Faculty of Forestry, University of Toronto *"2011-International Year of the Forest"*

Forestry Matters

It took more than three thousand years to make some of the trees in these western woods…Through all the wonderful, eventful centuries since Christ's time – and long before that – God has cared for these trees, saved them from drought, disease, avalanches, and a thousand straining, leveling tempests and floods; but he cannot save them from fools.

-John Muir (1838-1914), *Atlantic Monthly* 1897

October 2011

Dates to Remember

Oct 27	OPEN MIC Night. 7pm Above GSU Pub.
Oct 29	Fall Campus Day on St
Oct 31	BOO-Halloween Candy Time
Dec 6 & 7	MFC Final Presentations-room 4001
Dec 13 & 14	MARXAN training course in computer lab.

Faculty of Forestry Gets New Banner

On Wednesday Sept 21 the Faculty of Forestry unveiled its new banner on the corner of Willcocks and Huron St. It was a replacement for the old banner that was damaged during a wind storm (see left). The unveiling took place during our celebration of National Tree Day.

A Great Start to the Year

The day after Labor Day, before students flooded the St. George campus, our new group of Master of Forest Conservation students (28) were on their way to Haliburton Forest for an 8 day Biodiversity Field camp. This was my first time, as the new MFC coordinator, to experience the field camp in Haliburton and I admit that it quickly brought back the fond memories of spring camp in Petawawa and fall camp at Dorset.

For the first four days, students were introduced to Great Lakes St. Lawrence Forest management, as it pertains to the goals and objectives of Haliburton Forest and Wildlife Reserve. Through Peter Schleifenbaum's guidance, students were shown how proper forest and ecosystem management can work to revitalize the landscape and provide an economically and ecologically sustainable forest.

The field camp gave students a chance to get to know one another, get to know the academic faculty, join in discussions on biodiversity, and learn of Ian and Tony's amazing culinary talents. They also had a once in a life time opportunity to attend a candle light evening dinner and swim party hosted by Peter and Elke at the original family cottage. The high-light of the camp for me was the ½ day canoe trip. Pristine lakes, beaver dams, water fights and a couple of tipped canoes later we made it through to our pick up location where ever faithful Ian and Tony were waiting. The weather couldn't have been nicer and the sincere support and respect of the students for one another - inspirational.

Sally Krigstin,

MFC Program Coordinator

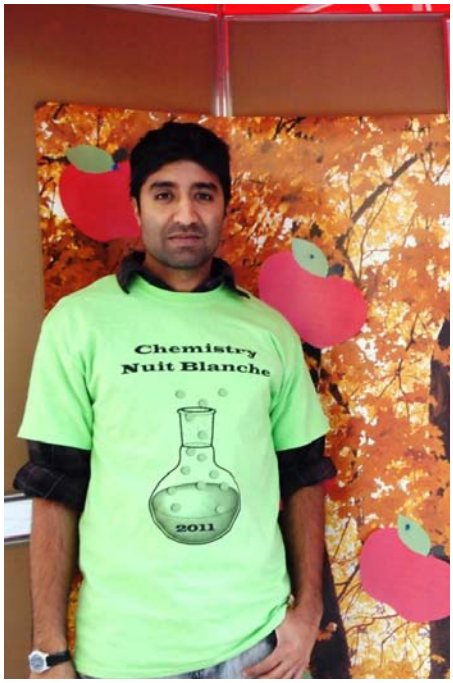
IN THE NEWS

Chemistry Nuit Blanche-Forestry Display

On October 1, 2011, Stacy Filenkova, Administrative Assistant of "Bark Biorefinery" project, and Jason D'Souza, a Ph.D. student working on Bark Biorefinery project, on behalf of the Faculty of Forestry participated in the **Chemistry Nuit Blanche** <http://www.chemistry2011.ca/> in the courtyard of Lash Miller building.

The event was hosted by Chemistry Department at the University of Toronto and celebrated UNs International Year of Chemistry. Faculty of Forestry joined in to also celebrate the year of Forests, showcasing contribution to sustainability and that the theme of "Chemistry in everyday life" fits well with many products from trees. The exhibit featured "Get Back to Your Roots" presentation highlighting the evolution of forests and humanity (beginning with harmonious living with forests in ancient civilizations, followed by unsustainable use of technology and forests, and finally transitioning to sustainable living with forests). The exhibit also featured a display of the forest with apples (to flip and explore many tree-based products), demonstration of samples, and pamphlets on the faculty and on the project.

Despite the unusual cold, wet weather, many showed up for the exhibit and "flipped an apple" on the display to learn about the amazing products that can come from a tree!



Thank you Stacy and Jason for sharing your passion for sustainability, well done!

UofT's Faculty of Forestry: a hotbed of tropical forest research.

Adam Martin

Toronto felt like a tropical rainforest this summer. It was hot, humid, sticky, and sweaty. So it's only fitting that the tropical forest ecology contingent at the Faculty of Forestry spent the past few months taking the lead on 5 exciting new tropical forest research papers (listed below). The papers are the combined effort of a research group that includes several members of the Faculty of Forestry, past and present: Dr. Sean Thomas, PhD student Adam Martin (M.F.C.), and Faculty graduates Erin Mycroft (MScF), Jean-Remy Makana (PhD), and Julian Norghauer (M.F.C., PhD).

The breadth of the articles is impressive. From quantifying biomass dynamics in monodominant forests of the Congo basin (Makana *et al*. 2011), to uncovering mechanisms of tree invasion following the establishment of mahogany plantations (Norghauer *et al*. 2011), to reevaluating carbon content in tropical trees (Martin and Thomas 2011): the tropical ecology group covered a spectrum of topics that are timely, and at times controversial. The geographic scope of these studies is no less impressive, with forests from Democratic Republic of Congo, Dominica, Malaysia and Panama all being represented in the papers.

In cobbling together these studies the group let nothing stand in their way, not even negative statistical results. In an interesting new publication avenue, one of the group's papers (Martin *et al*., accepted) is due for publication at the *Journal of Negative Results – Ecology and Evolutionary Biology*. Yes it is real. Yes it is peer-reviewed. Yes the results have made a certain graduate student lose sleep.

The tropical forest ecology contingent is another great example of how the Faculty of Forestry continues to be among the global leaders in research. And there is no sign of the momentum slowing. With new PhD student Mark Horsburgh now on board, and the M.F.C. '11 class set to explore the tropical forests of Malaysia during their international field camp, more groundbreaking tropical forest ecology research is sure to follow. (see next page)

Recent tropical forest ecology publications from the Faculty of Forestry:

1. Norghauer, J.M., Martin, A.R., Mycroft, E.E., James, A., and Thomas, S.C. (2011) Island invasion by a threatened tree species: evidence for natural enemy release of mahogany (*Swietenia macrophylla*) on Dominica, Lesser Antilles. PLoS ONE, 6: e18790.99.

http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0018790

2. Makana, J.R., Ewango, C.N., McMahon, S.M., Thomas, S.C., Hart, T.B., Condit, R. (2011) Demography and biomass change in monodominant and mixed old-growth forest of the Congo. Journal of Tropical Ecology, 27: 27:447–461.

http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=8347173

3. Martin, A.R., and Thomas, S.C. (2011) A reassessment wood carbon content in tropical trees. PLoS ONE, 6: e23533.

http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0023533

4. Martin, A.R., Stedman, E.R., and Thomas, S.C. (accepted) Size-dependent changes in light requirements of tropical trees: weak light –growth relationships in seven Caribbean rainforest species preclude testing a general hypothesis. Journal of Negative Results – Ecology and Evolutionary Biology.

5. Thomas, S.C., Martin, A.R., and Mycroft, E.E. (submitted) Tropical trees in a wind-exposed island ecosystem: height-diameter allometry and size at onset of maturity. Journal of Ecology.

Research assistant and co-author Elvis Stedman (see Martin *et al*. accepted) cores a tree in Dominica, West Indies.

Estimating forest light levels through hemispherical photography in Dominican forests.

Gas-exchange measurements in Dominican forests.

Hiking through the forests of Pasoh, Malaysia.

A BIG FORESTRY welcome to all our new students who joined us in September. We welcomed 27 Master of Forest Conservation Students and 9 MScF/PhD students. It is great to see and hear so many enthusiastic people in the faculty.

KINDA COOL!!!!

Chinese numerology and Feng Shui for 2011 this year we are going to experience four unusual dates: 1/1/11, 1/11/11, 11/1/11, 11/11/11, and that's not all. Take the last two digits of the year you were born and the age you will be this year and the result will add up to 111 for everyone! This is the year of MONEY. Also, this year, October will have 5 Saturdays, 5 Sundays, & 5 Mondays. This happens only once every 823 years.

Welcome to the first electronic version of the Haliburton Forest and Wild Life Reserve Ltd. Newsletter **"The Howler".**
In an effort to not overload your computer the newsletter has been set up in a flip book. Please click the link and enjoy the news from the Forest.
http://snack.to/5P0w9

Sincerely,

David Bishop
General Manager
Haliburton Forest & Wild Life Reserve
705-754-2198

Congratulations to Rorke Bryan on the publication of his new book.

Ordeal by Ice: Ships of the Antarctic

Rorke Bryan

The Collins Press, 2011

Athy Heritage Centre, Athy, Co.Kildare

Saturday, October 29th, 2011, 3 pm

You are cordially invited to attend the launch of Rorke Bryan's new book "Ordeal by Ice: Ships of the

Antarctic" by the Honorable Alexandra Shackleton as part of the 10th Annual Shackleton Autumn School.

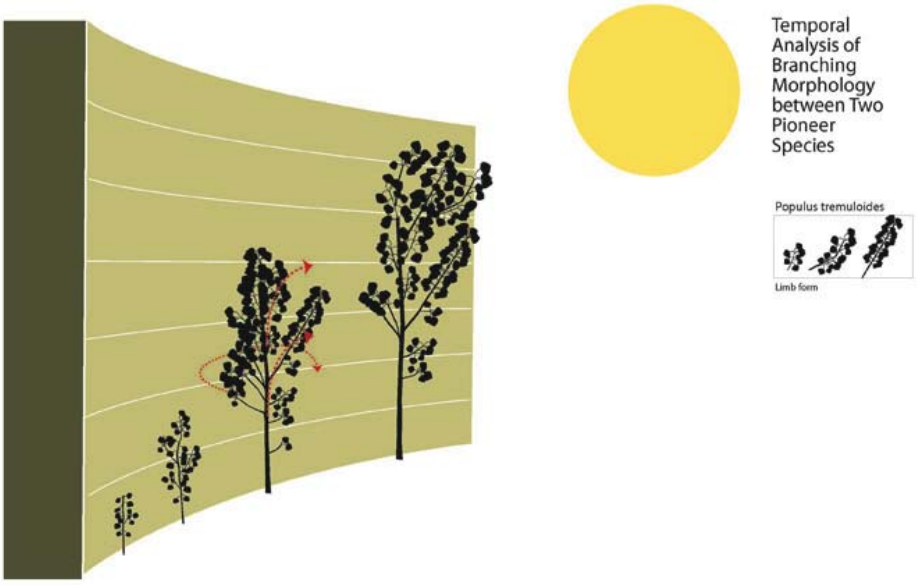
The launch will take place at 3 pm on Saturday, 29th October, 2011, at the Athy Heritage Centre, Athy, Co.Kildare, Ireland. "Ordeal by Ice" is published in Ireland by The Collins Press, Wilton, Cork (www.collinspress.ie), in Great Britain by Seaforth Publishing, Barnsley, South Yorkshire (www.seaforthpublishing.com) and in the United States of America by Sheridan House, Dobbs Ferry, New York www.sheridanhouse.com)

CONGRATULATIONS:

Joan Bunyan and John McCarron both retired in May of this year. Both were honoured by having their names engraved on a tree plaque and permanently mounted on the Centennial Wall located at the bottom of the circular stairs in the Forestry wing of the Earth Sciences Centre. They were recognized for their many years of dedicated service to the students and staff of the Faculty of Forestry.

A Different Perspective of the Trees in our Courtyard

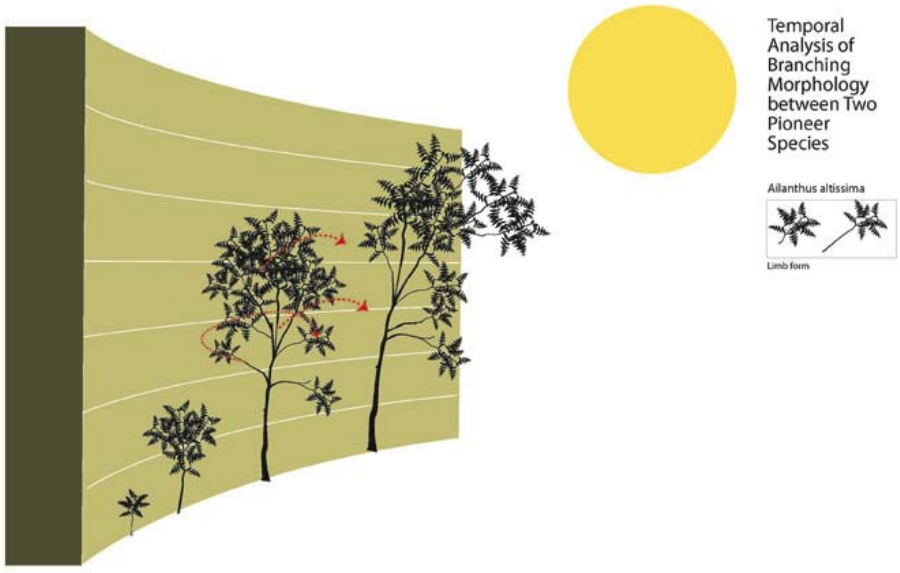
Recently a student from Landscape Architecture visited the Faculty looking for photos that showed the different stages of growth of the trees in our courtyard for a project assignment. His assignment: "Each student is given a site within the campus and each week we have to do different drawings. The goal is to be able to use different visual techniques to communicate flows and phenomena in the site. The drawings that I made last week we were told to show something that changes over a long period of time. I have personally been interested in the new growth of trees along the edge of curved northern edge of the boreal courtyard and was trying to compare the branching morphology of two types of trees that are competing on that edge. My personal hypothesis is that the trees are successful at capturing light because the branches act like appendages with terminal leaves that can be sent in different directions where there is sunlight. In a way it is more mobile."



Mehran Ataee

Thanks to Mehran for allowing me to include his drawings in this newsletter.

Ian



Ontario Professional Foresters' Association News:

1. See the Ontario Professional Foresters' Association June 2011 newsletter on urban forestry www.opfa.ca. Most of the articles have been written by U of T Forestry students and alums: Alex Satel, Mike Halferty, Adrina Ambrosii, Sadia Butt, Mike Rosen, Gord Miller, Richard Ubbens, Carol Walker Gayle, Megan Eastwood and Jack Radecki.
2. Also, check out the conversation the Ontario Professional Foresters' Association is having about the qualifications and accountability of foresters and related disciplines such as natural resource technicians/technologists, forest/wildlife biologists, ecologists, landscape architects. If you missed or cannot attend the seminar at the Faculty on October 28th, visit the website for details about 'Growing Professionalism in the Forest' (www.opfa.ca) This discussion can affect the future careers of forestry students.

Student Research Highlight:

PhD Research Proposal: Shabnam Mustari

Valuation of Biodiversity on Private Forest Land under the Ontario Managed Forest Tax Incentive Program (MFTIP) in Southern Ontario

Proposal Summary

This study attempts to value changes in a number of forest biodiversity attributes which describe complex characteristics of biodiversity rather than using a single indicator of biodiversity (ex. species richness). The attributes have been chosen to be used in this study include: a) extent of forest area under good forest management practices and their connectivity; b) forest components or structures and their quality and stability; b) species richness, their relative distributions and variations based on characteristics of biodiversity loss and ecological knowledge. The empirical application will be a choice experiment study conducted in privately owned forest land under the Managed Forest Tax Incentive Program (MFTIP) in Southern Ontario. Therefore, this study will be one of the first to shed light on the value of biodiversity conservation in MFTIP. In addition, this study will have important implications for future research, decision making, forest management and designing incentive programs.

Congratulation to Tajinder Singh upon completion of his PhD.

Thesis: "Economic Analyses of World's Carbon Markets".

EARTH TALES: 3 ECOFABLES for CHILDREN – A Free E-book

CANVAS (Center for Art, New Ventures and Sustainable Development) promotes greater awareness and appreciation for Philippine art, culture and environment, principally through the publication of children's books. The books are exquisitely illustrated by contemporary Filipino artists. Adults and children may download this free e-book published by CANVAS and the University of Santo Tomas. One of the ecofables was donated by Paul Aird, Professor Emeritus, Faculty of Forestry and Centre for Environment, University of Toronto to support this fine project.

Click on http://www.canvas.ph/downloads/ebooks/CANVAS%20TALES.pdf, and then read or print the 23-page e-book titled EARTH TALES: 3 ECOFABLES for CHILDREN.

What's all the BUZZ about??

Dr Sandy Smith will be harvesting the first crop of honey this week from the hive that resides on top of the Earth Sciences Center Library. You can get a good view of the hives from the windows in room 4001. What a great use for a wasted urban space. Green roofs and/or Bee Roofs!!

Shrooooms

When you own a greenhouse that is not being used as a greenhouse why not put it to another use. Why not grow shitake mushrooms in it over the winter. Each of these logs were inoculated where each of the little white plugs are. Each log needs to be "shocked" before it can produce the shitake mushroom. If you are in the neighbourhood of the greenhouse pop in and have a look.

No you cannot bring a frying pan and a slab of butter with you.

YET!!!

Newsletter Note: I hope that this newsletter will become a regular item again during this academic year. I am always looking for your research updates, I like to hear from alumni about what they are up to. Photos are great. Send me your contributions to ian.kennedy@utoronto.ca