



# Inside the Bark

Vol 2, No 1, Summer 2003

## Letter from the Dean

Welcome to the third issue of Inside the Bark, our Faculty newsletter aimed at keeping you up to date with what is going on at UNB. It's hard to believe that at the end of this month, I will have been Dean here for four years!

The UNB Faculty of Forestry and Environmental Management is alive and well. We graduated 59 students in our 2003 Encaenia ceremony in late May, with 47 BScF and 12 BScFE, plus an additional 6 MScF grads. We have been getting a great response from presentations to schools and Scouts/Guides/4-H groups put on by Outreach Coordinator Yolanda Spithoven and 15 graduate and upper undergraduate students (see article on p.4). Yolanda and her band of helpers have spoken to over 2,100 young people in 35 school visits plus 21 visits to other youth groups. Indications are that our student intake may be up by about 10–15 for fall 2003, plus hopefully the many presentations to younger kids from Scouts and Guides to grades 9–11 will pay off in the future.

Here are a few of the things that have been going on in the faculty:

- Forest Ecosystem Management Program Director Thom Erdle conducted a survey of selected recent alumni and employers to seek feedback about attributes, skills and knowledge required in today's forestry scene, to help evaluate our curriculum. The top responses in each category: *attributes*—ethical integrity, self directed/ambitious/energetic, team player/interpersonal skills, and empathetic/respectful/culturally aware; *skills*—communication, computer & technology skills, GIS, problem solving, bush skills; and *knowledge*—

Thom Erdle has been instrumental in leading the charge to beautify the Forestry Buildings this past year. A large selection of forestry posters were framed for the computer labs and two artists from Fredericton were hired to paint murals. One mural adorns the breezeway between old and new forestry buildings, one covers two walls in a computer lab and the 3 story



high wilderness mural depicted in the photograph below is located in the Forestry and Geology building. Does it look like the former equipment room between floors 2 and 3? It is! Our buildings are truly becoming a work of art.

resource modeling/analysis, financial analysis/business management, forest & landscape management, and tree growth/silviculture.

- The UNB silver ring ceremony was held in February in conjunction with SYLVICON 2003 (annual meeting of CIF Maritime Section, ARPFNB, NB Forest Technicians Association, and NB Forest Products Association). A total of 87 rings were awarded, with 69 forestry and 18 forest engineering. Locations of origin of the students included NB 33, NF 24, NS 17, BC 5, International 4 (Jamaica 2, Malaysia, and Maine), ON 2, AB 1, and PEI 1.
- The Forest Engineering (FE) group completed an analysis of strengths, weaknesses, opportunities and threats, and is currently redesigning the FE curriculum using an outcomes based framework.
- FE Professor Pierre Zundel received the Association of Atlantic Universities Instructional Leadership Award and the Canadian 3M Teaching Fellowship Award (see article on page 3).
- Forest certification is getting increasing play in our curriculum, including being used as a theme in our 4<sup>th</sup> year fall field camp (student groups determined how selected certification indicators could be evaluated) and being a major component of 5<sup>th</sup> year forest management planning group projects (applying three certification systems, FSC, SFI, and Pan-Canadian, to a watershed in the Fundy Model Forest). Two other 5<sup>th</sup> year group projects dealt with forest management planning to sequester carbon and to prevent soil erosion and rutting. Forestry is changing. . .
- I gave a presentation on "*The 21<sup>st</sup> Century Practitioner*" at the National Forest Congress in May in Ottawa. I addressed the topic using information such as the Erdle survey mentioned above, the Zundel and Needham (1996) Forestry Chronicle article on DACUM (Developing A Curriculum), and recent changes to the UNB curriculum that emphasize communication ability, social values, economics, certification, and a mix of forest management planning and ecology content. However, I also used the venue to raise the issue of whether there will even be forest practitioner education in Canada in 5, 10, 20 years? It's pretty sobering to realize that out of 515,983 program choices of students applying to all Ontario universities this year (each applicant selects their 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> program choice), only 54 (or 0.0104%) indicated forestry as a preferred program choice.
- Forestry and FE graduate studies and research is continuing to grow, with recent major research grants awarded including \$875,000 to Drs. Chui, Smith and the Wood Science and Technology Centre from the Natural Resources Canada Value to Wood program; \$350,000 to Dr. Beckley from Social Sciences and Humanities Research Council Initiatives on the New Economy program; and \$275,000 to Drs. MacLean, Meng, Quiring, and Arp from the Sustainable Forest Management Network for a project on use of forest and insect management to achieve carbon sequestration.



Enjoy the newsletter! Comments are always welcome. And don't forget, only five more years until our Faculty's 100<sup>th</sup> anniversary!

Dave MacLean

## Our new website

Check out our “new” Faculty website this summer! Over the past few months the Faculty “WebGang”, composed of Peggy McDougall, Joyce Moore, Liz Whamond and Debbie Jordan, has done a complete overhaul of our current website. The main goal was to create a website that would be a valuable resource tool for students, faculty/staff and alumni. The entire website can also be used as a recruitment tool that provides selling features of our world-renowned program.

As an alumnus, you will be able to “Keep in Touch” with our Faculty and each other. There now is an entire section of our Web site geared towards alumni. Please check it out.

## Graduate information

Currently we have 57 full and part-time Masters and PhD students. Students from all over the world are enrolled in our programs, including Germany, Great Britain, China, South Africa, Pakistan, Libya, Mexico, Costa Rica, USA and Canada. Research activities within FOREM reflect regional, national and international forest resource management issues. Recent thesis proposals, thesis abstracts, and a list of all graduate theses since 1917 are available on our web site.

The following is a sampling of topics presently being researched by Forestry and Forest Engineering graduate students:

- A spatially explicit assessment of vertebrate species risk on an industrial forest land base in northwestern New Brunswick (Jeff Higdon)
- The ecological pathway of mercury in herring gulls and great black-backed gulls from the Bay of Fundy (Catherine Otorowski)
- Spring dieback of yellow birch in North America: examining past decline events with historical weather data, and a process-based frost hardiness model (Darren Allen)
- Influence of forest management on the spatial and temporal patterns of forest community characteristics in northwestern New Brunswick (David Etheridge)
- Carbon in wood of trees (Sabah Lamlon)
- Mercury and the coastal environment: a mass balance for sub-catchments on the Bay of Fundy (Charlie Ritchie)
- Modelling knot size and location in black spruce trees over time (Jeff Benjamin)

We’ve also made it easier for you to acquire information on our graduate programs and other specialized programs such as our Forest Products Marketing Certificate.

Alumni often ask about our woodlot, Hammerfest, courses, student clubs and other news. Information about all of these topics is now included on our website. We also have a Forestry links section that includes valuable links to other websites such as job sites, research/educational sites and many others!

Please add [www.unbf.ca/forestry](http://www.unbf.ca/forestry) to your list of “Favorites” and be sure to “Keep in Touch”—we’d love to hear from you!

- Integrating a patch size distribution objective with harvest schedule and road construction optimization (Greg Paradis)
- Estimating passive use values for New Brunswick’s forests (Helen Smith)
- Simulating the characteristics of a forest landscape disturbed by spruce budworm outbreaks (Brendan Hemens)
- Triad forest management—land use zoning in northwestern New Brunswick (Mike Montigny)
- Vegetative propagation of *Fagus grandifolia* (American beech) resistant to the beech bark disease (Marianela Ramirez)
- Influence of lateral element stiffness on the performance of wooden floors (Aamir M. Khokhar)
- Foraging ecology of red squirrels in Newfoundland: potential impacts on forest renewal (Kirby Tulk)
- Public participation in Newfoundland: a comparison of industrial, provincial and certification driven processes (Sara Wallace)
- Phenological chemical profiling of the cambium: searching for indicators of tree health (Val Steeves)
- A sighting probability assessment of a double-count aerial survey technique for white-tailed deer (*Odocoileus virginianus*) in New Brunswick, Canada (Mark McGarrigle)
- Factors affecting the transmission of a virus in balsam fir sawfly (Roger Graves)
- Mapping fire danger moisture codes with remote sensing in northern Alberta and southern Northwest Territories’ forests (Steve Oldford)



On June 23rd, the Forestry class of 1953 visited campus and one of their activities was a visit to the Boiestown Woodsmen’s Museum of which Dave MacLean, Dave Daugharty and Yolanda Spithoven had the pleasure of attending. Some of those who attended this activity are from left to right:

Back row: Ed Telfer, Allan Seddon, Anne Seddon, Donald George, George Elliott, Marjorie Elliott, Reg Staples, Sterling McNeish  
Front row: Iris Perrin, Constance Porteous, Pat Staples, Barbara McNeish, Bill Perrin

Also, thank you Reid Watson, for taking the lead in designing a 50-year Forestry pin which was presented this year for the first time to all returning 50-year Forestry alumni. The Faculty is looking forward to presenting these pins to future 50-year returning graduates.





This year's FOR5973 International forestry trip went to Washington state at the end of April to tour forestry operations. The 9 students, 5 Faculty members and 1 alumnus explored rain forests, industrial forest research, and intensive forest management. They toured the Mount St. Helens Forestry Centre to see some of the cooperative research Weyerhaeuser has undertaken following the eruption of 1980 and viewed landscape-level and stand-level silviculture practices being used to restore east-slope ponderosa pine stands back to their fire-based structure. They compared areas which receive as little as 12 cm of rain per year to a zone that receives as much as 300 cm of rain per year.

The International Forestry Studies course is an exciting opportunity for students to learn about forestry and meet outstanding foresters from around the world. The students spend most of the year raising funds to offset the cost of the trip and greatly appreciate any donations from alumni. **Each year we also have a standing invitation for alumni and other professional foresters from Canada to join us.** It is an excellent time to spend an extended period of time with students and faculty and to see forestry from a completely different perspective. Tentative plans for next year's trip include either Brazil or Germany in late April. For more information, contact John Kershaw ([kershaw@unb.ca](mailto:kershaw@unb.ca) or 506-453-4933).

### 2003 UNB Service Award

Mr. Duc Banh was nominated for a UNB Service Award on the basis of his outstanding service to the Faculty of Forestry and Environmental Management. Duc, a technician and Level I computer support staff person, has been employed with the university since 1981. For the past 22 years he has shown exceptional service to the faculty. Duc is legendary within our faculty and the University for his helpfulness and excellent service.

### 3M Teaching Fellow

Pierre Zundel has joined the community of 3M teaching fellows who embody the highest ideals of teaching excellence and scholarship with a commitment to enhance the educational experience of every learner. Up to 10 awards are presented annually at the STLHE conference in June, recognizing exemplary contributions to teaching and learning in Canadian universities. The two criteria for these awards are: 1) excellence in teaching over a number of years, principally (but not exclusively) at the undergraduate level; and, 2) commitment to the improvement of university teaching within the candidate's own institution and perhaps beyond. Pierre certainly fits the criteria!

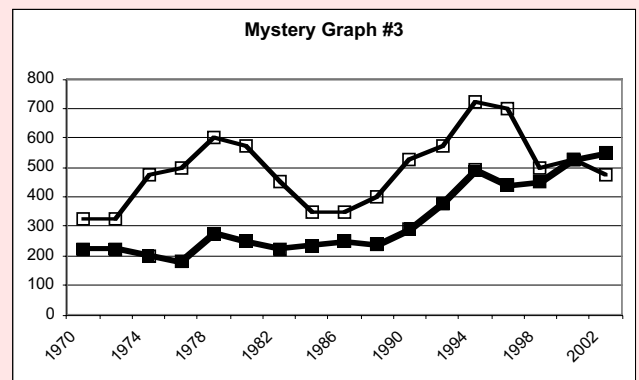
### 2003 UNB Teaching Professor

Dr. Ted Needham was awarded for the title of University Teaching Professor on the basis of his skill in and dedication to teaching, his mentoring of other faculty, his scholarship and his improvements to the learning environment within the forest engineering program.

Ted Needham's leadership of the forest engineering program has resulted in dramatic improvements to student morale and more concerted and purposeful learning activities. His patience, perseverance and vision have seen the program through development of explicit learning outcomes which model the structured engineering design process that the program instills in its graduates.

Dr. Needham is an eminent educator, mentor, scholar and leader, and he exemplifies the concept of a University Teaching Professor.

We have a winner from the previous Mystery graph—"My son and I were looking at the graph in the fall edition of *Inside the Bark* and he suggested to me that it represents the area (hectares) of forest burnt by year from 1919 to 1999. I did some research with DNRE Annual Reports and we feel confident that graph is as Chris observed. Chris is in his final year in the Faculty of Forestry at UNB!" — Wayne Clowater ('75)



This edition's graph is another "stumper." Send your guesses to [yolanda@unb.ca](mailto:yolanda@unb.ca) and the winner will be announced in the next newsletter. Good luck!

### The 2003 job scene

For students hitting the job market in 2003, things were tough, but not as bad as you might think from what you read in the newspapers. As long as students are willing to work hard, willing to relocate, and have some good job experience, there are lots of opportunities.

Permanent and summer jobs were found in all provinces except Quebec with NB taking the most students in both permanent and summer categories. NB was followed by ON, BC and the USA for permanents, and by BC, ON and the USA for summer hirings.

Placements in the US have been on the rise for several years. Students now watch the CN/US exchange rate as closely as you do—forest economics at the undergraduate level.



## Yolanda's travels

It has been a busy school year! I have traveled with student presenters to 30+ schools, 18 girl guide and 2 boy scout troops and one 4-H senior conference. The FOREM presenters were both graduate and undergraduate students and the topics included: biodiversity, ecosystems, forest management, climate change, extinction, remote sensing, geographical information systems, biogeography and of course—what are forestry and forest engineering at UNB! As of the end of May we had spoken to over 2,100 young people.

I emailed teachers in New Brunswick, Prince Edward Island and Nova Scotia and gave them a list of presentation topics and asked them to choose those topics which would mesh with their courses. Most schools arranged anywhere from 2 to 5 presentations per visit. We spoke with chemistry, physics, math, environmental and general science classes from grades 9–12. We became so popular at some schools that we were invited back two and three times! My hope is that we are both enhancing the curriculum and introducing forestry and forest engineering programs to students who might now consider these professions. Feedback has been great from the schools, and hopefully our enrollment numbers will reflect these efforts.

With the assistance of HRDC, Maritime College of Forest Technology and Fundy Model Forest, I was able to hire a student this sum-

mer to develop hands-on activities and new PowerPoint presentations for travel next year. Nelson Publishing provided free high school science text books and the NB Department of Education is assisting us with curriculum requirements. I hope to build even better presentations and exercises for next September's travels.

Canadian Forest Service, Maritime College of Forest Technology, NB Forest Products Association, The Tree House, Fundy Model Forest and UNB Foresters organized a half day forestry exercise for ten schools during National Forestry Week. The local schools each sent thirty science students to participate in hands-on activities involving the CFS seed center and nursery and GPS in the UNB Woodlot. The students thoroughly enjoyed their adventure and the teachers hope to be back with new classes for next year.

While we are working on new PowerPoint presentations plans are also underway for orientation activities for the September 2003 students. In conjunction with the Faculties of Computer Science and Engineering a "Girls in Science" day is being planned for October for grade 9 girls here at UNB.

Just a reminder—if you are interested in visiting a school in your area and could drop off a package of information I would be happy to send something to you. Also, if you have any recruitment ideas please send them my way.

## MBA program in Forest Products Marketing

Our first MBA in Forest Products Marketing class is underway. This is in conjunction with the UNBSJ Faculty of Business. This summer the MBA students are at the Fredericton campus to take nine forestry and wood products courses which are also available to other qualified students. They are of particular interest to professionals who are interested in acquiring up-to-date knowledge in wood technology and products, international marketing of forest products or forest resource and operation management planning techniques that consider investment return for a company. This year, we brought in Professors Rob Kozak and David Cohen from UBC, to deliver MBA courses on "Forest Products Marketing" and "International Trade." In addition to the full MBA degree, students who opt to complete the nine courses can qualify for a graduate certificate in Forest Products Marketing. For further information on the MBA program, graduate certificate or individual courses, please visit our web site <http://www.unbf.ca/forestry> or contact Prof. Y.H. Chui at [yhc@unb.ca](mailto:yhc@unb.ca)



Featured above: Professor Rob Kozak and students using the new Computer Applications lab for an MBA in Forest Products Marketing class.

## Jason Herron dies following long battle with cancer

Jason Herron, BScFE '76, a part-time lecturer with the Faculty of Forestry and Environmental Management, passed away on May 23, following a long battle with cancer. Mr. Herron joined the Faculty in 2000 on a part-time basis, teaching forest operations concepts and forest engineering operations. The unique insight he brought as a practicing forester was extremely valuable in delivering our program. Jason was formerly Forest Manager New Brunswick for Georgia-Pacific and the practical solutions he offered and the friendship he extended to students, faculty and staff will be missed by all.

The Faculty is establishing an award in Jason's name. In keeping with what Jason thought was most important, and with what he taught to students, an annual award will be given to a senior student who has demonstrated professionalism and academic leadership. You can contribute to the Jason Herron award on line at <http://www.unb.ca/donations/> (please choose the "other" category and specify "Jason Herron") or donations can be mailed to the Office of Development and Donor Relations, University of New Brunswick, PO Box 4400, Fredericton, NB, E3B 5A3. For further information, please contact Prof. Evelyn Richards, [ewr@unb.ca](mailto:ewr@unb.ca) or phone 506-453-4936.

## Alumni

Do you have a comment? Suggestion? Idea? An email address we don't know about? With your email address, we will be able to provide more information such as photos of reunions, special events, etc. Contact us: Faculty of Forestry & Environmental Management, PO Box 44555, Fredericton, NB, E3B 6C2, phone 506-458-7701, email: [yolanda@unb.ca](mailto:yolanda@unb.ca)

## ***International Forestry trip—more details!***



This year's International Forestry trip went to Washington state April 25 – May 6. Nine students, 5 faculty and 1 alumnus toured Washington forestry operations. Our trip started in Seattle with a baseball game at the new Safeco Field Friday evening with the Mariners winning. On Saturday, we were hosted by Dr. Dean Berg, a private consultant, looking at his work in developing silvicultural treatments for riparian zone management. That evening we had a salmon barbeque at the University of Washington, Olympic Natural Resource Center. Dr. Needham was a capable, although slightly slow chef. Sunday we had a beautiful sunny day to explore the rain forests of the Hoh River valley in the Olympic National Park. Monday was split between industrial forest research hosted by Bill Scott, Weyerhaeuser Company and USFS research hosted by Dave Marshall. Tuesday was spent with Tim Trueaxe of Port Blakely Tree Farms seeing various aspects of intensive forest management. On Wednesday, Dick Ford of the Weyerhaeuser Mt. St. Helens Forestry Center gave us a tour of the Forestry Center and showed us some of the cooperative research Weyerhaeuser has undertaken following the eruption of 1980. Unfortunately, the carter refused to come out of the clouds that day. Thursday, we were at the Wind River Canopy Crane. We each got a chance to be lifted through the canopy of a 70 m tall Douglas-fir – Western Hemlock stand and see the unique perspective an 80 m tall crane can provide a forester. On Friday, David Tharpe, silviculturist for the Naches Ranger district shows us the landscape-level and stand-level silviculture practices he is using to restore east-slope Ponderosa Pine stands back to their fire-based structure. Saturday, naturalist Libbie Soden took us on a cross-Washington tour. Starting at Vantage, Washington which receives as little as 12 cm of rain per year, we headed west collecting fossilized wood and examining the vegetation changes as we headed over the crest of the Cascade Mountains and down the other side going through a zone that receives as much as 300 cm of rain per year. We ended the day at Pack Forest, the University of Washington field camp where we unknowingly missed Dr. Jaeger's, a new professor of forest roads at UNB, birthday. Sunday we learned all about the rain of western Washington as we tried to tour Mt. Rainier National Park. Our tour was ended early as we encountered snow at the 4000 ft level! We ended our tour, on Monday at University of Washington with a tour of the College of Forest Resources.

The International Forestry trip is an exciting opportunity for students to learn about forestry and meet outstanding foresters from around the world. The students spend most of the year raising funds to offset the cost of the trip and greatly appreciate any donations from alumni. Each year we also have a standing invitation for alumni and other professional foresters from Canada to join us. It is an excellent time to spend an extended period of time with students and faculty and to see forestry from a completely different perspective. Tentative plans for next year's trip include either Brazil or Germany. The tour is scheduled for late April. For more information, contact John Kershaw ([kershaw@unb.ca](mailto:kershaw@unb.ca) or 506-453-4933).