and I will set you up with instructions, how to and where to go and I will even take care of the data entry for you!! Contact me through email: melalkins@hotmail.com or via my cell: 705-477-5110. What better way to spend some of your time! Please don't forget about the herpetofaunal atlas and don't forget to record those turtle and snake and sally sightings www.ontarionature.org/protect/species/herpetofaunal_atlas.php

Have a lovely summer folks and cheers to many days well lived!

Transformation for a Good Cause



Jeremy St. Onge put the challenge out to his Canadore students - he would allow his luxurious locks to be shorn off if they raised \$1,000 for Laurier Woods.

The Environmental Technician, Protection and Compliance students quickly met the goal, and in mid-April, Jeremy held up his end of the bargain.

The goal of the '*Laurier Woods is Growing*' campaign is to raise \$100,000 towards the purchase of 100 acres of wetland and add it to the Laurier Woods Conservation Area.



Congratulations, Jeremy!

You've found the "fun" in fundraising!

And you and your students are to be commended for all of your conservation efforts.

