



# Grey County WOODLOT

## Association ...ON THE LEADING EDGE

A CHAPTER OF THE ONTARIO WOODLOT ASSOCIATION

### WHAT'S INSIDE?

- 1 PRESIDENT'S REPORT
- 2 UPCOMING EVENTS
- 2 GREY COUNTY GEOLOGY
- 3 GEOLOGY (CONTINUED)
- 4 TECHNICAL SEMINAR REPORT

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### PRESIDENT'S CORNER

Members attending our program events this fall agree they have been educational and enjoyable.

On September 17, Minerva and I were pleased to welcome members to our place for the annual BBQ. The rain held off and we had a very good turnout. Thanks for coming.

There was also good attendance at our Technical Seminar October 15 that focused on the Emerald Ash Borer situation and is covered in more detail elsewhere in this issue. At that meeting a member of the audience who has forested property in the Singhampton area, close to the boundary with Simcoe County, reported seeing damage from this insect on his Ash trees. As a follow-up the Canadian Food Inspection Agency sent one of its inspectors to investigate and I am pleased to let you know that no evidence of the insect presence was found. Grey County remains an unregulated area – for now. Constant vigilance is required. Movement of firewood is the main vector.

The second Bruce-Grey Forest Festival was held October 18, 20 and 21 at Allan Park Conservation area and consisted of 32 activity

stations to provide 900 grade 7 students with hands-on environmental learning experiences. This was another great success and I am proud of our association for helping to sponsor it. Teaching was done by high school students and both Minerva and I enjoyed again helping with training, despite cold, wet weather. I wish to thank our members who also served as volunteers and I especially want to recognize Board member Jim McLachlan who not only represented us on the organizing committee, but brought his sawmill and demonstrated the sawing of logs into boards at one of the activity stations. The event was very well managed and we commend Saugeen Conservation for teaching young people in our community about sustainable forest management and protection of the natural environment.

The Ontario Woodlot Association Summit, a special meeting to provide a networking opportunity among the 19 chapters, was held at the Ganaraska Forest Centre November 4 to 6. Our chapter was represented by Jim McLachlan, Past President and Hans Hess, Vice President. Twelve chapters sent representatives. Our representatives

(Chair's Corner continued) found that similar challenges face all chapters and a survey prior to the meeting identified important issues as funding, attracting members, volunteer recruitment, communications and working together as being important.

It has now been confirmed that the MNR will not continue administration of the MFTIP program through OWA and OFA beyond the end of August, 2012. I understand the Ontario government may consider some bridging financial support for some OWA services. This loss of MFTIP funding presents a major issue to OWA because it represents about 60% of its total revenue. The Business Development Committee is continuing to look for new sources of revenue but so far, in my opinion, the proposals do not begin to fill the gap. I have been urging fellow Board members, as a matter of urgency, to prepare a new strategic plan to reflect the new reality, and I will continue to do so at the OWA Board meeting December 14.

Best wishes to all for the holiday season and the New Year.

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**Upcoming Events Early 2012**

**February 25**

**Annual General Meeting of the GCWA**

GSCA Site, Owen Sound 10 am.

- 1. **Forest Health** - Susan MaGowan - Forest Health Specialist, MNR
- 2. **Impact of Forestry** - Jesse Henrich - Lands and Forests Consulting

**March 31 and April 1**

**Grey Bruce Woodlot Conference and Exhibition**

As usual the program on Saturday will be held at the Elmwood Community Center 9 am - 3:30 pm, with a site visit on Sunday.

Tentative list of speakers and topics on Saturday

- 1. **Creating and Establishing Wetlands** – Wetland Care Program – Phil Holst.
- 2. **History of Forestry** – Land Clearing and Tree Planting during the Past 200 years - Clarke Birchard.
- 3. **Critters in the Litter** – History and native versus non-native species – Prof Jonathon Schmidt – University of Guelph.
- 4. **Update on Invasive Species** – Hailey Anderson – Ontario Invasive Plant Council.

**5. Biodiversity in the Woodlot** – Dr. Peter Schleifenbaum – Haliburton Forests.

**6. Bats are being Threatened** – White Nose Syndrome and other concerns – Leslie Hale – Biologist – MNR – Peterborough.

Details to follow

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**Grey County Geology**

**Part 2:** Long ago but not so far away.

You may remember that the first part of this presentation (Newsletter, summer 2010) dealt with the effects, eons ago, of plate tectonic and volcanic action in the geologic formation of our area. Now we come to another major factor, glaciation.

During the last 2 1/2 million years (or so) much of North

America was covered by an ice cap that may have been up to 1 km thick over Grey county. Geologists have established that during periods of unbelievable cold and snows at least 4 major and distinct glacial advances from the north occurred over southern Ontario, while, with intervening warmer weather, ice may have continued to move forward slowly but now it melted faster than movement at its terminus so that the ice retreated. Indeed, glacial features seen in our area can be attributed to last of these, the Wisconsinan ice age, which lasted from 20-10,000 years ago; Grey County was particularly affected by its Georgian Bay lobe. Glaciers change the landscape both during their advance and retreat.

Advancing giant ice sheets compress the land; indeed, parts of Ontario are still rising because the load has been lifted. The ice scours and flattens the landscape and also widens and deepens existing valleys leaving deep U-shaped ones, of which Beaver Valley is a good example. In progress the ice picks-up material that it traverses producing a glacial load; such material may be at the ice's surface or mixed with it. Where glaciers encountered more resistant bedrock, as in the north, only overlying layers were removed; to the south softer sandstone and shales were more severely affected. Thus, glacial load may include material varying in size from giant boulders to rocks and, where a glacier passed over preexisting lakes, sand and clay from their beds; such material at the base of the moving ice rasps the

(Geology continued) surfaces it traverses. Today exposed, rasped, rocky surfaces are marked by parallel striations of varying size and depth, their direction indicating ice movement. The solid material within the ice is also crushed, jostled by adjacent material and eroded. In this rocks within a moving glacier are eroded so they often have an angular shape rather than being rounded, the result of water wear. Moving ice may produce drumlins. These are eventually manifest by egg-shaped hills 15-35 m high that have a larger rounded end which gradually tapers towards a narrow pointed one; scientists are not quite certain how they form. One theory is they may result from subglacial sheet floods in late glacial times. However drumlin formation identified through imaging beneath the West Antarctica ice, resulted in a significant step in [geomorphologic](#) understanding. The Hofsjökull marginal drumlins formed through a progression of subglacial depositional and erosional processes with each horizontal till bed within the drumlin created by an individual surge of the glacier.<sup>[1]</sup> Erosion under the glacier in the immediate vicinity of the drumlin can be on the order of a meter's depth of sediment per year, with the eroded sediment forming a drumlin as it is repositioned and deposited <sup>[2]</sup> Good examples of drumlins are seen in the Big Head River valley between Chatsworth and west of Meaford. As temperatures began to rise and with glacial retreat depositional and erosional forms resulted. Where glacial load is deposited directly from moving ice without being affected by water the material is known as till or unstratified drift. Again, till's composition is determined by the area the ice passed over varying from clay or sand to an admixtures of gravel, boulders and/or stones; this partly explains why we have so many quarries in the area. Huge boulders deposited from glaciers and unusual in geologic composition for the area where found, for example they may be of igneous or metamorphic origin, are called erratics. Some may have been transported from the north shore of Lake Huron or the Canadian Shield. Occasionally they are seen in fence lines, moved there with great difficulty by pioneers to the district. The till may be deposited in flat plains as in the south of the county (Dundalk till plain), show fluting caused by drumlins or result in rolling hills produced by deposits at the terminus of an ice tongue or at their sides (end or recessional moraines).

Melt water from the glacier also affected the landscape. For example, eskers which are sinuous, strati-

fied ridges of coarse sand and gravels that have steep edges and are up to one kilometer long have their origin from rivers either on, within or below the melting ice with the a wall of ice supporting the deposits. When the ice melted the river deposit collapsed along its length. Other effects are crevasse fillings and kettle lakes while other landforms result. Furthermore, the released meltwater led to the formation of the Great Lakes. During periods of glaciation huge lakes formed between the ridges left behind by retreating ice fronts. They continually changed over time as the ice sheets moved northward. Early drainage from these lakes flowed southward through the present Illinois River Valley toward the Mississippi River; through the Trent River Valley between present lakes Huron and Erie and through the Lake Nipissing-Ottawa River Valley from Georgian Bay on Lake Huron downstream to Montreal. As the ice retreated about 7,000 years ago, the Saint Lawrence River became the outlet to the Atlantic Ocean. About 4000 years ago lake levels dropped to current ones and present-day river and stream inlets and outlets developed.

### References

Now, in this and the preceding article I have discussed but a fraction of what is know about the geology of our county. In preparing them I relied heavily on *Geology and Landforms of Grey and Bruce Counties* published by the Owen Sound Field Naturalists and reproduced segments with permission. Much more detailed & fascinating information is available in the guide. It also provides directions to find interesting geological formations in both counties if you should wish to see them. The book is available and distributed by the Ginger Press, Owen Sound (Phone 1 - 8 0 0 - 4 6 3 - 9 9 3 7 ) ; E - m a i l [Maryann@gingerpress.com](mailto:Maryann@gingerpress.com)). I obtained my copy from a bookseller at one of the Elmwood Conferences.

### Other References

- 1) Johnson, MD; Schomacker, A; Benediktsson, I O; Geiger, A J; Ferguson, A; Ingolfsson, O. (2010). Active drumlin field revealed at the margin of Mulajokull, Iceland: A surge-type glacier. *Geology* 38 (10): 943.
  - 2) Clark, CD; Hughes, ALC; Greenwood, SL; Spagnolo, M; Ng, FSL. (2009). "Size and shape characteristics of drumlins, derived from a large sample, and associated scaling laws". *Quaternary Science Reviews* 28: 677.
- Malcolm Silver

## Meet Your Board Members

### Lee Thurston

Lee Thurston was born and raised in Owen Sound then Graduated from Sir Sandford Fleming College as a Forestry Technician.

He worked for the Ministry of Natural Resources for 15 seasons in Plevna and Haliburton as a Forest Fire Fighter then, with progressive cutbacks, returned to University in Peterborough to study Biochemistry. Upon graduation he moved to the Brighton area and worked as a Quality Control supervisor in a Pesticide manufacturing facility then as Quality Control technician in a food manufacturing facility and finally as Production Supervisor.



After some life changing events Lee returned to Owen Sound in 2008 to start a small scale forestry operation on property owned by he and his brothers east of Chatsworth. The price of wood at the time gave a very meager living so he started tree planting with the Grey Sauble Conservation Authority in 2009. This led to a contract position with them as a Resource Technician.

He looks forward to getting to know more of the members of our Association and working to provide us new and interesting activities and educational events.

Lee says he has never met a tree he didn't like though some have been more problematic than others.

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### Report of Oct 15<sup>th</sup> 2011 Technical Seminar

(Organized by Carl Sadler, held on a cool, rainy day)

Doug Kraemer (Canadian Food Inspection Agency and Director of the Emerald Ash Borer (EAB) Group) discussed the source and spread of this foreign insect invader; it's life

cycle and provided examples of it and the damage it causes in affecting and killing all four types of ash trees. Emphasis in control had shifted from earlier destruction of infected trees, to slowing spread by survey, insect trapping and the introduction of regulations on wood movement in infected areas. He gave review of infestation in the province and the likely consequences in Grey County which, to this point, seemed free of the insect. Once EBA is found it means it has been present 3-4 years and is likely 65 km ahead of that infestation. Thus, if

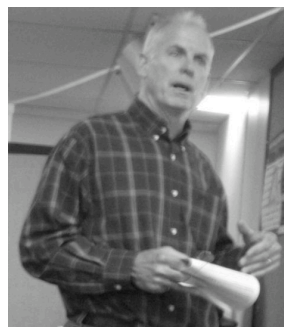
Grey County was infested the Federal Government would designate the entire County a regulated area with quarantine rules dealing with the movement of ash tree firewood and lumber instituted and strictly enforced; these controls were outlined. **He emphasized the importance of not moving firewood in the province.**



The insects have no known predators in the country. Woodpeckers do feed on larvae but their numbers are not enough to control an infestation. Rather, scientists seek other methods of biocontrol.

Thus, from China (source of EAB), 1cm long, stingless, wasps are being tested as controls in the USA. An Oobius wasp attacks the egg stage, while a Tetrastichus wasp and a Spathius wasp attack the larva stage. The wasps only attack EAB and are not a threat to humans or other wildlife. The hope is that saplings, which the borer leaves alone, can mature in an environment where the beetle is not rampant. In another approach a fungus that attacks the beetle is being studied. It is of interest that Trees Ontario is planting ash trees in devastated S-W Ontario.

**Terry Schwan, (MNR Guelph)** noted that because EAB had the potential to kill all ash trees on a property. Owners should, therefore, prepare for change. His sage advice had been presented in a paper by he and Peter Williams (Managing Ash in Farm Woodlots: Some Suggested Prescriptions) that was forwarded to all GCWA members in May 2011. In his view landowners should not feel pressured to remove ash & there was no need to cut healthy trees, they should aim for a healthy diverse forest.



Mr. Schwan also presented results of a Guelph study which over several years and in 7 instances showed the higher value of managing and maintaining forest for income compared with the costs and benefits of other agricultural activities.

**Ken Goldsmith (Forestry Technician/Forest Manager/ Provincial Weed Inspector for Bruce County)** brought specimens, including flowering heads and spoke about invasive phragmites (*Phragmites australis*), the common reed. His presentation will be included in the next Newsletter.