

Forestry Matters

"Wolves are very resourceful. All they need to survive is for people not to shoot them."
— **Bob Ferris**

January 2010



Dates to Remember

- February 1 SOS of CIF presents "Forestry on Haida Gwaii: Integrated District Pilot Project" by Len Munt.
- February 2 Salsa night at the Faculty, room 4001--\$2.00
- February 15 Family Day followed by reading week.
- March 5-7 MFC field trip to North Bay

Oh No!! Here we Go Again

As some of you may have already heard, the Faculty has been put again in the throes of re-envisioning its future! In response to the Faculty's External review of the Faculty in this past fall 2009, the Provost has asked Shashi Kant, Mohini Sain, and Sandy Smith to form a working group within the Faculty to discuss its future. The Faculty needs to: 1) get off the University's new budget radar, and 2) more importantly, to best plan its future in terms of what can/needs to be achieved in terms of forest education. We have some very important decisions to make over the next few months that will have implications in the coming years, but there also seems to be a lot of momentum and openness this time in how we do this, especially in terms of the format we can take (e.g. moving in part, or as a whole, into either Arts & Science, UTSc or some other configuration). It seems to be up to us this time to optimally define our future, and this can be both exciting and challenging.

In keeping with this spirit and our intent to make sure all are included in the process, we welcome any comments, thoughts, concerns, strategies, etc. that you as alumni and Faculty friends may have along these lines. The Faculty Working Group or 'Transition Committee' invites you to send your thoughts, insights, or any other inspirations to us on how best to proceed in this time of economic challenge and change (again). It is a time to reflect on past accomplishments but more importantly, to plan for our future. How can the Faculty best educate tomorrow's leaders in forest conservation? The Committee plans to have the final report to the Provost by 1 July 2010, but we need all your ideas to really achieve a workable solution in this timeframe. So.... we welcome your input, encourage you to participate, and most importantly, ask you to start discussing your perspective with all members of our Faculty.
Sandy, Shashi and Mohini.



Remember When?

When the B.Sc.F. program closed in 1996 students, Faculty and staff planted a memorial tree on the corner of Huron and Willcocks St. A commemorative plaque was cemented into the ground beside the tree. Neither the tree nor the plaque are present today. Where and why are they gone.



Sports and News

Hockey

I'm glad to announce that after last term's Div.3 championship victory, our forestry hockey team has moved up to Division 2 for the first time in over 15 years. Last night we played our first match against Innis college and squeaked out a 2-1 victory, despite playing with a short bench of only 8 players. Once again, Jay 'El Gato' Malcolm was instrumental in the victory, specifically making some incredibly clutch stops as the Innis offense pressed on in desperation. Last night our team also welcomed forestry

undergraduate Tyler Hall to the team, who adds depth to our offensive unit. Our next game is Jan.27th vs. St. Michael's College. We look forward to seeing you out there!

Cheers,
Adam Kuprevicius

FIRE LAB TURNS ON THE HEAT!!!

Once again Forestry people step up to the plate when help is needed. The Fire Lab personnel with Dr. Dave Martells support organized a Pancake Breakfast for everyone in the Earth Sciences Centre with the proceeds going to support the



ongoing needs of the earthquake victims in Haiti. The breaky lasted just over 2 hours and \$1,010.00 was raised from donations. With the government matching donations the total aid given to Haiti will amount to \$2,020.00. The money was donated via World Vision Canada.

Thanks and Congrats to the organizers and attendees.

ALUMNI CORNER

Dear Forestry Alumni,

Welcome to the alumni section of the "Forestry Matters" newsletter. The Faculty needs our support as they move forward with a yet undetermined future. As such, we are currently working with the Faculty to develop a strategy for alumni support through this time of transition.

Please stay connected through our Facebook pages (U of T Forestry and MFC) as well as through our website. Stay tuned for more details on our website!

Adrina

Adrina Bardekjian Ambrosii, MFC, PhD candidate
Faculty of Forestry Alumni Association President, University of Toronto
www.forestry.utoronto.ca/alumni
www.adrina.ca

CONGRATULATIONS



This March, Jon Schurman (PhD student of Dr. Sean Thomas) will be travelling to the University of California: Davis to work under the supervision of biometeorologist Dr. Kway Tha Paw U. Jon's research integrates remote sensing (LIDAR) and micrometeorological techniques (eddy covariance) to determine correlates of carbon sink effectiveness, including diversity and management effects. Pinpointing heterogeneities in carbon scalar sources and sinks can get complicated, relying on relating covariances of turbulence parameters to atmospheric CO₂ concentration and vertical wind velocity. Jon's goal is to familiarize himself with the language of atmospheric mixing, experimental design in biometeorology and error detection in eddy covariance studies. This exchange is funded by the NSERC Michael Smith Foreign Research award.



Haliburton Flux Tower: Photo credit Dr. Jen Murphy



Grad Update!!!

In a couple weeks I will be starting a job working with the Department of Sustainable Environment and the Bushfire CRC in Victoria State (Australia). I'll be working out of a small town located amidst the tragedy of the Black Saturday fires from last February (close to 200 people died when a bushfires passed through their communities http://en.wikipedia.org/wiki/Black_Saturday_bushfires).

I'll be working on their suppression crew, helping with prescribed fires, but mainly working with others to analyze some of the fire behaviour leading up to the tragic events. I also be part of a team working towards building a new fire severity scale that may help avoid situations like this in the future.

Kelsy Gibos

BAD TIMING!!!

It was not a good first day back after the Christmas holiday when we all show up for work and see a brand new fancy UofT sign calling us "The Department of Forestry". As the future of the Faculty is under discussion and

review we are very sensitive to the name Faculty of Forestry. John M quickly got on the horn to report the error (and it was an error) to the sign shop. We now proudly display our correct name once again.

People News

My wife (Melanie Young) gave birth to our first child on December 31, 2009 (1:45 away from being a new year's baby). Her name is Linnea Maude Dennis, Linnea being a variant of the old Swedish word for linden tree. James Dennis, M.Sc.F. (2009)



Dr. Sandy Smith Gets Discovered!!!

Discovery TV was filming in Sandy's lab for a new program this year explaining natural phenomena. A video on [YouTube depicts balls of slime](#) in the sewer from North Carolina. Discovery Channel wanted to know what these blobs might be. As an invasive species expert these days and working on earthworms (of which all but only a few species are invasive in Canada!), they arrived to film Sandy's opinion. It turns out that they were Tubifex worms, aquatic annelids that are used to feed fish! You can find them in your local pet shop frozen or dried....they form balls when they don't have a enough water (when the sewer is not flowing!).

Who are the Biomaterials Group and what do they do?

Part I: K.M.M. Dunham

As Canada racks up two "Fossil" awards at the climate change summit in Copenhagen, and is accused of depending too much on technology to meet emissions reducing targets, and long term carbon capture and storage, research continues in the field of bioenergy, biomass conversion, and then some at the Faculty of Forestry.

The compilation of Prof. Sally Krigtin's lab is likely the most diverse in the Faculty; Acquah G. Ewurama (Rama) works on biomass characterisation; Kira Dunham is a forest ecologist and is often found doing field work; Rachele Levin has a panache to talk up a storm around policy and social woes; Cheryl Leger deals with polymers, wood chemistry and lignin; and Daniela Tudor studies the break-down of wood fibres and fungal interactions.

The study of biomass, and the potential used of wood for energy or other value added products, even the work that Rama, Cheryl and Daniela carry out in the lab, starts out with a tree, in the great outdoors. This fall a block, in the Mazinaw-Lanark Forest, that had been previously harvested for biomass, and viewed by Prof. Krigstin, came under scrutiny and assessment.

This white pine block had been harvested for biomass, and cursory observation on a walk-through would indicate that there was less slash in the harvesting trails, and more regeneration than in a traditional shelterwood harvest. In fact the clusters of white pine seedling sprouting were quite striking, which warranted closer examination. Of course, this resulted in several field trips to Calabogie to be able to count the

seedlings, and who better to do it than Kira.

I enjoy field work, and even such tasks as counting small spruce seedlings isn't that daunting, but then I was asked to climb a chip pile, and take samples, and then I was asked to pin individual seedlings.....

In the end it was all wonderful work in the fresh air --- 'til it SNOWED.



Lovely clump of seedlings



Digging a deep hole in a pile, the tape running up the side, with those pink flags, extends 7+ m.



Each ONE of those pink flags is next to a seedling, and with the snow, it was commented all we need are a string of lights to finish the festive touch.

Congratulations to Sonya Richmond on her poster being selected for an award at CONFOR 2010 which was hosted in Thunder Bay by Lakehead. Special thanks go to her for representing the Faculty and UofT so well.

John McCarron cannot get the grin off his face. He is going to be a Grampa this summer.

Quotable Quotes

Since Forestry seems to be under the microscope these days I thought this might be a good time to ask the experts “WHY TREES ARE IMPORTANT TO THEM”. I am not talking about teachers, researchers or politicians. I went to the people who rely on our knowledge and planning to provide them with a future. The following quotes came from all grades at Leslie Frost public school in Lindsay. I would like to express my thanks to Sarah McNab for her involvement in getting the following. This is why we study “Forestry”.

Junior Kindergarten

I like that you can make doors.

I like that they have butterflies.

You can climb them.

I like how they grow apples.

You can climb them. You can shake coconuts from them.

Grade 2

They help you breath.

They give us air.

You can make fire, you can make paper and you can make other things.

You can play under them

The animals live in trees.

They help us breath.

They have pretty leaves and I can swing on them.

It is an animal home.

Grade 4

You can make paper, log houses, tree houses, wood shavings for pets, furniture and a lot lot more.

Tree are helpful to our environment because they give us oxygen and they provide homes for animals like squirrels, raccoons, skunks, birds and insects.

I like to play hide and seek behind trees.

There are lots of things tree do.

They give me maple syrup for my pancakes.

They give you air and are green and brown.

They are beautiful and give animals a place to live.

Trees are helpful to our environment because if we did not have trees we would not be able to breath or have paper to write on at school.

Got no clue.

Grade 4/5 Split

You can plant them, water them and make paper out of them.

Trees are helpful for the environment, they give us oxygen and take in carbon dioxide.

They can give you your life.

They give me shade.

I can make tree houses and tree forts.

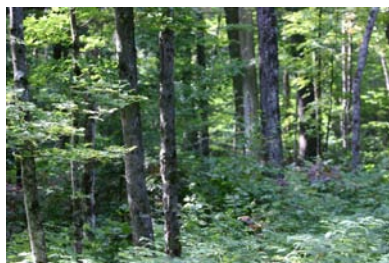
We can use pine trees for Christmas trees.

The thing I like about trees is they are tall.

They make cabins and houses and give you oxygen.

They give me shade in the summer.

You can climb them.



Grade 7

You can do many things with them. You can make paper, they make oxygen, they provide shade, they provide shelter for animals and they grow fruit.

Trees are helpful to our environment because they produce oxygen and humans need oxygen to breath.

They provide shelter and homes to many organisms.

They are a kid's playground.

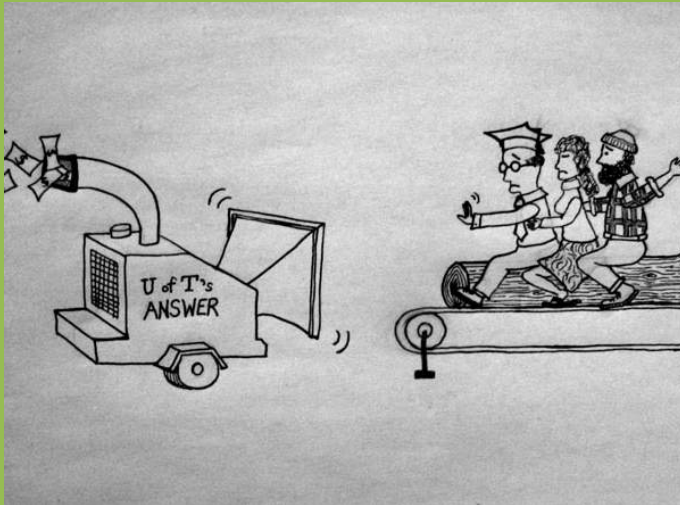
They provide oxygen and we need oxygen to survive.

They add beauty to our gardens and homes.



Boom –De-Ah-Dah Forestry

Do you want to do a little Forestry Rock and Roll? There is a great YOUTUBE video for you to watch. It's available for viewing at www.goforestry.ca. Make it full screen and turn up the volume and get ready to sing along. I highly suggest you visit their website and see what a group of people can do for promoting Forestry.



We have all experienced being trapped inside the political minefield that is our educational institution. One of my many stories involve playing for a varsity athletics team whose annual budget ranked 30 out of 30 in the nation, indicating the simple fact that athletics mean relatively little here. We played while enduring whispers that the program was to be shut down in order to save precious dollars. Regardless, we took the field, and the program persists. The Corporation now has the Faculty of Forestry in its crosshairs and is looking to bring an end to the second oldest Forestry faculty in North America. This is a faculty that after having its professional undergraduate program (B.Sc.F.) eliminated in 1993 by the provost for budgetary concerns, remains near, or at the top, of all U of T faculties in terms of

highest publication rate per faculty member and lowest student-to-faculty ratio.

So it's not a problem of quality or production. And contrary to many misconceptions, although named Forestry, the faculty isn't a group of plaid-laden, tree-hugging lumberjacks. They have very little, if any, interest in timber extraction and management. They are comprised of skilled scientists who are connected to the forest in fields including ecological functions, resource production and processing (biomaterial sciences including biofuels), and policies governing the social and economic impacts of forest communities. So it's not an issue of relevance, or a case of this group performing work that is growing obsolete. Their science is highly essential. As you can guess, it comes down to the almighty dollar. U of T's annual budget shows that the Faculty of Forestry is supported by 76 per cent from other faculties, a rate approximately twice that of other professional faculties, which is clearly problematic. And so the provost is looking to convert the faculty into a department within another faculty such-as UTSC or Arts and Science-continuing its current downward trajectory.

It is such an uncreative and simplistic approach to the problem: No money, shut down! How long did it take them to come up with that? At an institution where intellectual pursuits should trump profit margins, the provost should be working with the faculty to generate more revenue via increasing undergraduate enrollment within the faculty. Of course, this would go against the political undertows of larger faculties like Arts and Science, who would likely welcome the demotion of the faculty because those students passing on Forestry and entering Arts and Science would drive their overall revenues up. Instead, the provost should give the Faculty of Forestry time to seek out and execute strategies for increasing enrollment. Here's a start, re-brand yourselves from "Forestry", which sounded brilliant in 1907, to the "Faculty of Environmental Science and Conservation", and immediately become more relevant and attractive to those passionate about the environment. Initiate your own undergraduate programs to prevent the poaching of undergrads from Arts and Science courses. Finally, keep fighting the good fight.

Written by Tim Ryan, Reprinted from The Newspaper.

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) for the February issue of Forestry Matters. It's becoming very difficult for me to get your input. Please HELP ME!!

lab sustainability

Steps to reduce the environmental impact of your work



Lower fume hood sashes.

Fume hoods draw warmed or cooled air from your lab. Keep sashes low to save energy (ESC only; RW hoods run a constant air volume).



Turn off chilled centrifuges, ovens and water baths when not in use.

Turn them back on 30-45 minutes before you need them. Keep centrifuge rotors refrigerated so they are ready immediately.



Defrost refrigerator/freezer.

Ice makes the compressor work harder. Defrost when ice reaches >2 cm.



Turn off overhead lights if daylight is adequate...

and use a task light when you're alone in the lab.



Use the appropriate quality water for each task.

Use tap water for bulk rinsing of dirty glassware and use progressively purer water with each step.



Wash and re-use glass and plastic disposable labware when possible.

If contamination issues are of vital importance in your lab, try to find a lab that has less stringent requirements to reuse your plastic and glassware.



Recycle.

Battery disposal is available in the ESC 3rd floor kitchen and RW lobby. Printer cartridges can be recycled in ESC 3rd floor kitchen and RW 033.



Only ship overnight or "rush" when absolutely necessary.

Rush delivery almost always means sending the package by air, which produces more GHGs than ground transportation. Plan your work ahead so that you aren't in a hurry at the last minute to send/receive materials.



Ask for Energy Star appliances and instrumentation.

Lab equipment often lacks energy efficient features because scientists don't ask for them. By choosing energy efficient equipment, you can help change the market.



Look for other sustainable practices.

For more ideas, please visit: sustainability.ucsb.edu/LARS/best_practices/energy/
If you have tips of your own, please share them with UTBEAT at utbeat@utoronto.ca

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