

# Forestry Matters

"People who will not sustain trees will soon  
live in a world that will not sustain people."

*Bryce Nelson*

December 2009



## Dates to Remember

- December 18 Final Day the University is open until after the break
- January 4 Most formal graduate courses begin this week
- January 15 Final date to add January session courses
- January 20 September session grades available for viewing by students on ROSI

## Master of Forest Conservation Ring Ceremony

December 9<sup>th</sup>, 2009 was a day of celebration when the following MFC students received their rings signifying the completion of their programme. Congratulations to:

Shahwar Aslam, Caroline Booth, Mike Halferty, Dorothy Maguire, Annie McKenzie, Alex Karney, Martha Kornobis, Mallory Parks, Amanda Suksagar and Brian Volz.

When the first Master of Forest Conservation (MFC) class completed their 16 months of residency at 33 Willcocks, the Faculty decided to mark the occasion by presenting each student with a ring. This is not the traditional "CIF" ring presented to B.Sc.F. students, but rather one specifically designed for the MFC programme. On Wednesday December 9 the MFC08 class was presented with their rings bringing the total number of recipients to 160.



## Remember When?

As part of their coursework for their BScF students used to head north of the city to prepare, determine proper concentrations of insecticide and then measure its release on the ground. Dye was used in place of insecticide.





## Sports and News

### Hockey

I am pleased to announce that our Forestry hockey team felled the Faculty of Dentistry 2-0 in the div.3 intramural championship on Friday night. It was evident that our on-ice prowess on Friday was driven by the fabulous goaltending of Jay 'El Gato' Malcolm, who recorded a perfect 1.000 save percentage throughout the playoffs. The suspense escalated late in the game as our team was put on the penalty kill and pressed desperately by the Dents who were down 1-0 and hungry for an equalizer. However, their attack fell short due to the natural supremacy of our unpenetrable 'ministry of defence', and with the help of an empty-net

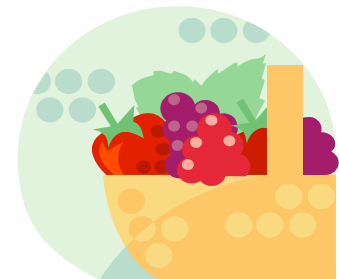
goal our team our team took the Jennings cup for the second time.

On behalf of our team I would like to thank all of the faculty and students who showed up and flexed their fanatical support of our team on Friday. We look forward to next term's season and hope to provide the same level of athletic excellence for our fabulous faculty!!

Adam Kuprevicius

### PAYING IT FORWARD

One cannot but help be impressed by the students here at the Faculty. It all started with a great idea by Mary Rose Naudi that we ask for



Christmas donations of food to go to the student food bank here on campus. It was not long after that when students started a "make a donation for a coffee" program. After just two coffee times they managed to raise \$250.14. This plus 2 large containers of food was delivered to the student food bank before the Christmas break.

## WELCOME ALUMNI

A special welcome to many Faculty Alumni who have opted to receive Forestry Matters monthly. The Alumni executive are hoping to have an "Alumni Corner". Alumni will be encouraged to submit anything they wish such as searching for a classmate, having a reunion, maybe you would like to share some of your research or contributions made to the forestry community.

### Some Alumni Stuff:

The class of 6T5 will be holding its 45 year reunion in Tofino on Vancouver Island next September.

I am attaching a not so recent photo (following pages) of me and my friends the Sirionó Indians here in Bolivia. In the upper photo that's me in the red vest giving a course on directional felling. In the lower photo that's me in the corner with a Beard. That was the third forest management plan approved in an indigenous community. I came here as a CUSO Cooperant and didn't have a reason to leave so I stayed here.

John Kudrenecky, BScF Forestry, 8T7

**APPEAL TO OUR ALUMNI:** The Faculty of Forestry is asking for your assistance with recruiting graduate and undergraduate students to our programs. You can help by talking about your experiences at the Faculty of Forestry with potential applicants. Please refer interested persons to us. You are our best recruiters!

## Feeling the Forestry Love at Convocation

On November 3<sup>rd</sup>, 2009 several MScF and PhD Forestry students proudly received their degrees at convocation. It was a beautiful fall morning, and we were all excited to celebrate the completion of our theses. I, like the other MScF students, wore the traditional green forestry hood, which seemed to make my father (a Forestry alumni) well up with pride. Everyone kept remarking, "what an appropriate colour for Forestry", and I had to agree; pink just wouldn't have felt the same.

Standing with my forestry peers, I felt like we were special- everyone knew everyone. Even in an institute as large as U of T, somehow Forestry makes you feel like you're part of a small family.



After welcoming remarks, everyone enjoyed a memorable piano performance by the honorary degree recipient, Angela Hewitt. The PhD degrees were presented first: Jorge Solorzano-Filho, Jeff Biggs, Patrick James, Nick Rudzik and Dave Savage were present to receive their degrees and shake hands with Dean Tat Smith.

After all the large faculties had past, then came the 'small yet mighty' MScF students.

Mike Burrell and I, who are recently engaged, would graduate on stage at the same time. When our turn came, after trying to respond to the chancellor that no, I was not too small to be a forester, I told him that I was engaged to the other graduate. The Chancellor was so excited, he told us to hug, *which we did*, and showed off the ring on stage! Everyone applauded, and in the spirit of the moment, the next two Forestry graduates--James Dennis & Susan Kidnie-- gave each other a hug too. Jingjing Li ("Crystal"), who was the final Forestry graduate, was hugged by the Chancellor!

Forestry students seem to always find a way to stand out in a crowd...

Congratulations go out to the students who were unable to celebrate with us on that day: Anthony Kimaro PhD, Mark Vanderwel PhD, Saswati Ghosh Roy MScF, Gireesh Gupta MScF, Fletcher Quince MScF, and Fraser Smith MScF.



Thanks to Tat for being at convocation to celebrate with us students- and thank-you to everyone in the Faculty for your support along the way.

Submitted by: Erica Barkley

## The Canopy Crowd Convenes in India

Rajit Patankar, Erin Mycroft, and Shaik Hossain represented University of Toronto and the Faculty of Forestry at the 5th International Canopy Conference held in Rajit's hometown - Bangalore, India from October 25th - October 31st. Rajit and Erin participated in a symposium on "The role of canopy ecophysiology in sustainability science", and presented talks on their respective research entitled, "A gall-forming mite drives drastic declines in canopy tree photosynthesis" and "The influence of polypore fungal infection on canopy physiology of a temperate deciduous tree species". Shaik presented his research on "Horizontal crown plasticity in three shade tolerant tree species" in a general symposium.



All three students also presented in a student symposium, chaired by Rajit Patankar. Rajit presented his work "Life cycle and distribution of a leaf galling mite in a mature forest canopy" during the symposium, and led a round-table

discussion on current trends in canopy research and exploration following the talks. Shaik and Erin also presented the results of their research at the Student Symposium, and participated in the round-table, which was an excellent opportunity for students to network and share their ideas.

Highlights of the conference included talks by Mark Moffet, an entomologist and photojournalist for National Geographic; Meg Lowman, a canopy biologist, author and educator; and William Laurance, a renowned conservation biologist. Workshops on climbing techniques, education and outreach, and research priorities were also a hit. Shaik and Erin participated in a mid-conference trip to Bhoga Nandiswara temple at Nandi Hills, where they were entertained by traditional carnatic music and an evening lecture on "The role of natural resources in the emergence and decline of empires and civilizations: lessons from Indian history" by Dr. K.N. Ganeshaiah.

Submitted by: Erin Mycroft



## NEWS UPDATES

John Caspersen and Nate Basiliko have recieved a MITACS grant of \$213,328 for a project titled "Increased utilization of forest biomass for energy production: greenhouse has benefits and ecosystem impacts". The funding will support research at Haliburton Forest and students in the Department of Geography and Faculty of Forestry, including Derek Wolf, Katherine Thebeau, and Jason Shabaga, and Julian Cleary.

Dr Shashi Kant has two papers on Forest Tenure published in the recent issue of Forestry Chronicle:

1. Kant, S. 2009. Sale of Canada's public forests: economically non-viable option. The Forestry Chronicle November/December, Vol 85.

No.6, 841-848.

2. Kant, S. 2009. Recent global trends in forest tenures. The Forestry Chronicle November/December, Vol 85. No.6, 849-858.

Doug Woolford, a postdoctoral fellow who worked under David Martell in his Fire Management Systems Laboratory during 2007 is now a faculty member in the Department of Mathematics at Wilfrid Laurier University.

Paul Cooper welcomes Zhong (Benjamin) Yang as a Post Doc from the Chinese Academy of Forestry (NIR specialist)

Congratulations to Kelsey Gibos for recently passing her M.Sc.F Defence.



John Kudrenecky, BScF Forestry, 8T7

## IT CORNER

Are your PowerPoint Presentations just way too big, slow to load, cannot be emailed because they just have too much of a waistline causing them to be well *JUST TOO BIG?*

Follow these few quick and easy steps to a healthy and manageable PowerPoint Presentation that will impress your fellow computer users with its load speed and quickness in slide advancement.

- Open your presentation
- Find any picture that you have inserted into the presentation.
- Right click on the picture
- Choose "Format Picture"
- Choose the "Picture" tab at the top.
- Choose the "Compress" button found at the bottom left.
- In the "Compress Picture" dialogue box under "Apply to" click on "all pictures in document".
- Click Ok
- Click Apply on the next dialogue box.
- Click OK

You now have a PowerPoint presentation that has reduced its size significantly but picture quality has not been compromised.

**NOTE:** I would suggest that you save your newly reduced ppt file with a new name until you are comfortable that indeed file size is reduced without any quality issues.

### EMAIL DO NOT DO'S:

If you want to get a lot of people very mad at you very quick just hit "Reply All" when responding to an email.

Therefore PLEASE NEVER EVER click on "Reply All". Just Reply will do nicely.

Think before you click:

Yours Truly:

Grumpy Computer Guy

## Research Update

### Effectiveness of deck finishes to reduce copper leaching from preservative treated wood

M. Nejad and P. Cooper

New water based wood preservatives, alkaline copper quat (ACQ) and copper azole (CA) have high copper contents and leach considerable amounts of copper when exposed to rain. Since copper has high aquatic toxicity, we were interested in whether coatings recommended for decking (mainly penetrating stains) would be effective to reduce copper leaching. Treated boards were brush coated with 5 different stain products, selected to represent a wide variation in available types. The boards were installed as shown and rain water collected and analyzed over a three year exposure period. Starting after the first year some coatings started to peel and after 3 years all were significantly degraded (Figure 1b).



Figure 1a



Figure 1b  
Figure 1: Treated and coated deck boards (a) newly installed; (b) After 3 years natural weathering

We were pleased to observe that all coatings effectively reduced copper leaching (Figure 2), although some coatings were more effective than others. What was most significant was that even after the coatings started to fail, the reduced leaching effect persisted. We have now confirmed that this is because, contrary to previous understanding, the preservative system continues to fix over a long period. Protection of the treated wood over the first year when the coatings remained intact, led to long term (and we believe permanent) reduction in the leaching potential of this wood by as much as 70%.

Based on these results, we recommend that all treated wood placed in sensitive environments be protected by a stain or coating to allow more complete fixation reactions and reduced leaching of preservative components.

We acknowledge funding support from NRC Canada (Value to Wood Program) for this project.

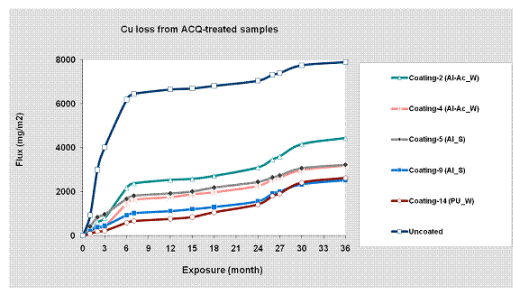


Figure 2: Cumulative copper leaching ( $\text{mg}/\text{m}^2$ ) from ACQ treated wood over 3 years weathering exposure in Toronto



*Confirmation of what wood scientists have known for a long time: wood "bites" steel*

(P. Cooper photo - corner of Beverly and Dundas St.)

**Faculty of Forestry****Research Student Academic Accomplishments – 2009-10**

NSERC CGS D2 – **Michelle Araujo**

NSERC PGS D3 – **Muhammad Pervaiz**

NSERC PGS D3 – **Peter Ralevic**

NSERC CGS M - **Jonathan Schurman**

OGSST (Zimmerman) – **Liz Nelson**

OGSST (Buell) – **Kathleen Ryan**

OGSST (Alpa Lumber) – **Carlos Quijano-Solis**

**Kelsey Gibos** --International Association of Wildland Fire Scholarship

**Mojgan A. Nejad** -- Service Award from the Canadian Wood Preservation Association  
-- Presented at the 3<sup>rd</sup> International Wood Coating Conference

**Sedric Pankras Mettlemary** --R.W. Stephens Memorial Award from the Canadian Wood Preservation Association  
--Ron Cockroft Award from the International Research Group on Wood Protection  
--Student Award for Excellence from the Forest Products Society – Eastern Canadian Section

**Carlos Quijano-Solis** --Student Award for Excellence from the Forest Products Society – Eastern Canadian Section

**Laura Timms** – Selected to speak in the Entomological Society of Canada Graduate Student Symposium.

**Master of Forest Conservation Academic Accomplishments – 2009-10**

T.W. Dwight award was shared between Caroline Booth, Annie McKenzie and Mallory Parks.

Caroline Booth received the Earthroots conservation award.

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*Please submit your research, your stories, your activities, your favorite photos, your editorial comments and well just about anything to Ian Kennedy ([ian.kennedy@utoronto.ca](mailto:ian.kennedy@utoronto.ca)) for the January issue of Forestry Matters. See everyone in January 2010. Merry Christmas and all the best for a New Year*