

2009 Annual Report



Forestry
University of British Columbia

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Weyerhaeuser Company

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2009 Annual Report

Faculty of Forestry

University of British Columbia

April 1, 2009 – March 31, 2010

Full page photographs of science in the Faculty of Forestry by Jamie Myers

Front cover – Examining cottonwood with a Licor 6400 portable photosynthesis system

Back cover – Germinants in a UBC greenhouse

Editor: Susan B Watts, PhD, RPF

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DEAN'S MESSAGE

AFTER CLOSE to 10 years of being in the fortunate position of Dean of one of the world's premier Faculties of Forestry, this will be my last opportunity to report on the annual progress of our unit and the many communities, partners and individuals who have supported us over the past decade.

There was almost a doomsday sense at the start of my tenure in 2000, with Y2K threatening to disrupt our ever increasing reliance on computers and the debate on global warming starting to pick up steam. Although there was already general recognition that "sustainability" was important, there was still a sense that perhaps we were generally, "living beyond our means". By the year 2000, the Faculty of Forestry had fully embraced what most people now recognize as the economic, ecological and social legs of the sustainability stool, and was contributing to the ongoing challenge of keeping them in balance.

This is reflected in many aspects of what the Faculty does. From the continuing growth of our natural resources conservation program, to the hiring of many world-class faculty members whose research and teaching contributes to the evolving paradigm that is "the sustainable, global forest", to the many products and outcomes of the Faculty's work including our graduates, alumni, papers, conferences and contributions to policy recommendations and the evolution of the forest sector.

During the past ten years there has also been increasing recognition of the convergence and competition for the 5 Fs, Food, Feed, Fibre, Fuel and Fertilizer, and the role that forestry and its products will play in the new economy. This was occurring even before the catalytic effect of the global financial meltdown. The BC forest industry experienced some highs in the early part of the decade, with record sales of lumber. This was followed by some of the lowest numbers of US housing starts in quite some time. Similarly, there has been a roller coaster ride in oil prices. Prices rose from about \$10 a barrel at the start of the decade, to almost \$150 a barrel a few years ago. The increase in the price of oil has influenced a growing interest in bioenergy as well as wood pellet production and exports. Through all of this, the environment and more specifically the role that forests and their products might play in demonstrating, alleviating or, with their removal, exacerbating climate change, has remained front-and-centre in many people's minds.

It has been a great pleasure to see how the Faculty's research and teaching has contributed to the discussions and understanding of many of the areas mentioned above. For example, we now better understand the role that wood engineering can play in increasing markets for non-residential housing, the concomitant carbon that will not be released by avoiding concrete and steel, the significance of the carbon that can be "stored" in these long lived buildings, and the effect that climate change is having on BC's biogeoclimatic zones and how, in some case, the land area is changing more quickly than trees can re-seed themselves. As well as our traditional strengths in the management and science of forests and their products, we have established some world-class expertise in the social aspects of forestry. Our research spans Aboriginal issues through to the viability and functioning of communities. This is unfortunately demonstrated by the colossal impact that climate change has had on the ecological, economic and social aspects of the mountain pine beetle infestation of BC's forests. Fortunately, with support from partners such as the BC Ministry of Forests and Range and the Future Forests Economic Scientific Council (FFESC), resources were available to recruit world-class graduate students and post docs to help us predict what our future forest might look like and how this will affect the viability of forest dependent communities.

One great concern I have as I vacate the Dean's chair is that, with unprecedented changes occurring in our forests and communities, now is the time to invest more in research and training of the next generation of individuals that will have to deal with these issues. With the demise of programs such as FFESC, and reductions in federal and provincial programs such as the Forest Innovation Investment, we may not have the information to make enlightened decisions. Just as important, with a future lack of trained and informed individuals to make these decisions, there is apprehension that we will not be able to sustain, never mind expand, the multiple values that we obtain from BC's and the world's forests.

As well as taking a lead in our forest community, the Faculty has also taken a lead in demonstrating what might be accomplished at UBC as it relates to UBC's aspirational document, "Place and Promise", which was published in December 2009. The Plan focuses on the student learning experience, research excellence, Aboriginal engagement and other key areas such as teaching and research in sustainability, intercultural understanding and increasing internationalization in all that we do. The Faculty, particularly through the work of Nicholas Coops and Jean Markus, has taken a lead in developing undergraduate opportunities in the broad area of sustainability, such that all students

at UBC will have the opportunity to learn what sustainability actually means. If you navigate to UBC's home page and look up sustainability you will see that Jean and her colleagues have been able to list all of the undergraduate courses relevant to sustainability and that the Faculty's offerings feature prominently. Other goals described in "Place and Promise", such as increased internationalization and Aboriginal engagement, have been well established strategies at the Faculty of Forestry for many years.

As described in this year's annual report, our undergraduate numbers continue to increase (thanks mostly to our Natural Resources Conservation program and increasing international student numbers). We have excellent "quality and quantity" of graduate students (although diminishing research funding is likely to quickly change this picture). We remain second to Medicine in terms of research dollars per budget-supported faculty member, but again this situation is likely to change with reduced provincial and federal funding. One of our biggest financial challenges has been with our endowments, which are about one-third lower than we have been used to. Particular programs, such as our endowment-dependent Wood Products Processing program, have had to be both innovative and frugal. Our endowed professorships and scholarships also remain challenged.

Students and Teaching Programs

For the ninth year in a row, our student enrolment at the undergraduate level has continued to grow. Total undergraduate enrolment for 2009/10 was 557, an increase of 50 students from the previous year. New student enrolment was up by over 25% from 160 in 2008/09 to 207 in the past year. Our Natural Resources Conservation program remains by far the most popular of our five undergraduate options with 250 students enrolled (up 13% from 2008/09). Natalie Swift, a Conservation student was chosen to receive the Canadian Institute of Forestry Gold Medal recognizing her as one of the country's most outstanding students from the nation's graduating classes. A continuing priority has been to increase international student enrolment and this year we welcomed 90 undergraduate students from countries other than Canada. We are second to the Sauder School of Business in terms of the proportion of international students in our undergraduate programs. The primary sources of our growing number of international students are China and the United States. We also remain an attractive location for visiting and exchange students from elsewhere in Canada and around the world. During the past year 7 of our students went on exchange to Australia, Norway, New Zealand and South Africa. We hosted 10 international exchange/visiting students from Australia, China, Japan, New Zealand, Sweden

Faculty of Forestry Activities, 1999/00 – 2009/10

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Undergraduate enrolment ¹	553	508	447	441	448	453	454	467	504	507	557
Distance education (fte)	21	22	19	14	9	9	10	10	10	9	7
Graduate enrolment	217	231	202	163	170	197	242	252	265	261	268
Teaching Evaluation Index ²	2.15	2.19	2.05	1.88	1.90	1.99	1.89	2.00	4.26	4.29	4.32
GPOB (\$'000) ³	4,919	5,491	5,884	6,124	6,219	6,332	6,398	6,631	6,850	8,102	7,824
GPOB/WFTE ⁴	2,195	2,479	3,024	3,487	3,508	3,315	2,976	3,003	2,890	3,439	3,135
Extramural funding (\$'000)	8,168	8,635	8,357	11,370	11,379	10,427	12,101	11,699	13,296	13,493	12,229
Endowment income (\$'000)	1,192	1,330	1,342	2,031	1,981	1,706	1,698	1,575	1,902	1,843	1,207
Extramural funding/GPOB faculty member (\$'000)	233	225	214	274	295	260	304	286	365	374	307

¹ Headcount unless otherwise noted

² Average numerical score of several criteria used by students to assess teaching performance of Faculty members. Score system used up to and including 2006/07, 1=Excellent; 2=Very Good; 3=Good; 4=Fair; 5=Poor; 6=Very Poor

³ New system introduced in 2007/08, 5=Excellent; 4=Good; 3=Average; 2=Poor; 1=Very Poor

⁴ GPOB = base recurring budget

⁵ WFTE calculated as 2 x (undergraduate + extrasessional) + 4 x masters + 6 x PhD students

DEAN'S MESSAGE

and the United Kingdom. Our undergraduate student statistics are summarized on pages 6-11.

Enrolment in the Forestry Graduate program reached an all-time high during the past year with a total of 268 graduate students, many coming with their own scholarship support and choosing to study at UBC. More than half of all of the graduate students are enrolled in PhD programs. We welcomed 26 new PhD students and 41 new master's students to the Faculty of Forestry in 2009/10. Fifty-four percent of our graduate students are from outside of Canada representing 42 different countries and making us one of the most culturally diverse graduate programs on campus. Women comprise 51% of our masters and 36% of our doctoral students. Fifty-two students completed their studies (36 from master's programs and 16 from doctoral programs) and were conferred with graduate degrees. This past year Dr John Innes introduced a new graduate course on tropical forestry. Our graduate student statistics are summarized on pages 12-19.

The Faculty continues to develop strong ties with Chinese forestry universities, particularly through programs that allow Chinese students to study at home for 2 years before transferring to UBC for 2 years to graduate with UBC Forestry degrees. This transfer program is currently in place with 2 universities in China and agreements have now been signed with several more Chinese forestry universities. In August of 2009 we hosted the International Energy Agency Bioenergy conference "Biofuels and bioenergy: A changing climate". We also hosted international delegations from China, France, Ethiopia, Taiwan, Indonesia and South Africa during the year. Further information on our international activities is provided on pages 20-21 of this report.

For more than 15 years we have been developing a First Nations strategy for our Faculty. The challenge remains to increase the number of First Nation Registered Professional Foresters and land managers. We continue to provide assistance to First Nations and the wider community to meet these challenges and opportunities through our First Nations strategy. This was the final year of support from the Ministry of Forests and Range for our First Nations/Aboriginal strategy. With this financial support together with the advice of our First Nations Council of Advisors and the work of Garth Greskiw, Ron Trosper and Gordon Prest, we made good progress in the implementation of this strategy. A highlight was Gordon Prest's winning of a National Aboriginal Achievement Award, recognizing the many contributions that Gordon has made over his career. Pages 22-23 provide highlights of our Aboriginal forestry activities.

Faculty, Research, Development and Alumni

This past year has seen 2 new faculty hires, 2 resignations and one retirement. Dr Allan Carroll joined the Forest Sciences department as an associate professor in forest entomology. Allan previously worked as a research scientist with the Canadian Forest Service in Victoria. Dr Richard Hamelin joined the Forest Sciences department as a Professor in plant pathology. Richard is seconded to us from the Canadian Forest Service where he was stationed at the Laurentian Forest Centre. Dr Tom Maness resigned from the Forest Resources Management to join the Forest Engineering, Resources and Management department at Oregon State University. Dr Sumeet Gulati (assistant professor in food and resource economics) moved from a joint appointment between the Forest Resources Management department and Land and Food Systems to a 100% appointment with Land and Food Systems at UBC. Dr Michael Feller retired from his position of associate professor in fire science and water quality after a long association with the Faculty. Michael taught courses in forest fire science and was an active participant in all of the forest management and conservation field schools. During the past year, Dr Nicholas Coops (Forest Resources Management) was promoted to full professor and Drs Sarah Gergel and Maja Krzik (Forest Sciences) were promoted to associate professor status with tenure. Several faculty members were recognized with prestigious awards during the year. Dr Sally Aitken (Forest Sciences department) received the Canadian Forestry Achievement Award, Drs Yousry El-Kassaby (Forest Sciences) and Shawn Mansfield (Wood Science) received the IUFRO Scientific Achievement Award, Dr Jack Saddler (Wood Science) received the Life Sciences BC Leadership Award, Dr Sue Grayston (Forest Sciences) received the UBC Killam Faculty Research Fellowship, Dr John Kadla (Wood Science) received the Hayashi Jisuke Award and Dr Maja Krzik received the CNIE Award of Merit from the Canadian Network for Innovation in Education. Dr Cindy Prescott (Forest Sciences) was appointed deputy editor in-chief of the National Research Council Press.

The Centre for Advanced Wood Processing (CAWP) continues to provide educational programs and applied research activities under its integrated structure with the department of Wood Science. In 2009 CAWP launched a new product development service that allows companies to access the Centre's scientific and technical expertise including use of CAWP's state-of-the-art range of CAD/Cam software and manufacturing equipment. Together with Stellenbosch University, CAWP is involved in a major new initiative to assist Ghana's forest products sector with the creation of new educational and training programs.

For further information on activities of the Centre, see pages 44-45 of this report.

The Centre for Applied Conservation Research (CACR) co-directors Drs Sarah Gergel and Peter Arcese continue to lead Centre collaborators to help solve interdisciplinary issues in conservation and management. In the past year, CACR postdoctoral fellow Dr Hilary Thorpe coordinated 2 educational initiatives on Haida Gwaii. A workshop on aerial photography and dendrochronology promoted opportunities for islanders interested in historical ecology and management. Hilary also coordinated a four-month interdisciplinary undergraduate program offered through UBC Forestry by the Haida Gwaii Higher Education Society. CACR activities are covered on pages 46-47 of this report.

Twenty-five new projects were initiated at our Research Forests over the past year. Construction of the Norm and Betty Pelton Rotary Field, the Loon Lake outdoor activity shelter and the Loon Lake Camp host residence was completed at the Malcolm Knapp Forest. Past year achievements and future plans for our Research Forests are documented on pages 48-49.

During the past year we hosted 2 "Forestry Lectures in Sustainability" funded by the Koerner Foundation. In April we hosted the annual Alumni and Friends Forest Tour and Dean's BBQ at the Malcolm Knapp Research Forest. In May we opened our doors to UBC alumni during UBC's Alumni Weekend Open House. Also in May, we formally recognized the accomplishments and contributions of "Champions" Mike Apsey, Joseph Gardner and Gordon Prest. Full details of our development and alumni activities are recorded on pages 78-79.


Looking Ahead

During the past decade, the Faculty has built on the legacy that my predecessors established. We have the impressive building that is our Forest Sciences Centre, innovative undergraduate programs and successful Research Forests. Through the hard work of individuals such as Paul Lawson (manager of Malcolm Knapp Research Forest) we have brought many ideas from concept through to reality. For example, the "destination resort" that is now the world class Loon Lake teaching and research facility was only realized through the generosity and partnership of individuals and groups such as Sue and Charlie Johnston, the Koerner Foundation, and the Canadian Cancer Agency (Camp Goodtimes), to name but a few. Through the provincial, national and international work of our faculty and graduate students and resources such as our Research Forests, we truly are "The University of British Columbia", rather than the "University of Point Grey", with our work impacting regional issues such as "what should be going in the ground after the pine beetle has moved through" to the social, ecological

and economic impacts that forest have on global issues such as trade, poverty alleviation and climate change. We have become a research intensive unit, attracting and training some of the brightest minds in the full spectrum of disciplines that now constitute "forestry". During the past ten years we have also been able to recruit, and mostly retain, world-class faculty members who have helped us to attract research support, quality graduate students and measurable outcomes such as high impact publications, contributions to policy development, and final placement of our graduates. I have used the term "world class" several times, because I think the Faculty truly is associated with one of the world's greatest universities and is, if not the best, certainly one of the best Faculties of Forestry, in the broadest sense, in the world!

During this past year, UBC has been engaged in a worldwide search to recruit the next Dean of the Faculty of Forestry. As might be expected, with the Faculty being one of the world's premier forestry institutions, we had strong interest in the position from around the world. After a rigorous and I am sure, exhausting, review process, Dr John Innes, professor of Forest Resources Management was chosen as the next Dean of the Faculty of Forestry. John is internationally recognized and, in addition to having an excellent teaching and research track record, has been heavily involved with international organizations such as the International Union of Forest Research Organizations, the Commonwealth Forestry Association, and the Intergovernmental Panel on Climate Change. He has been a long time proponent of increasing the international impact of the Faculty's work and has worked extensively in Europe and China. I am sure that John will help build the Faculty's reputation and bring us to new levels of excellence!

It has been a great pleasure and a privilege to have been able to serve as the Dean of the Faculty of Forestry for these last years. I want to thank all the individuals and organizations that have been so generous and gracious with their support of me and the Faculty, both internally (you know who you are) and externally (you also know who you are). I hope to be able to continue to contribute to the aspirational goals of UBC and the Faculty while having more time to spend with my hard working research group, colleagues in organizations such as the International Energy Agency and while contributing to UBC's sustainability and clean energy strategies by working with colleagues in the Michael Smith Laboratory and the Clean energy Research Centre. Thank you all. I know the Faculty will continue to go onto greater things!



UNDER-GRADUATE STUDENTS

PROGRAMS OF STUDY



Peter L. Marshall
BScF, MScF, PhD, RPF
Associate Dean
Undergraduate Studies
604.822.4918
peter.marshall@ubc.ca

Sally Aitken
BSF (Hons), MSc, PhD
Director
Forest Sciences Program

Dennis Bendickson
BSF, RPF
Director
Forest Operations Major

Simon C Ellis
BSc (Hons), MSc, PhD
Director, Wood Products
Processing Program

Scott G Hinch
BSc (Hons), MSc, PhD
Director, Natural Resources
Conservation Program

John Nelson
BSF, MBA, PhD, RPF
Director, Forest Resources
Management Major

www.forestry.ubc.ca/programs/undergrad.html

THE FACULTY OF FORESTRY offers four-year degree programs in the following areas:

Bachelor of Science in Forestry BSF

This degree integrates science and technology to advance the understanding and practice of sustainable forest management. It enables students to become Registered Professional Foresters with diverse career options. Students choose one of two majors upon application to first year:

Major in Forest Operations: This major focuses on the engineering, planning, development, harvesting, and management of forest lands. It is designed to develop professionals who understand both environmental and social objectives and who can provide the link between the growing forest and its products. Students in this program can add courses to create eligibility for registration as a Professional Engineer. For students who wish to concentrate on business rather than engineering, a Minor in Commerce is offered through the UBC Sauder School of Business.
Contact: Dennis Bendickson
604.822.5932 dennis.bendickson@ubc.ca

Major in Forest Resources Management: This major focuses on the multidisciplinary aspects of forest resources and the management of forested ecosystems. Students learn about the unique characteristics of each resource, their interactions, and the manipulation of forests to yield a variety of desirable products in the context of ecological, social, and economic objectives. It also offers a four-year International Forestry Specialization plus a new Community and Aboriginal Forestry Specialization.
Contact: John Nelson
604.822.3902 john.nelson@ubc.ca

Forest Sciences BSc (Forest Sciences)

This program is designed to develop professionals who can conduct research in forested ecosystems, and are well prepared for graduate studies. Students gain a strong foundation in the basic biological and environmental sciences, with emphasis on the interacting components and functions of forests. Core topics include genetics, soil science, weather and climate, tree form and function, ecology, silviculture, biodiversity, and research methods. In the third and fourth years of study, students specialize in an area of particular interest. Possible specializations include forest ecology, forest entomology or pathology, forest fire science, forest genetics or biotechnology, forest hydrology and aquatic sciences, forest soils, tree physiology, silviculture, conservation biology, or wildlife ecology. This program also allows a four-year International Forestry Specialization.
Contact: Sally Aitken
604.822.6020 sally.aitken@ubc.ca

Wood Products Processing BSc (Wood Products Processing)

This award-winning program is a fusion of science, engineering and business that prepares students for careers in the wood products sector. Students gain a comprehensive understanding of wood science, advanced manufacturing and business operations, and can choose to complement their degree with a Minor in Commerce through the UBC Sauder School of Business. Co-op is an option to integrate career-related experience into academic studies. This program was developed in response to the need for university graduates qualified to become leaders in the wood products manufacturing sector. Graduates are always in demand and enjoy diverse career opportunities with the highest average salary compared to other UBC undergraduate degrees.

Contact: Simon Ellis
604.822.3551

simon.ellis@ubc.ca

Natural Resources Conservation BSc (Natural Resources Conservation)

This transdisciplinary program provides students with a solid foundation in the function, process, and structure of natural ecosystems, with an appreciation for the political, legal, and socioeconomic contexts of conservation and management strategies. The development of communication and problem-solving skills, teamwork, and leadership is emphasized. Students select a major at the end of second year:

Major in Science and Management: Students obtain a working knowledge of conservation science and management, particularly within the Pacific Northwest context. A notable feature is the fourth year capstone field school which integrates field and classroom instruction throughout the fall term. Students can readily pursue Registered Professional Biologist or Forester status through this major.

Major in Global Perspectives: Students obtain broad knowledge on a range of resource systems. International study is a requirement. A notable feature is the capstone modeling course involving a comprehensive assessment of policy, management, and resource sustainability in developing countries.

Contact: Scott Hinch
604.822.9377

scott.hinch@ubc.ca

ACHIEVEMENTS IN 2009 – 10

A new specialization under the BSF program in Forest Resources Management was approved by Senate and will be implemented starting in September 2010.

Four Wood Products Processing (WPP) students and one professor took part in an all-expenses-paid one-week tour of Italian manufacturing facilities, courtesy of ACIMALL, the Italian Machinery Manufacturers' Association in July 2009. They

were based in Milan, where they visited leading machinery manufacturers as well as several furniture and wood products makers, with a particular focus on advanced CNC technologies. ACIMALL ran an essay-writing competition among the senior WPP students to select the winning students. The efforts and generosity of ACIMALL and the Italian Trade Commission in organizing and hosting the trip are greatly appreciated.

COOPERATIVE EDUCATION is an educational model combining classroom-based learning with practical work experience; allowing students to alternate between the classroom and paid work terms related to their degree. Students gain practical and relevant work experience and develop career clarity and enhanced employability; ensuring they are well prepared for their future careers. Employers have access to an excellent staffing resource and the opportunity to recruit, train and assess potential future employees.

2009-10 was another challenging year. The economic downturn impacted forestry much harder than other sectors. Many employers, though supportive of co-op, were unable to offer co-op opportunities; resulting in lower work term numbers compared to previous years.

Barbara Bremner resigned her position as Co-op Coordinator – Wood Products Processing in February 2010. Linda Dom from the UBC Sauder School of Business Co-op Program was hired to fill this position.

ACHIEVEMENTS IN 2009 – 10

Forestry Programs

- Co-op students completed work terms with consultants, government, industry and non-governmental organizations.
- Work terms were completed in British Columbia, Alberta, Manitoba, Nova Scotia, Costa Rica, Ecuador, South Africa and the United States (California).
- International work terms were completed with CC Laboratorios (Ecuador), Environmental Resource Solutions, Inc. (USA), The Nature Conservancy (Costa Rica) and Universiteit Stellenbosch (South Africa).
- New employers included: Agriculture and Agro-Food Canada (Summerland, BC), Burns Bog Conservation Society (Delta, BC), Canadian Forest Service – Northern Forestry Centre (Edmonton), Fisheries and Oceans Canada – Freshwater Institute (Winnipeg), Nature Conservancy of Canada (Calgary) and Parks Canada – Cape Breton Highlands National Park (Ingonish Beach, NS).

PLANS FOR 2010 – 11

- Explore the concept of a “Forest Sciences Honours Program” with entry after completion of second year.
- Implement a new in-house Forestry Communications course for first year students to replace three credits of the first year English requirement. The curriculum has been designed and the course will be offered once a Faculty member has been identified to teach it.

- The geographical distribution of co-op work terms was 24% BC Lower Mainland; 8% other BC locations; 24% Canada outside of BC; and 44% international.
- In February delivered presentation to faculty and students of the Department of Forest and Wood Science at Universiteit Stellenbosch.

Wood Products Processing Program

- Co-op work terms were completed in British Columbia, Alberta, Manitoba, Quebec and New Brunswick as well as Australia, Germany and the United States.
- The geographical distribution of co-op work terms was 47% BC Lower Mainland; 3% other BC locations; 31% Canada outside of BC; and 19% international.
- International co-op work terms completed with Forest Enterprises Australia (Australia); Hansen Tree Farms (USA); and Hochschule Rosenheim University of Applied Sciences (Germany).
- Attendance at the semi-annual Co-op Presentation Evening remained strong despite the recent economic downturn.
- Presentations delivered by senior co-op students at Co-op Presentation Evening were recorded and available for viewing on the Forestry website.

PLANS FOR 2010 – 11

- Further develop international co-op opportunities to broaden students’ cultural awareness and understanding of global issues related to their degree and future career.
- Increase the number of new employers participating in co-op.
- Review employer and student marketing strategies.
- Update co-op workshops and handbook.

<i>Number of work terms completed</i>				
	06/07	07/08	08/09	09/10
Forestry	9	9	8	3
Forest Sciences	6	9	7	2
Natural Resources Conservation	22	26	24	20
Wood Products Processing	50	52	34	32
Total	87	96	73	57

UNDER-GRADUATE STUDENTS

CO-OP PROGRAMS



Geoffrey Anderson
BComm
Coordinator, Co-op Education
Forestry Programs
604.827.5196
geoff.anderson@ubc.ca



Barbara Bremner
BA
Coordinator, Co-op Education
Wood Products Processing
Program
604.822.4793
barbara.bremner@ubc.ca

www.forestry.ubc.ca/co-op

UNDER-GRADUATE STUDENTS

STUDENT SERVICES & RECRUITMENT



Candace Parsons
BSF, RPF
Director, Student Services
604.822.3547
candace.parsons@ubc.ca



Tristan Banwell
Advisor, Admissions
604.822.1834
tristan.banwell@ubc.ca



Chiara Longhi
MA
Officer, International
Recruitment
604.822.9187
chiara.longhi@ubc.ca

THE UBC FORESTRY STUDENT Services Team provides support to prospective, new and continuing undergraduate students. Our priorities include attracting strong students to our degree programs, enhancing student life for current undergraduates and raising the profile of the Faculty of Forestry at UBC and beyond.

ACHIEVEMENTS IN 2009 – 10

Student Events

Tradition is alive and well in the Faculty of Forestry. This year, Student Services worked with the Forestry Undergraduate Society to organize and support the following student events:

- “Imagine” – the university-wide orientation session held on the first day of classes
- Forestry Week – our week to showcase our Faculty to the rest of campus
- Trip to Nanaimo, BC for the Canadian Institute of Forestry (CIF) 101st annual conference, including the nationwide Forestry Student Quizbowl competition – two UBC teams competed but despite valiant efforts, were out-competed by the University of Alberta
- Dean’s Welcome Back BBQ, a well-attended annual function
- CIF Chili Cookoff – complete with “just for fun” Quiz Bowl competition
- International Food Extravaganza, a sampling of student-prepared dishes from the world over
- CIF Silver Ring Ceremony, our magnificent graduation celebration held each spring
- Coconut, the legendary year-end event, held again this year at the UBC Farm

Student Services

Student Services staff provide many different types of assistance, including admissions and registration support, orientations and tours, personal and program advising, referrals to other UBC services and more. We pride ourselves on our personalized approach. Last year, we were delighted to welcome back Chiara Longhi from her maternity leave but sad to say good-bye to Tristan Banwell, our Recruiter/Advisor, who left in September 2009 to move to Washington and marry his American sweetheart. In December, the Forestry Graduate Program staff moved into the Student Services office, creating “one-stop shopping” student services for all Forestry students.

Recruitment Activities

Chiara Longhi recruits and advises international, visiting and exchange students, and Tristan Banwell was responsible for recruiting and advising

domestic (and US) students. Tristan’s position was not fully replaced due to budget cuts, although we were pleased to welcome Miriam Isaac-Renton (recent Conservation program graduate) on a part-time contract for a few months in Spring 2010. Barbara Bremner was responsible for recruitment to the WPP program until her resignation in Spring 2010. Her replacement, Linda Dom, will continue to provide both co-op and recruitment activities for this program.

Our Faculty-wide recruitment priority again this year has been to increase international student enrolment and retention, in China and the US in particular. A new recruitment video was developed. We also maintained efforts to raise awareness of our programs among current UBC Arts and Science students.

Outstanding Students

Natalie Swift, a Conservation student, was chosen to receive the Canadian Institute of Forestry Gold Medal, recognizing her as the most outstanding student of this year’s graduating class. Natalie was also instrumental in organizing a student symposium called “Branching Out” in January 2010 focussing on future careers for Forestry students.

Forestry Tri-Mentoring Program

This year was the second delivery of our fledgling Tri-Mentoring Program – triads are comprised of one alumni mentor plus two students (one senior and one junior). This program helps students to develop their skills in career planning and provides links to their future job market. Mentors included entrepreneurs, retirees and industry and government representatives; participation provided the opportunity to inspire future colleagues, to enhance coaching skills, to network with other mentors and to maintain a connection with the UBC community. This year’s program was well received by all participants. Tri-mentoring is popular with students and growing every year. We are always looking for more mentors – to learn more, please contact Geoff Anderson at geoff.anderson@ubc.ca

PLANS FOR 2010 – 11

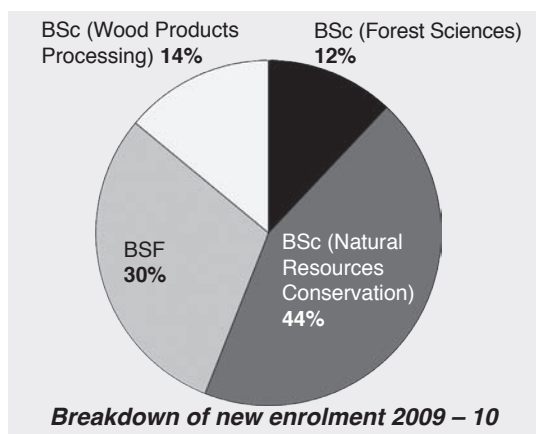
- Take a Forestry Quiz Bowl team to Jasper, AB for the 102nd CIF Conference and AGM, where they will compete against college and university forestry teams from across Canada and bring back the Quiz Bowl trophy to UBC!
- Find ways to streamline student services activities with reduced staffing to minimize negative impacts to recruitment and the student academic experience.
- Continue to enhance the reputation of the Faculty of Forestry and increase awareness of our undergraduate programs, both on campus and beyond.

New Student Enrolment

New student enrolment this year was 207, up by over 25%. Our admission GPA for students entering directly from secondary school remained the same as last year: 78% for the Forest Sciences and Natural Resources Conservation programs and 75% for Wood Products Processing and BSF Forest Resources Management and Forest Operations majors.

New students entering into different program years are tabulated below.

<i>New students 2009 – 10</i>	
Year of study	Number of new students entering
1	173
2	27
3	7
4	0
Total	207

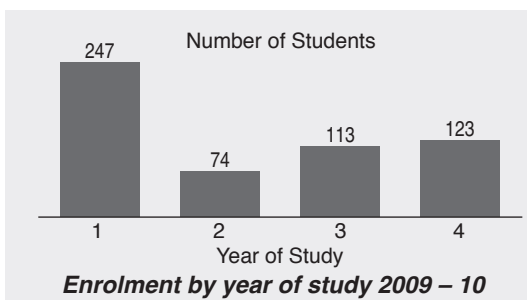
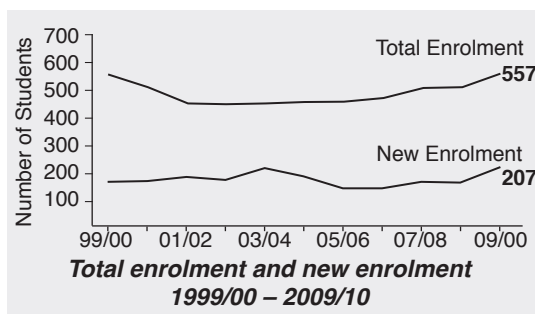


Total Enrolment

Total undergraduate enrolment grew to 557, an increase of 50 students over the previous year. This increase is a consequence of the higher secondary school entrance standards we have adopted in the past few years, which have resulted in higher retention rates (fewer failures) as well as a larger new student intake. We remain an attractive location for undergraduate visiting and exchange students from elsewhere in Canada and the world. This year we hosted 9 visiting and exchange students. In addition to visiting and exchange student enrolment, the number of international students enrolled in our degree programs continues to increase. This year we had 90 international students, up from 66 the previous year. We are second in the university to the Sauder School of Business in terms of the proportion of international students in our undergraduate programs. The primary sources of our

growing number of international students are the United States and China. The Faculty of Forestry has partnership arrangements with Nanjing Forestry University and Fujian Agriculture and Forestry University and memoranda of understanding with several other Chinese universities which have helped us with attracting suitably qualified students.

The following graph shows the distribution of undergraduate students by year of study.



The percentage of female students in our undergraduate programs is 40.5%, down about one percent from the last few years. This percentage varies considerably among our programs, from about 60% for the Natural Resources Conservation program to about 10% for the Wood Products Processing program.

The following table provides a breakdown of students by program.

<i>Enrolment by program 2009 – 10</i>		
	Number enrolled	% of total
Forest Resources Management (BSF)	113	20.3
Forest Operations (BSF)	35	6.3
Forest Sciences (BSc)	56	10.1
Wood Products Processing (BSc)	103	18.5
Natural Resources Conservation (BSc)	250	44.9

UNDER-GRADUATE STUDENTS

AWARDS

First Year Students

Beaudoin Nadeau, Martin	SODERMAN, DEAN
Bruemmer, Matthew	TRUCK ¹
Daly, Murray	WOOD
Fraser, Elijah	CS JOHNSON
Gleasure, Elizabeth	TRUCK ¹
Katamay-Smith, Tanya	WEST
Lenze, Justin	TRUCK ¹
Leung, Debbi	SODERMAN
Warkman, Erin	ALUMNI ²

Second Year Students

Xie, Shenghao	WOOD
Xiong, Huan	WOOD
Baker, Sydney	GOLOUBEUF
Erdle, Lisa	WEST
Fegyverneki, James	WELDWOOD
Field, Samuel	BANKS
Grills, Chantelle	WEYERHAEUSER ¹
Langley, Benjamin	TRUCK ²
Lepine, Maxime	KETCHAM, WEYERHAEUSER ³
Schlenker, Nora	WEST
Wallace, Cory	SODERMAN, DEAN

Third Year Students

Beier, Clayton	GOLOUBEUF
Boulton, Christopher	MAC ¹ , CHISHOLM, DEAN
Bunnell, Corey	DEAN, McINTOSH ² , GARDNER

ABCFP Scholarship in Forestry¹,
Graduating Prize in Forestry², UBC-O
Award³

UBC Forestry **ALUMNI** Division
Scholarship¹ and Entrance Scholarship²

BACKMAN Scholarship in Forest
Resources Management

Charles and Jane **BANKS** Scholarship

Emily and Francis **BINKLEY** Scholarship

CARIBOO Woodlot Education Society
Scholarship in Forestry

Hugh RD **CHISHOLM** Scholarship in
Forestry

Canadian Institute of Forestry (**CIF**) Medal

Robert J **CRAIG** Memorial Scholarship

August and Cristina **CRUCIL** Scholarship
in Forestry

Charlie and Sue **JOHNSON** Forestry
Entrance Scholarship

DEAN of Forestry Scholarship

Elizabeth **BACKMAN** Scholarship in
Natural Resources Conservation

Galt **ELKINGTON** Memorial Scholarship

Barry **ENGLISH** Memorial Prize

Joseph and Joyce **GARDNER** Scholarship
in Forestry

David, Christian	TRUCK ²
Fraser, Stephen	SPLAN
James, Samantha	LITTLE, DEAN
Kofoed, Michael	MAC ¹
Lawrence, Michael	MAC ¹ , SODERMAN, DEAN, McINTOSH ¹
Lee, Charles	DEAN, LUMBER
Limantono, Arnold	SODERMAN, WOOD
Mellstrom, Charlotte	DEAN, CARIBOO
Ng, Tracy	GOLOUBEUF
Nie, Xin	BANKS
Pu, Ting	WEYERHAEUSER ¹
Strimbu, Vlad	SPLAN
Tan, Rynhevee	STEINER, WOOD
Ukpabi, Houston	MACHINERY, LUMBER, MAC ¹
Wildeman, Jesse	WELDWOOD
Yang, YuanYan	SODERMAN, WOOD

Fourth Year Students

Barra, Michael	WELLWOOD
Bemmels, Jordan	SIDDOO ¹
Bichel, Patricia	RE MILLS
Borslein, Daniel	WOOD
Buschhaus, Catherine	SPLAN, BINKLEY
Cheng, Kenneth	WOOD
Chow, Amanda	BANKS
Czapiewski, Christopher	SODERMAN
Dolejsi, Douglas	ENGLISH
Doyon, Erika	BACKMAN
Goldsmith, Fraser Perry, Burgess	WOOD
Guy, Brendan	BANKS, CRAIG, DEAN

Peter Andrew **GOLOUBEUF** Scholarship in
Forestry

Harry **HOBSON** Memorial Prize

Ted **JOHNSON** Scholarship in Forestry

Janet **KETCHAM** Scholarship

Tony **KOZAK** Scholarship in Forest
Measurement

National Education Initiative Gerhard
KRESS Memorial Scholarship

Charles **LARRE** Memorial Graduating Prize

David Bell **LITTLE** Memorial Scholarship

MACHINERY and Supply Companies
Group Forestry Scholarship

HR **MACMILLAN** Prizes in Forestry¹, Forest
Harvesting², Scholarship in Forestry³

Jim and Gerry **McINTOSH** Award in
Forestry¹ and Scholarship in Forestry²

James Russell **MILLS** Memorial Award

NATIONAL Scholarship

NORTHWOOD Pulp and Timber Limited
Scholarship

Robert E **MILLS** Memorial Award

KJ **ROLLER** Sopron Scholarship in
Forestry

Kapoor Singh **SIDDOO** Scholarships in
Forestry¹ and Forest Ecology²

Harrison, Sophia	BANKS, DEAN
Hooper, Robyn	SIDDOO ²
Hu, Miao	WOOD
Jablkowski, Patrick	SOPRON
Laurysen, Michael	BANKS, WOOD
Lu, Cynthia	CRUCIL
Molander, Mariko	BANKS, BACKMAN, SISCO
Ng, Jeffrey	WOOD
Piwek, Jeffrey	DEAN
Ponnambalam, Kumary	TIMBERLINE, SPLAN
Prilesky, Vojtech	SPLAN
Schonnop, Marcus	SPLAN
Senda, Teio	NORTHWOOD
Sills, Nicholas	CRUCIL, WOOD
Smith, Jason	SMITH
Spence, Andrew	WEST
Swift, Natalie	BANKS, ALUMNI ¹ , DEAN
Thy, Emilie	PACIFIC, WELDWOOD, KOZAK
Toews, Mary	ELKINGTON, JOHNSON, DEAN
Utama, Stefanus	WOOD
Young, Emily	BANKS, MILLS

Graduating Awards (Spring 2009)

Braun, Sarah	CIF
Martin, Amanda	ABCFP ² , MAC ¹
Bakker, Nicola	MAC ²
Pashkowski, Tove	HOBSON, FORED
Pershin, Andrew	ABCFP ² , LARRE

Dave White **SISCO** Memorial Award in
Forestry

J Harry G **SMITH** Award in Forest
Resources Management

Oscar **SODERMAN** Memorial Scholarship

SOPRON Alumni Scholarship

William John **SPLAN** Scholarship in
Forestry

Paul Robert **STEINER** Memorial
Scholarship in Wood Science

TIMBERLINE Scholarship

TRUCK Loggers Association Scholarship¹
and Scholarship in Harvesting²

WELDWOOD of Canada Ltd Scholarship
in Forestry

Mary and Robert **WELLWOOD** Memorial
Scholarship in Wood Science and
Industry

WEST Fraser Timber Co Ltd Scholarship
in Forestry

WEYERHAEUSER Scholarship in
Forestry¹, Award in Forestry² and
Aboriginal Award in Forestry³

Weldwood of Canada Limited H Richard
WHITTALL Scholarship

University of BC **WOOD** Products
Processing Awards

Bursaries

The following bursaries have been made available specifically for students enrolled in the Faculty of Forestry. Due to the confidential nature of bursary applications, recipients cannot be identified.

Herschel H BOYDSTON, Jr Memorial
Bursary in Forestry
Gerry and Jack BURCH Bursary
Tommy BURGESS Memorial Forestry
Bursary
Ian T CAMERON Memorial Bursary
CANFOR Corporation Bursary
COASTAL Silviculture Committee Bursary
Doris M DOWLING Memorial Bursary
EUROCAN Pulp & Paper Co Bursary

J D HETHERINGTON Memorial Bursary
British Columbia KILN Association Bursary
in Forestry
Jeanette LINDSAY Memorial Bursary
NORRIS-MEBIUS Bursary
P L NORTHCOTT Memorial Bursary
Tudor OMMANEY Memorial Bursary in
Forestry
Henri J PIGEON Bursary in Wood Science
and Industry

Oscar SODERMAN Memorial Bursary
Oscar SZIKLAI Memorial Bursary in
Forestry
EG & WD TOUZEAU Bursary
VINTEN Fund Forestry Bursary
John WORRALL Alumni Bursary in
Forestry

UNDER-
GRADUATE
STUDENTS

Degrees Conferred, May 2009 and November 2009 Congregations

BSc (Natural Resources Conservation, Global Perspectives Major)

Alidina, Alyssa
Banwell, Tristan
Desilles-Rubino, Melyssa
Hansen, Emily
Jaung, Wang Gi
Okamoto, Tami
Shaffer, Eva
Stafl, Natalie
Taguchi, Megumi
Yang, Fan

BSc (Natural Resources Conservation, Science and Management Major)

Anderson, Meghan
Van Breemen, Elke
Buchwald, Jason
Chan, Kwok Hei
Cheng, Amy Oi Wah
Cho, Jonathan
Cristiani, John
Elkington, James
Foster, Tiffany
Freeman, Olivia
Henderson, Evan
Kobitzsch, Caitlin
Kosztirko, Peter
Lai, Kevin
Mallon, Christopher
Martin, Amanda
Niddery, Kim
Nielsen, Lindsay
O'Neill, Eoin
Pearson, Jessica
Ramey, Stella
Scuffi, Lacy
Tha, Andrea
Wagner, Shannon
Whitney, Charlotte
Wong, Kelvin

BSF (Forest Operations)

Bakker, Nicola
Cho, Sang Han Sam
Hansen, Kyle
Lee, Michael
Pledger, Sean
Wickman, Christopher

BSF (Forest Resources Management)

Allingham, Reece John
Beaumont, Kristen Lee
Beck, Alistair Stuart
Bergeson, Tara Leigh
Caissy, Mathieu
Chandra, Timothy Shi Qiang
Donovan, Matthew Evan Sean
Farrer, Nicola Dawn
Fietz, Wesley Warren
Galligos, Craig Gerry
Helleouet, Patrick Jean-Michel
Iverson, Chad Lawrence
Kwok, Kevin Chi Sum
Laing, Chris Jacob
MacEachern, Neil Alexander
Morben, Melinda Jade
Pashkowski, Tove Marie
Reinhardt, George Nicholas
Richmond, Gregory Neil Hugh
Sawden, Andrew Jacob
Shepherd, Conal
Smith, Richard Joseph
Wakelin, Heather Monica
Williams, Matthew Scott Killam

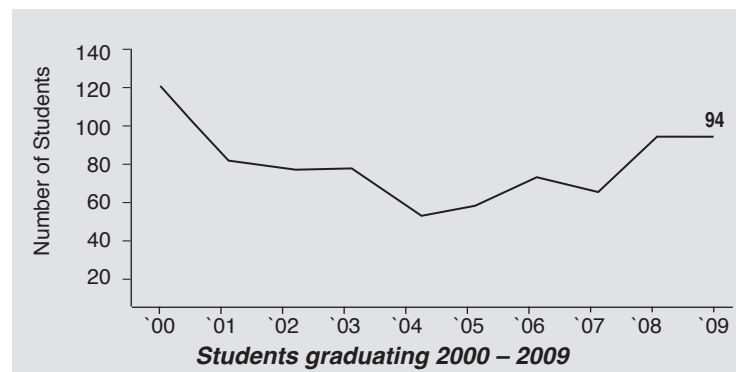
BSc (Forest Sciences)

Braun, Sarah
Hryniewicz-Moczulski, Magdalena
Law, Siew
Minagawa, Haruna
Mohan, Ashish
Nixon, John
Saraiva, Maria

BSc (Wood Products Processing)

Alvarez Orellana, Monica
Carter, Bradley
Compston, Sean
Dhadwal, Daksh
Dube, Tina
Edwards, Vanessa
Emaminia, Ghazal
Fairclough, Duncan
Gendi, Raymond Hewitt, Richard
Hoang, David
Huang, Yi
Liem, Martin
Mihalcheon, Christopher
Nordman, Brock
Pearson, Alexander
Pershin, Andrew
Poon, Chi-Yuen Winston
Scott, William
Watai, Kengo
Widiyanto, Dwi

GRADUATION STATISTICS



GRADUATE STUDENTS

ENROLMENT STATISTICS



Cindy E Prescott

BSc (Hons), MSc, PhD
Associate Dean
Graduate Studies & Research
604.822.4701
cindy.prescott@ubc.ca

Gayle Kosh

Dip T
Manager, Graduate Programs
604.827.4454
gayle.kosh@ubc.ca

Dan Naidu

Coordinator, Graduate Awards
and Scholarships
604.822.6177
dan.naidu@ubc.ca

Erika Helmersen

Assistant, Graduate Programs
604.822.6784
erika.helmerson@ubc.ca

[www.forestry.ubc.ca/
programs/grad](http://www.forestry.ubc.ca/programs/grad)

THE FACULTY OF FORESTRY offers four graduate degrees:

- Doctor of Philosophy – PhD (in Forestry)
- Master of Science – MSc (in Forestry)
- Master of Applied Science – MASc (in Forestry)
- Master of Forestry – MF

Distribution of students by degree program 2009 – 00*

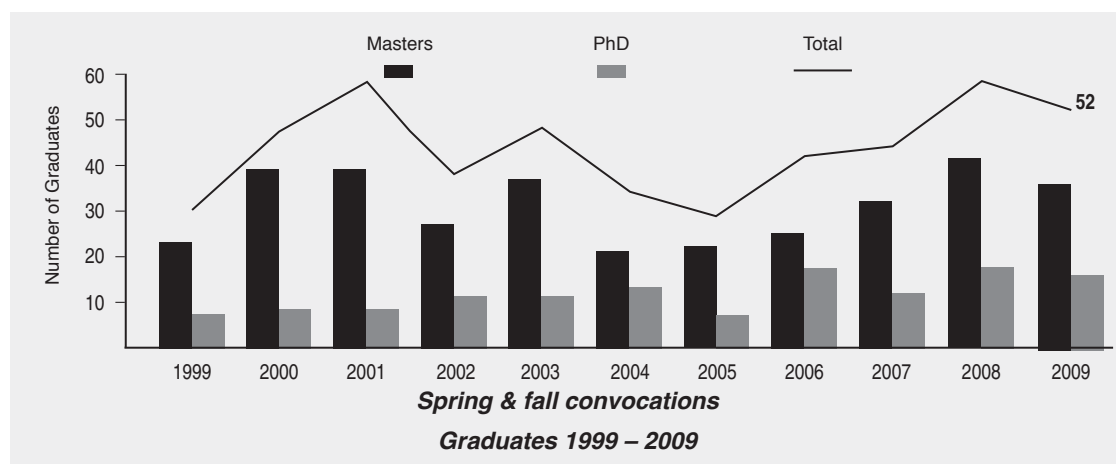
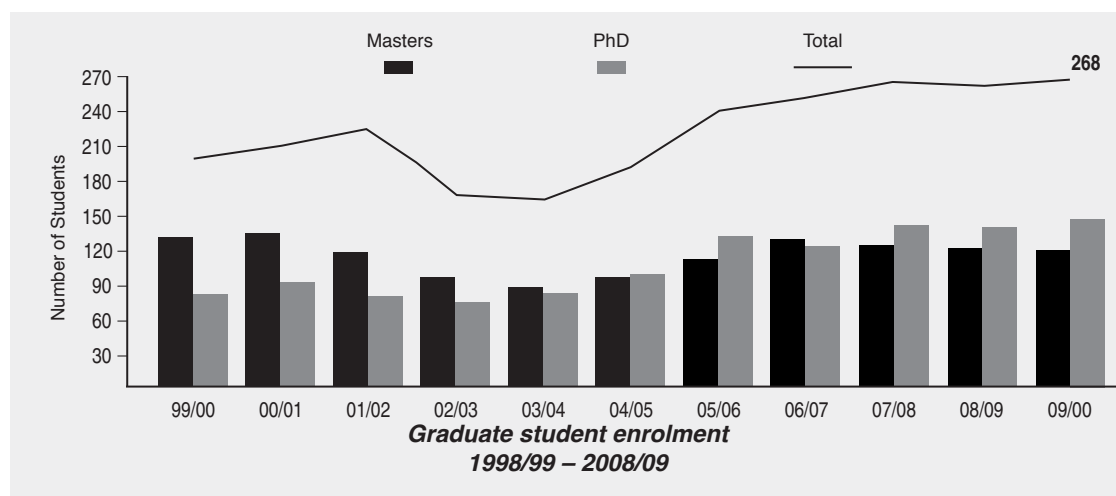
	Male	Female	Total
PhD	94	54	148
MSc	42	44	86
MASc	5	1	6
MF	12	16	28
Total	153	115	268

*As of October, 2009.

Enrolment and Graduation Trends

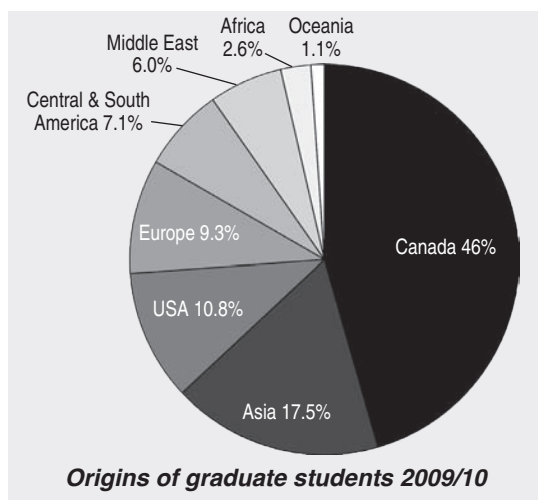
Enrolment in the Forestry Graduate Program reached an all-time high during the past year with 268 graduate students. More than half (55%) of our graduate students are enrolled in PhD programs. Women comprise 50.8% of our master's and 36% of our doctoral students. We welcomed 26 new PhD students and 41 new master's students to the Faculty of Forestry in 09/10.

The average graduate student complement of supervising faculty members is 5. Fifty-two students successfully completed their graduate programs last year, 36 with master's degrees and 16 with PhD degrees. Average time-in-program of students finishing their programs in 09/10 was 2.6 years for master's and 5.6 years for doctoral students.



The Forestry Graduate Program – An International Community

The Faculty of Forestry continues to attract excellent graduate students from around the world. Fifty-four percent of our graduate students are from countries other than Canada, and we have students from 42 different countries, making Forestry one of the most culturally diverse graduate programs on campus. We continue to link incoming international students with a current student from the same country or region, to ease their transition to UBC and Vancouver. In 09/10, 16 current students served as “buddies” for incoming students from China, India, Iran, Japan, Malaysia, Spain and Taiwan. The FGSA again hosted the monthly Global Tea House talk series; this year students from Brazil, Czech Republic, Ecuador, Pakistan, Spain and the United States presented talks to students and faculty members about the forests and culture in their native countries.



ACTIVITIES AND ACHIEVEMENTS IN 2009 – 10

Andres Varhola (PhD, Coops) received the Graduate Teaching Assistant Award. Ciprian Lazarescu (PhD, Avramidis) received the Best PhD Thesis Award and Kyle Bateson (MSc, Trosper) received the Best Master's Thesis Award. MSc student Jenn Burt spearheaded implementation of teaching evaluations for graduate student teaching assistants.

The Forestry Graduate Student Association (FGSA) was very active again this year in helping us to provide a sense of community for our graduate students. The FGSA organized a welcome-back get-together BBQ, wine and cheese evening, and musical 'coffee house' events. Special monthly socials this year included a 'Forestry Olympics' theme, a bowling night, and a Blues Music night. The FGSA also supported graduate student involvement in inter-mural sports across campus. The FGSA executive and representatives were Andrew Innerd, Mike

Buffo, Helené Marcoux, Lily Khadempour, Trevor Jones, Victor Nery, Ana Elia Hidalgo Ramon, Felipe Hirata, Jean-Simon Michaud, David Jack, and Suzi Malan.

David Jack and Lily Khadempour organized lab tours for the public as part of this year's Celebrate Research event, which included visits to the Centre for Advanced Wood Processing, Centre for Forest Conservation Genetics, Belowground Ecosystem Group, Pathology Lab, Integrated Remote Sensing Studio, and Forest Biotechnology. Thirty-two students presented their research at the Faculty's Research Poster Evening and awards for outstanding posters were presented to Ana Elia Hidalgo Ramon, Joshua Switzer and Jill Hamilton.

Forestry graduate students were once again active participants in the Let's Talk Science program. Leah Rathbun, Carmen Hsieh, Jenn Burt, Kent Chen and Carolina Chanis gave presentations to more than 1000 elementary and high-school students in Vancouver and Williams Lake.

Dr Phil Evans continued a 12-workshop series on advanced scientific writing for graduate students and postdoctoral fellows. Our graduate students also continue to benefit from graduate skills-training courses in oral presentation and technical writing offered by Dr Susan Watts. Faculty of Forestry Research Seminars were presented by faculty members Howard Harshaw, Sarah Gergel, Tom Sullivan and Shawn Mansfield. In 09/10 we also offered a Career Choices for Graduate Students seminar, at which a panel of faculty members who have also worked in government, NGOs or private industry (Nicholas Coops, Yousry El-Kassaby, John Innes, Suzanne Simard, Kathy Martin, Steve Mitchell, Hosny El-Lakany, and Paul McFarlane) discussed their experiences and the relative merits of these career options.

Dr John Innes introduced a new graduate course on Tropical Forests in 09/10. Drs Scott Hinch and Sally Aitken presented a workshop on "What is Graduate Studies" to make Forestry undergraduate students aware of the possibilities offered by this opportunity.

To facilitate future graduate program reviews we have tracked down all of our former graduate students back to the graduating class of 2003, and will be able to report their activities and accomplishments both in program reviews and as features in future publications. We have also compiled the publications of present and former graduate students to facilitate reporting.

PLANS FOR 2010 – 11

- Continue development of planning of new course-based master's degree programs.
- Enhance our presence on the web by incorporating multi-media profiles of grad students into the Faculty website.

GRADUATE STUDENTS

ACHIEVEMENTS AND PLANS

GRADUATE STUDENTS

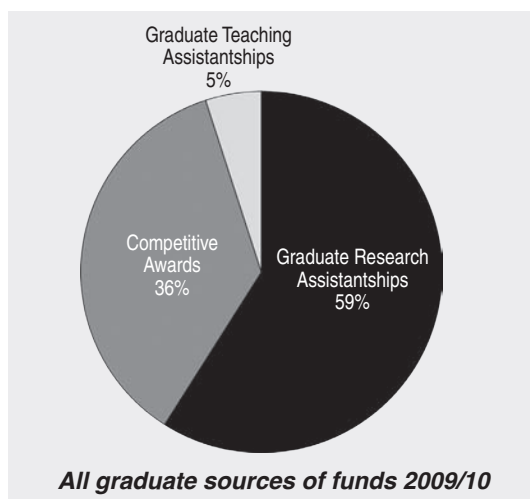
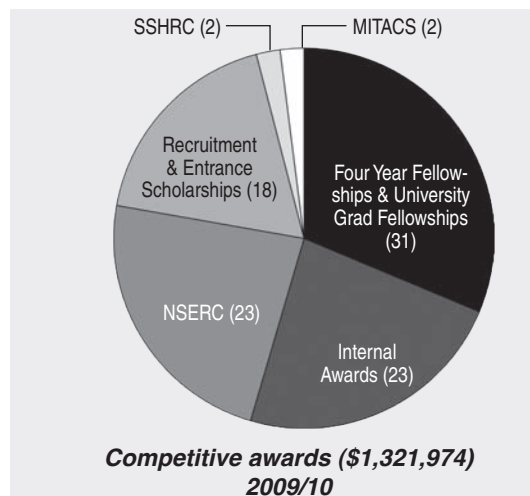
SCHOLARSHIPS AND FELLOWSHIPS

Graduate Student Funding 2009 – 10

Adequate funding of our graduate students is a priority in the Faculty of Forestry. More than \$3.6 million was invested in graduate student stipends in 09/10. The average annual stipend for doctoral students (during the first four years of their program) was just over \$19,000; for research-based master's students (during the first two years of their program) it was just over \$15,000. Graduate research assistantships (\$2,125,326) are the primary source of student stipends, especially for master's students, while graduate teaching assistantships contribute about 5% of our student funding (\$184,079). Competitive awards (not including tuition awards) contribute about half of doctoral student stipends and one quarter of master's student stipends (\$1,321,974).

Twenty-five Forestry graduate students received Tri-Council (NSERC and SSHRC) scholarships. Tri-council scholarships accounted for almost 40% of the \$1.3 million received by our graduate students in competitive awards in 09/10. This was a transitional year for university graduate awards, during which University Graduate Fellowships were replaced by the Four Year Doctoral Fellowships (FYF). The Faculty of Forestry allocation of five FYFs were awarded to incoming doctoral students Stephen Drenner, David Levy-Booth, Trisha Atwood, Shalima Devi, and Keith Gourlay. Faculty of Forestry Strategic Recruitment Fellowships (SRF) were awarded to an additional 17 incoming MSc and PhD students. The SRF program is funded through the Graduate Student Initiative program at UBC. A total of 31 Forestry graduate students received University Awards (FYF, SRF or UGF), \$457,390, which accounted for 35% of the total received in competitive awards.

Endowed, merit-based, Faculty of Forestry awards continue to be a vital resource for our graduate students; in 09/10 23 students received part of their stipend from these internal awards, despite the downturn in endowment values. Louise Blight holds the Graduate Fellowship in Sustainable Forestry, sponsored by the Koerner Foundation.



GRADUATE STUDENTS

SCHOLARSHIPS AND FELLOWSHIPS

Doctoral Students

Abdollahzadeh, Negar	HANSON
Albouyeh, Rokneddin	VANDUSEN
Atwood, Trisha	FYF
Assadi, Pooria	SRF
Beaudoin, Jean-Mitchel	SSHRC
Beiler, Kevin	BUCKLAND, MCPHEE
Bennett, Joseph	FYF
Bingham, Marcus	GRAHAM, MCPHEE
Blight, Louise	KOERNER
Branton, Margaret	HOFFMEISTER
Brooks, Dallin	SRF
Brooks, Denise	FYF
Bull, Justin	SRF
Campbell, Jocelyn	COCHRAN, MCPHEE
Chamberlain, Brent	NSERC, MSFSS
Chen, Baozhang	NSERC
Churchland, Carolyn	NSERC, FYF, SRF
Cockle, Kristina	NAMKOONG, MCPHEE
Coggins, Samuel	FYF
Curtis-McLane, Sierra	FYF
De La Torre Cuba, Amanda	FYF
Del Rio, Luis	FYF
Devi, Shalima	FYF
DeWaard, Jeremy	NSERC, FYF
Donaldson, Michael	SRF, NSERC
Drenner, Matthew	FYF
Ebadian, Mamood	FYF
Eddington, Margaret	SRF
Farnden, Craig	FMIBC, MCPHEE
Ferster, Colin	UGF
Funda, Tomas	FYF
Gonzalez, Julian	UGF
Gourlay, Keith	FYF
Guichon, Shannon	UGF, IMAJO
Hajjar, Reem	SSHRC
Hamilton, Jill	SRF, NSERC
Hember, Robbie	NSERC
Jinguang, Hu	CSC
Huang, Yu	SRF
Jack, David	SMITH
Jeffries, Kenneth	FYF
Jones, Trevor	FYF
Kalcsits, Lee	SRF
Lazarescu, Ciprian	BEST PHD THESIS
Levy-Booth, David	FYF
Li, Yu	FYF
Lim, Hyung-Suk (Thomas)	MITACS
Massoumi-Alamouti, Sepideh	NSERC, FYF
Mcguigan, Erin	FYF
Mobini Dehkordi, Mohammad Mahd	FYF

Naujokaitis-Lewis, Ilona	NSERC
Norris, Andrea	FYF
Oaten, Dustin	NSERC
Paudel, Shyam	NSERC
Pittl, Elisabeth	AAICER
Rathbun, Leah	CANFOR, MCPHEE
Read, Wolf	VANDUSEN
Ristea, Catalin	PICS
Shabani, Nazanin	GES
Toktam, Sajedi	WEBER, MCPHEE
Singh, Monika	MCPHEE
Stephen, James	NSERC
Stephens, Jeffrey	VANDUSEN
Tooke, Rory	NSERC
Trenholm, Ryan	HELLER
Twieg, Brendan	SRF
Unda, Faride	NSERC, FYF
Vahid, Saba	FYF
Varhola, Andres	UGF, BEST TA
Waeber, Patrick	FYF
Wahl, Antje	FYF
Xi, Li	CSC
Xu, Lianzhen	CSC

Master's Students

Bateson, Kyle	BEST MASTER'S THESIS
Bird, Laura	AFFLECK, MCPHEE
Buffo, Mike	VANDUSEN, MCPHEE
Burt, Jennifer	NSERC
Clark, Allyson	LUMBER
Edworthy, Amanda	NSERC
Fundova, Irena	ALLEN, MCPHEE
Gale, Marika	NSERC
Gillanders, Steve	MITACS
Haase, Jonathan	SRF, RIX
Jackson, Cheyney	SRF
Klemmer, Amanda	SRF
Little, Patrick	SRF, PICS
Lobo, Nina	VANDUSEN, MCPHEE
MacDonald, Elizabeth	NSERC
Marcoux, Helene	NSERC
Nery, Victor	NSERC IPS, IMAJO
Noel, Natalie	SRF, NSERC
Philpott, Timothy	SRF, NSERC
Pribowo, Amadeus	WELWOOD, VANDUSEN, MCPHEE
Ramon Hidalgo, Ana Elia	1st PRIZE, CELEBRATE RESEARCH POSTER EVENT, LA CAIXA
Sam-Brew, Solace	VANDUSEN, MCPHEE
Sheldon, Kim	NSERC
Tomaselli, Maria	SRF
Vollmer, Stephen	RIX
Yoshida, Tomoko	MCPHEE

GRADUATE STUDENTS

SCHOLARSHIPS AND FELLOWSHIPS

ACCELERATE BC Graduate Research Internship Program

AFFLECK Peter N. Affleck Memorial Graduate Scholarship in Forest Policy

Austrian Agency for International Cooperation in Education and Research

George S. **ALLEN** Memorial Scholarship

Edward W. **BASSETT** Memorial Scholarship in Reforestation

BCIC Innovation Scholars Scholarship

Don **BUCKLAND** Memorial Scholarship in Forest Pathology

CANFOR Corporation Fellowship in Forest Ecosystem Management

China Scholarship Council

Hugh Robert Duncan **CHISHOLM** Scholarship in Forestry

Ralph and Elizabeth **COCHRAN** Scholarship

COMMONWEALTH Scholarship

Deutscher Akademischer Austausch Dienst.

Forest Management Institute of British Columbia

Forest Science Program Graduate Student Pilot Project

Four Year Fellowship

Graduate Entrance Scholarship

Graduate Fellowship in Sustainable Forestry

GO GLOBAL international learning programs award

Braham G. **GRIFFITH** Memorial Scholarship in Forest Resources Management

Graduate Teaching Assistant Award

Kenneth **GRAHAM** Memorial Scholarship

Brenda **HANSON** Memorial Scholarship in Forestry

Paul **HELLER** Fellowship

Bert **HOFFMEISTER** Scholarship in Forest Wildlife

US-IALE Student Travel Award

International Doctoral Research Centre Awards

IMAJO Cedar Management Fund

Asa **JOHAL** Graduate Fellowship in Forestry

KOERNER Foundation

LA CAIXA Canada Scholarships

LINDBERGH Foundation Grant

LUMBER Inspector's Benevolent Society Scholarship

MADSEN Harold Madsen Prize

Donald S. **MCPHEE** Fellowships

Michael **Smith** Foreign Study Supplement

NAMKOONG Family Fellowship in Forest Sciences

NASA-MSU Professional Enhancement Award

Natural Sciences and Engineering Research Council of Canada

NSERC Graduate Scholarships

NSERC Post Graduate Scholarships

NSERC Industrial Postgraduate Scholarships

NSERC Top Up Supplements

Organization of American States Scholarships

Society of ORNITHOLOGISTS Award for Best Oral Presentation

PACIFIC FOREST Centre Graduate Student Award

PACIFIC LEADERS Graduate Student Fellowships

RIX Family Leading Edge Student Awards

J. Harry G. **SMITH** Scholarship in Forest Resources Management

SOPRON Alumni Fellowship

Strategic Recruitment Fellowship

Social Science and Humanities Research Council of Canada

TIMBERWEST Forest Limited Fellowship in Forest Resources Management and Planning

TIMBERWEST Forest Limited Fellowship in Forest Sciences

University of BC Graduate Fellowships

University of BC Graduate Fellowships – Theodore E. **ARNOLD** Fellowships

University of BC Graduate Fellowships – **JOSEPHINE T. BERTHIER** Fellowships

University of BC Graduate Fellowships – **KILLAM** Predoctoral Scholarships

University of BC Graduate Fellowships – **PACIFIC CENTURY** Graduate Scholarships

University of BC Graduate Fellowships – Cordula and Gunter **PAETZOLD** Fellowships

University of BC Graduate Fellowships – **SIMONS** Foundation Doctoral Scholarships

University of BC Graduate Fellowships – **ST. JOHN'S COLLEGE** Fellowships

VANDUSEN Graduate Fellowships in Forestry
James **WATSON** Award

Adrian **WEBER** Memorial Scholarship in Forest Ecology

WELDWOOD of Canada Limited Scholarship in Forestry

WELDWOOD of Canada Ltd. H. Richard **WHITTALL** Scholarship

Degrees Conferred, May 2009 and November 2009 Congregations

MASc

ASSADI, Pooria

Dr T Sowlati

Evaluation of information technology investments in the wood industry.

MSc

AMES, Caroline

Dr P Arcese

Extra-pair mate choice in the song sparrow (*Melospiza melodia*).

BAHUGUNA, Devesh

Dr S Mitchell

Postharvest windthrow and recruitment of large woody debris in riparian buffers.

BAINS, Babita

Dr J McLean

Galling adelgids: Gall formation, developmental anatomy, characterization, and the genetic susceptibility of spruce.

BARNES, Justin

Dr R Trosper

Land use preferences of the Adams Lake Indian Band: Employing the q sorting technique in natural resource management.

BATESON, Kyle

Dr R Trosper

Contemporary and traditional values of a landless Cree first nation in northern Ontario.

BAUMBER, Stephen

Dr P Wood

Exploring discretion and ethical agency of BC Professional Foresters: the space between ought and can.

BRAVI, Rebecca

Drs C Chanway and R Hamelin

An ectomycorrhizal symbiosis? A morphological and molecular characterization of *Tricholoma magnivelare* in *Pinus contorta* roots from the West Chilcotin Plateau of British Columbia, Canada.

DEWI, Meiliana

Dr S Grayston

Soil microbial community responses to green-tree retention harvesting in coastal British Columbia.

DING, Chen (Klaus)

Drs M Meitner and Y El-Kassaby

Evaluating interior spruce genetic resource management practices through GIS-based tracking of seed deployment over time in British Columbia.

EBERLE, Rowan

Dr R Kozak

Are secondary wood products environmentally friendly? A study of public perceptions.

FERSTER, Colin

Dr N Coops

Using inventory based field attributes to characterize carbon stocks and carbon stock changes within eddy-flux covariance tower footprints.

GILLANDERS, Steve

Dr N Coops

Multi-temporal remote sensing of landscape pattern dynamics resulting from mountain pine beetle infestation and timber harvest.

GOUGH, Angeline

Dr J Innes

Characterizing sustainable forest management at the local-level in British Columbia, Canada.

LAI, Ben

Dr Y El-Kassaby

Pollination dynamic in an advanced generation Douglas-fir seed orchard.

LARSON, Lisa

Dr J Richardson

Coeur d'Alene salamander abundance, distribution, and habitat use in Mount Revelstoke National Park of Canada.

MASSAH, Nasim

Dr Y El-Kassaby

Genealogical relationship among members of selection and production population of yellow-cedar (*Callitropsis nootkatensis*) in the absence of parental information.

MATHES, Todd (Martin)

Dr S Hinch

Effect of water temperature, timing, physiological condition and lake thermal refugia on success of migrating adult sockeye salmon.

MORGAN, Jessica Lindsay

Dr S Gergel

Analysis of historic aerial photographs for ecological management using object-based approaches.

GRADUATE
STUDENTS

DEGREES
GRANTED

GRADUATE STUDENTS

DEGREES GRANTED

MORTYN, Joel

Dr T Maness

Economic analysis of recovering solid wood products from western hemlock pulp logs.

MURAKAMI, Aya

Dr J Richardson

The relationships between headwater stream macroinvertebrate communities and summer low-flow events in a temperate rainforest.

OTSU, Kaori

Drs G Bull and J Nelson

Trade-off analysis of accuracy and spatial resolution in strategic forest planning models.

RATU, Ricky

Dr P Evans

Development of a weatherometer to accelerate the surface checking of wood.

RAYIRATH, Prasad

Dr S Avramidis

Some aspects of western hemlock air permeability.

ROSCOE, David

Dr S Hinch

Hydro-system related mortality and in-lake behaviour of migrating adult sockeye salmon in the Seton-Anderson watershed, British Columbia.

SATTLER, Derek

Dr V LeMay

A hybrid model to estimate natural recruitment and growth in stands following mountain pine beetle disturbance.

SCHULZ, Rueben

Dr P Marshall

Predicting time-since-fire from forest inventory data in Saskatchewan, Canada.

TOMLINSON, Matthew

Dr S Gergel

Long-term changes in river-floodplain dynamics: Implications for salmonid habitat in the interior columbia basin, USA.

TOOKE, Rory

Dr N Coops

Remote sensing applications for vegetation management in urban environments.

ZHANG, Chao (Tom)

Dr G Smith

Measurement and modeling of the in-plane permeability of oriented strand-based wood composites.

YUAN, Jinhong

Dr CK Lyons

Title depreciation of capital expenditures in forestry.

MF

HADIZADEH, Azadeh

Dr C Prescott (essay)

Place prioritization for biodiversity conservation in the chilliwack forest district.

KWOK, Joanne

Dr R Trosper

Local perception of deforestation in Mexico.

SHEN, Yin

Dr R Trosper (essay)

Review of co-management in natural resource management using two case studies: Clayoquot Sound and Gwaii Haanas.

SLAYMAKER, Heidi

Drs H Harshaw and M Meitner (essay)

To guard or garden: the wilderness management question.

SMITH, Alison

Drs B Larson and C Prescott (essay)

Natural disturbance based management of boreal shield forests in Ontario and Quebec.

PhD

AMOROSO, Mariano

Dr B Larson

Stand development patterns as a consequence of the decline in *Austrocedrus chilensis* forests.

CHEN, Chin-Lin (Charles)

Dr K Ritland

Lineage specific inferences about QTL evolution among three mimulus species of contrasting relationship and inbreeding.

DIMITRIU, Pedro

Dr S Grayston

Functional and compositional responses of microorganisms to reclamation of surface-mined boreal forest soils.

DORDEL, Julia

Drs S Simard and C Prescott

Effects of nurse tree species on growth environment and physiology of underplanted *Toona ciliata* Roem in subtropical Argentinean plantations.

HOLLIDAY, Jason

Dr S Aitken

Genomics of adaptation to local climate in sitka spruce (*Picea sitchensis*).

LAZARESCU, Ciprian*Dr S Avramidis*

Modeling wood shrinkage response to tensile stresses in convective drying.

LI, Minghao*Dr F Lam*

Seismic performance of post-and-beam wood buildings.

LO, Yueh-Hsin*Dr JP Kimmins*

Relationships between climate and annual growth in three coniferous species in interior British Columbia, Canada.

ROBICHAUD, Francois*Dr R Kozak*

The role of communications in emerging markets for wood products.

ROBINSON, Andrew (Rob)*Dr S Mansfield*

Metabolomic analyses of wood attributes in tree species.

SCHERER, Robert*Dr R Moore*

The effects of wildfire disturbance and streamside clearcut harvesting on instream wood and small stream geomorphology in south-central British Columbia.

SCHWAB, Olaf*Drs G Bull and T Maness*

The economics of natural disturbances: an agent-based forest sector modeling approach.

SONG, Xiaobin*Dr F Lam*

Stability and reliability analysis of metal plate connected wood truss assemblies.

STRIMBU, Bogdan*Dr J Innes*

An analytical platform for cumulative impact assessment in northeastern British Columbia.

WANG, Guangyu (Jason)*Dr J Innes*

Sustainable forest management in the context of integrated watershed management in southern China.

ZHAO, Yihai (Simon)*Dr M Krzic*

Relative bulk density as an index of soil compaction and forest productivity in British Columbia.

INTERNATIONAL FORESTRY

THE FACULTY OF FORESTRY at UBC is characterized by its large number of international undergraduate and graduate students and a range of significant international research and teaching activities. We are committed to further internationalization and better communicating our ongoing successes within UBC, our community and globally. The challenges faced by forests around the globe affect people locally and the issues facing local forests have global impacts. Our future graduates need to understand their role in the context of global forests and environmental issues. We wish to broaden global awareness of both faculty and students through cross-border experiences and exchange of knowledge through international partnerships and collaboration.



Hosny El-Lakany
BSc, MSc, PhD, DSc
Director
International Forestry
604.822.6921
hosny.ellakany@ubc.ca



Jorma Neuvonen
MBA, MSc
Director, Special Projects
604.822.2807
jorma.neuvonen@ubc.ca

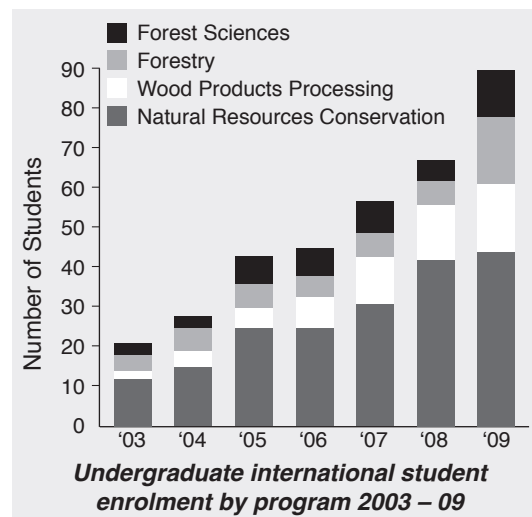
UBC Forestry considers China as one of its focus areas internationally and intends to build on the good relationships developed over the years. We hired Dr Guangyu Wang as Director of Asian Strategies. Dr Wang has been instrumental in strengthening ties with the Chinese forestry sector and forestry universities and research institutions. Prior to moving to Canada, Guangyu was President and CEO of the Fujian Forestry Investment and Development Co. (one of China's top ten forestry companies), Deputy Director of the World Bank Forest Project and Director of International Forestry Programs in Fujian, China.

International Students and Student Exchange

UBC's Faculty of Forestry is one of the most culturally-diverse faculties at UBC. Both our undergraduate and graduate programs attract students from around the world and our international student numbers are growing steadily.

Currently international students comprise 16% of the undergraduate student body (representing 19 countries) and 54% of all graduate students (representing 42 countries). We continue our efforts to make international students more aware of our Faculty's offerings through participation in international recruitment activities.

The Faculty continues to develop strong ties with Chinese forestry universities through transfer programs in which Chinese students study for two years at home before transferring to UBC Forestry for two years. These students graduate with UBC forestry degrees. This transfer program is currently in place with two universities in China. In 2009, Nanjing sent 4 students to UBC and Nanjing Overseas College registered 19 first year students in their UBC stream. These students hope to be admitted to UBC Forestry undergraduate programs in 2011. Our faculty members are involved in teaching these students during their first two years in China through short teaching modules delivered in Nanjing and through video conference



lectures from UBC. Nanjing has also implemented curriculum changes that better reflect the equivalent programs in UBC Forestry. Fujian Agriculture and Forestry University (FAFU) has also been working with us on a 2+2 program. FAFU sent 3 students to UBC Forestry this year. Similar collaboration agreements have now been signed with several other Chinese forestry universities.

We provide students with opportunities for foreign experiences through our international exchange programs. Our undergraduate and graduate students can select from 155 institutions in 50 countries that share formal agreements with UBC. During the past year, seven of our students went on exchange to Australia, Norway, New Zealand and South Africa. We hosted 10 international exchange/visiting students from 7 different universities in 6 different countries, including Australia, China, Japan, New Zealand, Sweden and the United Kingdom. There is still a marked imbalance between outgoing and incoming students, but this year we worked with the UBC Go Global office to improve our agreements with foreign institutions.

International Partnership for Forestry Education (IPFE)

The International Partnership for Forestry Education (IPFE, www.ipfe.fi) is a global network that assists university-level forestry educators to meet society's needs. IPFE facilitates partnerships between university forestry educators and other relevant institutions to improve the quality and relevance of forestry education programs. Our Faculty has a leadership role in IPFE through Dr Hosny El-Lakany, elected Chair, and by hosting the network's secretariat jointly with the University of Eastern Finland. The Canadian Forest Service has provided financial support to help implement IPFE related activities. Similarly, the Finnish Ministry of Education has allocated funds to the University of Eastern Finland to help with co-hosting the IPFE secretariat.

The IPFE met during the XIII World Forestry Congress, in Buenos Aires. Participants included the Association of University Forestry Schools in Canada, the African Network for Agriculture, Agroforestry and Natural Resources Education, the Asia-Pacific Forestry Education Network, the Latin American Network on Forestry Education, the Network of European Forestry Schools, the International Forestry Students' Association and the FAO.

IPFE supports the University of Eastern Finland's forestry education projects with Moi University in Kenya and with the University of the Andes in Venezuela. These projects involve information communication technology to facilitate education and communication goals and to establish an education platform to link different institutions.

IPFE has created a marketplace for forestry E-learning courses for its members and is providing a catalogue of E-learning courses at member universities. This new site is designed to provide a free information service that will connect suppliers (universities) with potential customers (students).

International Events and Collaboration

In August 2009 we hosted the International Energy Agency Bioenergy conference "Biofuels & Bioenergy: A Changing Climate". This conference brought together researchers, government officials and industry leaders from over 20 countries with the aim of advancing bioenergy development and reducing fossil fuel dependency.

Faculty members participated in many international events throughout 2009. Hosny El Lakany organized a session on forestry education and presented a paper on the future of forestry education at the XIII World Forestry Congress held in Buenos Aires, Argentina.

We hosted a number of international delegations during the year including the Chinese State Forestry Administration, Chinese Academy of Forestry, the Spanish Research Council, the French Embassy, Hawassa University (Ethiopia), the Taiwan Forestry Research Institute, University of Trinidad and Tobago, Shandong Agricultural University (China), Fujian Agriculture and Forestry University (China), Gadjah Mada University (Indonesia) and Nelson Mandela Metropolitan University (South Africa). Faculty members also hosted several visiting faculty members from around the world.

We facilitate collaboration between major international research institutions such as CIFOR and ICRAF through Hosny El-Lakany who is a board member of both organizations. The Faculty is also well represented in IUFRO through Dr John Innes who serves as its vice president. We joined a consortium of seven European partner institutions to form the Forest and Nature for Society,

a three-year world-class joint doctoral program. We also worked with three Canadian and four European forestry schools on a joint proposal for a Transatlantic Degree Partnership involving the delivery of course-based master programs leading to dual degrees (Canada-Europe) in resource and environmental management. We also collaborated with Freiburg University, IUFRO and forestry faculties at six universities to develop a worldwide E-learning program. The aim of this program is to promote, facilitate, organize and run E-learning courses in forestry education and competence development in the fields of forestry, wood science and management of natural resources.

UBC Forestry has also been actively involved in building educational collaboration between Chinese forestry universities and western universities. Together with the Chinese State Forestry Administration, the Canadian Forest Service, the Chinese Education Association of Forestry, the Association of University Forestry Schools of Canada, Beijing Forestry University, and the International Partnership for Forestry Education, we have been working hard to organize a follow-up symposium for the Beijing 2008 Symposium. Vancouver International Forestry Education Symposium will be organized on May 17th-21st, 2010. The goal is to discuss progress with issues and themes that were identified at the Beijing Symposium. The symposium will provide a forum for reporting on joint educational programs and initiatives, and will explore future synergies and collaborations in areas of forestry education promotion, enhancing effectiveness of regional forestry education networks, E-learning and course-based masters graduate programs.

Curriculum Development

Our international forestry master's degree is designed for students who wish to work in the area of international forest and land management issues. Graduates will be equipped with a solid foundation in forestry and land use in combination with international law and global policies addressing the environment and natural resources management. Dr Hosny El-Lakany is leading the development of this program which is scheduled to start in September 2011.

ABORIGINAL FORESTRY



Ronald Trosper
BA, MA, PhD
Associate Professor
Aboriginal Forestry
604.822.8089
ronald.trosper@ubc.ca.



Garth Greskiw
BA, MRM, PhD
Manager, Aboriginal Initiatives
604.827.4407
garth.greskiw@ubc.ca.

FOR MORE THAN 15 years, the Faculty has been developing and implementing its First Nations strategy. Starting with recognition of the increasing importance of British Columbia's First Nations in the forest sector, the strategy is expanding to include the importance of indigenous peoples in all aspects of ecosystem management, including conservation policy, land use planning, and park co-management.

In British Columbia, the need for First Nations involvement in forested land activities is evident. In November 2004, the Canadian Supreme Court ruled in the Haida and Taku cases that First Nations must be consulted at a strategic level in forestry management. In spite of its view, the Court issued no injunction, and in late May, 2005, the Haida Nation, along with non-Haida community members, blockaded forest operations on Haida Gwaii in protest of actions they felt did not adequately address the public concerns or Aboriginal rights on the island. This eventually led to a land planning agreement. In other cases, BC courts have continued to insist that the government consult and accommodate Aboriginal rights, whether proved or likely to be proved.

These and other events contributed to Premier Campbell's decision to enter into a "New Relationship" with First Nations in BC. Leaders of the First Nations Summit, BC Assembly of First Nations and the Union of BC Indian Chiefs agreed to work on developing the New Relationship. A New Relationship document described the BC Government's intent to establish new legislation and policy affecting First Nations rights and access to traditional territories. Implementing the policy in legislation has not occurred, however. Although the extent of the practical effect of the New Relationship remains to be determined, First Nations are gaining greater access to forest resources through Forest and Range Agreements, the new Forest and Range Opportunities, and other Interim Measures Agreements. Although many of the tenures are non-replaceable or have other drawbacks, progress appears to be occurring. Much remains uncertain, however, because the forest sector is in an extended economic slump, and the consequences of the mountain pine beetle infestation remain uncertain.

The challenge remains to increase the number of First Nation Registered Professional Foresters and land managers. The UBC Faculty of Forestry wishes to provide assistance to First Nations and the wider forest community in order to meet these challenges and opportunities through its First Nations strategy.

Below is an abbreviated list of achievements over the past year. They are a reflection of strategies and efforts employed to maintain established relationships while fostering new ones.

ACHIEVEMENTS IN 2009 – 10

- In the final year of financial support from the Ministry of Forests and Range, the First Nations Council of Advisors (FNCOA), and the Faculty, we continued to employ Dr Garth Greskiw to manage the implementation of our First Nations strategy, "Furthering Aboriginal Forestry: A Strategic Plan for 2007 – 2010," until January, 2010.
- Garth co-ordinated Aboriginal initiatives with the Faculty development office. He involved members of FNCOA, the Faculty and others with fund-raising initiatives to achieve objectives of the 2007-2010 First Nations Forestry strategic plan. Garth provided the Faculty contribution to the much-valued UBC First Nations House of Learning initiatives. He collaborated on the UBC Aboriginal undergraduate student recruitment committee to attract new Aboriginal students to UBC. The Faculty has been proud to announce, to all of Canada, that Gordon and the FNCOA have done much to develop Aboriginal forestry knowledge at the University of British Columbia. Gordon continues to serve the Faculty as an advisor and recruiter in his 'retirement'.
- Dr Ronald Trosper from the Salish and Kootenai Tribes of the Flathead Reservation, Montana, began his fifth year in the Faculty as Associate Professor of Aboriginal Forestry, continuing to teach the graduate course FRST 522, "Indigenous Peoples and Forest Land Management," and the undergraduate course CONS 370, "Perspectives on First Nations and Forest Lands." This year he also piloted a new course in Community Forestry. He also published a book, *Resilience, Reciprocity and Ecological Economics: Northwest Coast Sustainability* (Routledge, 2009).
- A total of nine undergraduate and one graduate Aboriginal student were enrolled in forestry programs in 2009-2010. One of these Aboriginal students will receive their bachelor's degree in forestry in 2010.
- In 2005, the Faculty and Malaspina University College formally created the First Nations Bridging and Laddering Partnership to offer the first two years of the BSF degree program for block credit transfer to UBC. We continue to implement this partnership.
- Ronald Trosper, as chair of the Research Advisory Board for the Centre for Native Policy and Research, also served on its Board of Directors.

- Dr Trosper was a co-investigator on a completed project, "A Participatory Approach to Aboriginal Tenure Reform in Canada." The Carrier-Sekani Tribal Council and Stellaquo First Nations participated in this project, which examined Aboriginal tenures and governance. This project has generated a chapter in a book edited by David Natcher and Mark Stevenson, *Changing the Culture of Forestry in Canada* (CCI Press, 2009).
- Dr Trosper continued to work on the idea of using the Q Method to examine attitudes regarding the use of land and water. One, funded by the Social Science and Humanities Research Council, supported graduate student Kyle Bateson in work with his band, the Missanabie Cree First Nation of Ontario. He completed his thesis. The second, funded by the Forest Sciences Program, examined the meaning of criteria and indicator frameworks for First Nations communities. Dr John Innes is a collaborator on the second project. Justin Barnes completed a thesis on this project.
- Dr Trosper continues as the North American focal point for the Task Force on Traditional Forest Knowledge of the International Union of Forest Research Organizations. He will be co-editor of the final report of the task force.

PLANS FOR 2010 – 11

Efforts in 2010 – 2011 will be directed toward funding and implementing the strategic plan and the new community and Aboriginal forestry specialization in the forest resources management degree program.

The vision of the plan is as follows:

Guided by indigenous values, and in partnership with all British Columbians, the UBC Faculty of Forestry will be a global leader in indigenous forest stewardship, and the building and sharing of forest knowledge for future generations through exceptional learning experiences.

The mission is as follows:

The Faculty of Forestry will work with the indigenous peoples of British Columbia and throughout the world to enhance participation and success of Aboriginal people in the forest sector, broadly defined.

The new plan contains specific targets organized by each of the categories of UBC's Trek 2010 Vision of the Future: People, Learning, Research, Community and Internationalization.

First Nations Council of Advisors

Keith Atkinson	FNCOA Co-Chair CEO, BC First Nations Forestry Council
Gordon Prest	FNCOA Co-Chair, Sto:lo
Jeremy Boyd	Forestry Director Shuswap Nation Tribal Council
Dawna Harden	Manager of Policy and Interim Measures, Aboriginal Affairs Branch BC Ministry of Forests and Range
Lennard Joe	Owner-Operator, Grizzly-man Resource Management Ltd
Linc Kesler	Director, First Nations' House of Learning Professor and Head Dep't of Indigenous Studies
Bruce Larson	Professor & Head FRM, UBC
Maxine Lepine	Undergraduate Student
Andrea Lyall	Stewardship Forester Ministry of Forests Squamish District
Peter Marshall	Professor & Associate Dean of Forestry, UBC
Jim McGrath	Forester, Kamloops Indian Band
Garry Merkel	Forester, Tahltan Nations
Debbie Miller	Treaty Officer, Katzie First Nation
Lyle Mueller	Coordinator, Aboriginal Programs UBC Okanagan
David Nordquist	Forester, Adams Lake Indian Band
Angeline Nyce	Lawyer and Forester Davis LLP, Vancouver
Darrell Robb	Director, Aboriginal Affairs Branch, Ministry of Forests & Range
Brian Robinson	Association of BC Forest Professionals
Jack Saddler	Dean of Forestry, UBC
Carleigh Smart	Teacher, Coquitlam
Ivan Tallio	Forester, First Nations Forestry Council
Georgina Thomas	Extension Officer, Forrex First Nations Forestry Council
Matt Wealick	Forester and Manager Ch-ihl-kway-uhk Forestry

OFFICE OF
THE DEAN



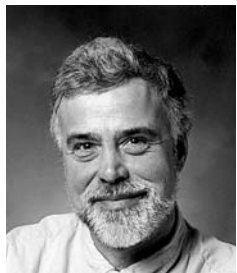
SADDLER, JN (Jack)

BSc (Hons) (Edin), PhD (Glas)

Dean

604.822.3542

jack.saddler@ubc.ca



MARSHALL, Peter L

BScF, MScF (Tor), PhD (Brit Col), RPF

Associate Dean, Undergraduate Studies

Responsible for administering undergraduate academic programs, including curriculum and calendar changes; admissions; retention; transfers and advancements; awards; discipline and teaching evaluations.

604.822.4918

peter.marshall@ubc.ca



PRESCOTT, Cindy E

BSc (Hons) (Brock), MSc, PhD (Calg)

Associate Dean, Graduate Studies and Research

Responsible for promoting and overseeing administration of externally-sponsored research activities, and administering all aspects of Forestry graduate programs.

604.822.4701

cindy.prescott@ubc.ca



WATTS, Susan B

BSc (Wales), MF, PhD (Brit Col), RPF

Director, Communications

Responsible for directing communications and external relations, for promoting research, and for producing Faculty Newsletters and Annual Reports.

604.822.6316

sue.watts@ubc.ca

OFFICE OF THE DEAN

FACULTY AND STAFF

ANDERSON, Geoffrey

BComm (Nfld)
Coordinator, Cooperative Education
604.827.5196 geoff.anderson@ubc.ca

CHOI, Felix

BCS (Brit Col)
Manager, Computer Lab
604.822.6793 felix.choi@ubc.ca

CHOU, Julie

BSc (Brit Col), MBA (West Texas A & M)
Receptionist/Financial Clerk
604.822.2727 julie.chou@ubc.ca

CLODIUS, Christoph

BA (S Fraser), MA (Brit Col)
Director, Development
604.822.8716 christoph.clodius@ubc.ca

DRAKES, Renita

BA (Brit Col)
Coordinator, Education and Web Technology
604.822.0024 renita.drakes@ubc.ca

HELMERSON, Erika

Assistant, Graduate Programs
604.822.6784 erika.helmerson@ubc.ca

JOHANSSON, Carl

BSc, PhD (S Fraser) MCSE
Manager, IT Systems
604.822.4061 carl.johansson@ubc.ca

JOHNSTON, Wendy

Director, Operations and Facilities
604.822.0651 wendy.johnston@ubc.ca

KOLEVA, Eli

MSc (Bulgaria)
Executive Coordinator, Dean's Office
604.822.3542 eli.koleva@ubc.ca

KOSH, Gayle

DipT (Calg)
Manager, Graduate Programs
604.827.4454 gayle.kosh@ubc.ca

LEE, Yuko Ikegami

BFA (Japan)
Assistant, Student Services
604.822.5195 yuko.lee@ubc.ca

LONGHI, Chiara

MA (Pisa)
Coordinator, International Recruitment
604.822-9187 chiara.longhi@ubc.ca

MARCUS, Jean

BA (Queens), BSc (Dalhousie), PhD (Vic)
Project Manager (Environmental and
Sustainability Education)
604.822.5794 jean.marcus@ubc.ca

McCANN, Jenna

BA (Brit Col)
Officer, Development
604.822.8787 jenna.mccann@ubc.ca

MORIZAWA, Caryn

Coordinator, Dean's Office
604.822.2176 caryn.morizawa@ubc.ca

MYERS, Jamie

HND (Lond)
Coordinator, Editorial and Graphic Design
604.822.4072 jamie.myers@ubc.ca

NAIDU, Dan

Coordinator, Graduate Awards and Scholarships
604.822.6177 dan.naidu@ubc.ca

NEUVONEN, Jorma

MBA (Brit Col), MSc (Finland)
Director, Special Projects
604.822.2807 jorma.neuvonen@ubc.ca

PARSONS, Candace

BSF (Brit Col), RPF
Director, Student Services
604.822.3547 candace.parsons@ubc.ca

QUINN, Katherine

BA (Brit Col)
Coordinator, Development
604.822.0898 katherine.quinn@ubc.ca

SHARWOOD, Colin

CGA, BEcon, BCom (Hons) (S Africa)
Director, Finance and Administration
604.822.5542 colin.sharwood@ubc.ca

WANG, Guangyu

PhD (Brit Col) MBA (Marylhurst, Oregon)
Director, Asian Strategies
604.822.4407 guangyu.wang@ubc.ca

YU, Jill

CGA, BBA (S Fraser)
Manager, Finance
604.827.3082 jill.yu@ubc.ca

Office of the Dean
Forest Sciences Centre
2005 – 2424 Main Mall
Vancouver, BC V6T 1Z4

Phone: 604.822.2727
Fax: 604.822.8645

FOREST
RESOURCES
MANAGEMENT



Bruce Larson
Head



Younes Alila



Dennis Bendickson



Gary Bull



Nicholas Coops



George Hoberg



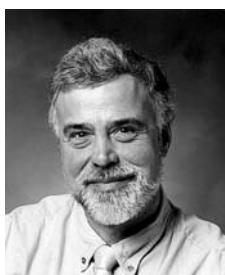
John Innes



Valerie LeMay



Kevin Lyons



Peter Marshall



Michael Meitner



Dan Moore



Harry Nelson



John Nelson



Stephen Sheppard



David Tait



David Tindall



Ron Trosper



Paul Wood

LARSON, Bruce

Professor, Head
Silviculture and Management
AB (1976) Harvard, MFS (1978) Yale,
PhD (1982) Wash
604.822.1284
bruce.larson@ubc.ca

ALILA, Younes

Associate Professor
Forest Engineering Hydrology
BAsC (1985), MASc (1987),
PhD (1994) Ottawa, PEng
604.822.6058
younes.alila@ubc.ca

BENDICKSON, Dennis F

Senior Instructor and Director, Forest
Operations Major
Forest Operations
BSF (1971) Brit Col, RPF
604.822.5932
dennis.bendickson@ubc.ca

BULL, Gary Q

Associate Professor
Forest Economics and Forest Policy
BSF (1988), MF (1991) Brit Col,
PhD (1995) Tor
604.822.1553
gary.bull@ubc.ca

COOPS, Nicholas C

Professor and Canada Research Chair
in Remote Sensing
*Remote Sensing and Spatial Data Modeling in
Forestry and Ecology*
BAppSc (1991), PhD (1996), RMIT Melbourne
604.822.6452
nicholas.coops@ubc.ca

HOBERG, George

Professor
Policy and Governance
BS (1980) Calif, Berkeley, PhD (1987) MIT
604.822.3728
george.hoberg@ubc.ca

INNES, John L

Professor and Forest Renewal BC Chair in
Forest Management
*Sustainable Forest Management, Cumulative
Impacts Analysis, First Nations*
BA (1979), MA (1983), PhD (1983) Cantab., CEnv
604.822.6761
john.innes@ubc.ca

LeMAY, Valerie M

Professor
Biometrics and Mensuration
BSc (1981), MSc (1982) Alta,
PhD (1989) Brit Col, RPF
604.822.4770
valerie.lemay@ubc.ca

LYONS, C Kevin

Associate Professor
Forest Engineering
BSF (1997), MF (1998) Brit Col,
PhD (2001) Oregon State
604.822.3559
kevin.lyons@ubc.ca

MARSHALL, Peter L

Professor and Associate Dean,
Undergraduate Studies
Growth and Yield, Sampling Design
BScF (1976), MScF (1979) Tor,
PhD (1984) Brit Col, RPF
604.822.4918
peter.marshall@ubc.ca

MEITNER, Michael

Associate Professor
*Environmental Perception and Visualization,
Recreation, GIS*
BSc (1992), MA (1998), PhD (1999) Arizona
604.822.0029
michael.meitner@ubc.ca

MOORE, R Dan

Professor (Forest Resources Management, Geography)
and Forest Renewal BC Chair in Forest Hydrology
Hydrology
BSc (Hons) (1979) Brit Col,
PhD (1984) Canterbury, PGeo
604.822.3538
rdmoore@geog.ubc.ca

NELSON, Harry W

Assistant Professor
Forest Policy and Economics
BA (1983) Carleton, MPP (1987) Harvard, MSc
(1990), PhD (1999) Brit Col
604.827.3478
harry.nelson@ubc.ca

NELSON, John D

Professor and Director, Forest
Resources Management Major
Timber Supply Planning
BSF (1980), MBA (1982) Brit Col,
PhD (1988) Oregon State, RPF
604.822.3902
john.nelson@ubc.ca

**Forest Resources
Management**
Forest Sciences Centre
2045 – 2424 Main Mall
Vancouver, BC V6T 1Z4

Phone: 604.822.3482
Fax: 604.822.9106

FACULTY AND STAFF

SHEPPARD, Stephen RJ

Professor (Forest Resources Management, Landscape Architecture) and Director, Collaborative for Advanced Landscape Planning
Visual Management, Planning, Visualization, Communicating Climate Change
BA (1974) Oxf, MSc (1976) Brit Col, MA (1980) Oxf, PhD (1982) Calif, Berkeley
604.822.6582
stephen.sheppard@ubc.ca

TAIT, David EN

Assistant Professor
Optimization Techniques, Forest Planning
BSc (1968), MSc (1970), PhD (1983) Brit Col
604.822.2997
david.tait@ubc.ca

TINDALL, David B

Associate Professor (Forest Resources Management, Sociology)
Environmental Sociology and Social Research Methods
BA (1985), MA (1989) Vic, PhD (1994) Tor
604.822.2550/2363
tindall@interchange.ubc.ca

TROSPER, Ronald

Associate Professor
Aboriginal Forestry
BA (1967), MA (1970), PhD (1974) Harvard
604.822.8089
ronald.trospers@ubc.ca

WOOD, Paul M

Associate Professor
Conservation Policy, Environmental Ethics
BSc (1973), PhD (1994) Brit Col, RPF, RPBio
604.822.0951
paul.wood@ubc.ca

Research Associates

HARSHAW, Howard

HBOR, BA (Lakehead), PhD (Brit Col)
Forest Recreation, Human Dimensions of Natural Resources

MATHEY, Anne-Helene

BSc (Grenoble), MSc, PhD (Brit Col)
Natural Resources Management

Faculty Associate

CAO, Sam

PhD (Nanjing University)

Honorary Research Associate

ZUMRAWI, Abdel Azim

BSc (Sudan), MSc, PhD (Corvallis)
Biometrics, Growth & Yield

Post-doctoral Fellows

HILKER, Thomas

BSc (Goettingen), MSc (Stuttgart), PhD (Brit Col)
Modeling Carbon-Fluxes and Mapping Landscape Disturbances

NITSCHKE, Craig

BSF, PhD (Brit Col)
Forest Vulnerability and Climate Change

TIKINA, Anna

MSc (Budapest), MFS (Yale), PhD (Brit Col)
Environmental Policy, Sustainable Forest Management

SCHROTH, Olaf

Vordiplom (Hannover), MA (Newcastle), PhD (Zurich)
Interactive Landscape Visualization

Adjunct Professors

COHEN, Stewart

(Environment Canada, Adaptation & Impacts Research Division)
BSc, MSc, PhD
Climate Change, Impacts and Adaptation

COLLINS, Denis

(BC Ministry of Forests and Range)
BSc, PhD, PGeo
Forest Sustainability and Inventory; Remotely Sensed Imagery

DAVIS, Rod

(Ministry of Environment, Director Emeritus)
BSc, MSc, PAg
Ecosystem and Biodiversity Conservation

DE LA ROCHE, Ian

(Formerly FPInnovations)
BSc, MSc, PhD
Forest Industry Policy

D'EON, Robert

(Consultant)
BScF, MScF, PhD
Ecology and Management of Forested Landscapes

EL-LAKANY, Hosny

(Forestry Department, FAO/UN, Former Head)
BSc, MSc, PhD, DSc
International Forest Policy

ELLIOTT, Chris

(WWF Canada)
BSc, MES, PhD
Forest Policy, Biodiversity and Certification

HUDSON, Robert

(BC Ministry of Forests & Range)
BSc (Hons), MSc, PhD
Forest Hydrology

ILES, Kimberley

(Consultant)
BS, MSc, PhD
Forest Inventory

KURZ, Werner

(Canadian Forest Service)
Dip Holzwirt, PhD
Forest Ecosystem Modelling

LAAKSONEN-CRAIG, Susanna

(BC Ministry of Forests & Range)
MSc, PhD
Forest Economics

LECKIE, Donald G

(Canadian Forest Service)
BSc, PhD
Remote Sensing

MANESS, Thomas C

(Forest Engineering, Resources and
Management, Oregon State University)
BSF, MSc, PhD
Forest Economics and Systems Analysis

MATAKALA, Patrick

(Int'l Centre for Research in Agroforestry,
Mozambique)
BSc, MSc, PhD
*Community Resource Management and
Conservation Planning*

OGDEN, Aynslie

(Government of Yukon)
BSc, MSc, PhD
Sustainable Forest Management

ROBERTS, Don

(CIBC World Markets Inc.)
BSc, MSc, MBA
*Forest Economics & Finance, International
Forestry*

SMITH, Nicholas

(Consultant)
BSc, MF, PhD
*Biometrics, Inventory, Silvicultural Investment
Analysis, Growth & Yield*

WEILER, Markus

(Freiburg University)
MSc, PhD
Watershed Hydrology

WINKLER, Rita D

(BC Ministry of Forests & Range)
BSF, MSc, PhD
Watershed Management, Snow Hydrology

WULDER, Mike

(Canadian Forest Service)
BSc (Hons), MSc, PhD
Forest Geomatics, Remote Sensing

YIN, Yongyuan

(Environment Canada)
BSc, MSc, MA, PhD

Professors Emeriti

ADAMOVICH, L

Professor Emeritus (1984)

CHAMBERS, AD

Associate Professor Emeritus (1997)

DOOLING, PJ

Associate Professor Emeritus (1995)

GOLDING, DL

Associate Professor Emeritus (1996)

HALEY, D

Professor Emeritus (2004)

KOZAK, A

Professor Emeritus (2001)

MUNRO, DD

Professor Emeritus (1995)

MURTHA, PA

Professor Emeritus (2003)

PEARSE, PH

Professor Emeritus (1997)

REED, FLC

Professor Emeritus (1993)

YOUNG, GG

Associate Professor Emeritus (1996)

Staff

AIREY, Adelle

CALP Secretary

AKAI, Heather

Administrator

AQUINO, David

BSc (La Molina, Peru), MF (Brit Col)
Research Assistant, Senior Technician

BATER, Christopher

BA (Winnepeg), MSc (Brit Col)
Research Scientist

FLANDERS, David

BSc (Calgary), MLA (Brit Col)
Research Scientist

GOUGH, Angeline

BSc, MSc (Brit Col)
Research Analyst

ACHIEVEMENTS AND PLANS

LEE, Taehee

BSc (Kyunghee), MSc (Kookmin),
MSc (Brit Col)
Research Analyst

MAEDEL, Jerry

BFA, TC (Vic), MSc (Brit Col)
GIS/RS Coordinator

MCGUIGAN, Erin

BSc, MSc (Brit Col)

MCPHERSON, Debbie

Department Secretary

POND, Ellen

BA (Brit Col), MLA (Brit Col)
Research Scientist

RELOVA, Marissa

BA (Maryknoll Coll, The Philippines)
Financial Clerk

RISTEA, Catalin

BSc (Transylvania), MSc (Brit Col)
Project Manager

TATEBE, Kristi

BSc, MSc (Brit Col)
Research Scientist

VERWOERD, Harry

Computer Support Specialist

Promotion

- Dr Nicholas Coops was promoted to professor, effective July 1, 2009.

Resignation

- Dr Sumeet Gulati moved to 100% Land and Food Systems, effective July 1, 2009.
- Dr Thomas Maness resigned effective September 30, 2009 to take a position as head of department of Forest Engineering, Resources and Management at Oregon State University. Dr Maness will continue to be associated with UBC as an adjunct professor in Forest Resources Management department.

ACHIEVEMENTS IN 2009 – 10

- New students for the 2 plus 2 program with Nanjing University and Fujian University arrived and are integrating into the courses.
- Dr Stephen Sheppard completed the Peter Wall Scholar in Residence.
- Drs Alila, Coops, Maness and Nelson received ongoing NSERC funding.
- Dr Mike Meitner received an NSERC Discovery grant.
- Dr Coops received a CFI Infrastructure grant and NSERC Engage grant.
- Drs LeMay and Marshall received funding from ForValueNet.
- Dr Innes received new SSHRC grants.
- Drs Innes, Larson, and H Nelson received FSP funding.
- Dr Ron Trosper successfully completed the University Investment Funds to support a study on bridging and supporting aboriginal students in UBC science programs.
- Working on building closer links with FERIC and the new FPInnovations.
- Mark Boyland, CFS has relocated from Ottawa to join Tony Lempriere and Peter Graham on the 4th floor.

PLANS FOR 2010 – 11

- The department is developing a Field Safety Protocol, requiring graduate students to develop a plan for field safety.
- Hold an international workshop with Environment Canada “Proactive Adaptation: Challenges and Opportunities for Incorporating Climate Change Response within Sustainable Forest Management”.
- Develop at least one new service course in sustainability.
- Develop and implement strategy for meeting Forest Economics teaching and research needs.



Flasks in a shaking bench-top incubator

FOREST
SCIENCES
DEPARTMENT



Robert Guy
Head



Sally Aitken



Peter Arcese



Jörg Bohlmann



Allan Carroll



Chris Chanway



Yousry El-Kassaby



Sarah Gergel



Susan Grayston



Richard Hamelin



Scott Hinch



Maja Krzic



Kathy Martin



Steve Mitchell



Cindy Prescott



John Richardson



Kermit Ritland



Suzanne Simard



Tom Sullivan



Susan Watts

GUY, Robert D

Professor and Head
Plant Physiology
BSc (1977), PhD (1984) Calg
604.822.6023
rob.guy@ubc.ca

AITKEN, Sally N

Professor and Director, Forest Sciences Program
Director, Centre for Forest Gene Conservation
Forest Genetics and Gene Conservation
BSF (Hons) (1984) Brit Col,
MSc (1986), PhD (1989) Calif, Berkeley
604.822.6020
sally.aitken@ubc.ca

ARCESE, Peter

Professor and Forest Renewal BC Chair in
Applied Conservation Biology
Population Ecology of Birds and Mammals
BA (1981) Wash, MSc (1985), PhD (1988) Brit Col
604.822.1886
peter.arcese@ubc.ca

BOHLMANN, Jörg

Professor (Michael Smith Laboratories, Forest
Sciences, Botany), Distinguished University
Scholar, NSERC EWR Steacie Fellow
*Plant/Insect Interactions, Forest Health, Genomics,
Biochemistry, Biotechnology*
BSc (1988), MSc (1991), PhD (1995)
Braunschweig, Germany
604.822.0282
bohlmann@msl.ubc.ca

CARROLL, Allan

Associate Professor
Forest Entomology
BSc (1988) S Fraser, PhD (1993) New Brunswick
604.822-3360
allan.carroll@ubc.ca

CHANWAY, Christopher P

Professor (Forest Sciences, Land and Food Systems)
Soil Microbiology
BSc (1978) Winn, BS Ag (1980) Manit,
MSc (1983), PhD (1987) Brit Col
604.822.3716
christopher.chanway@ubc.ca

EL-KASSABY, Yousry A

Professor and NSERC Chair in Applied Forest
Genetics and Biotechnology
Quantitative Genetics
BSc (1970) Alexandra, MSc (1976) Tanta,
PhD (1980) Brit Col, RPF
604.822.1821
y.el-kassaby@ubc.ca

GERGEL, Sarah E

Associate Professor
Watershed Landscape Ecology
BS (1992) Florida, MS (1996), PhD (2001)
Wisconsin
604.827.5163
sarah.gergel@ubc.ca

GRAYSTON, Susan J

Professor and Canada Research Chair
in Soil Microbial Ecology
Soil Microbial Ecology
BSc (1982), PhD (1987) Sheffield
604.822.5928
sue.grayston@ubc.ca

HAMELIN, Richard

Professor (Canadian Forest Service)
Plant Pathology
BSc (1992) McGill, MSc (1986) S Fraser,
PhD (1991) Kentucky
604.827-4441
richard.hamelin@ubc.ca

HINCH, Scott G

Professor and Director, Natural Resources
Conservation Program
(Forest Sciences, Institute for Resources and
Environment)
Aquatic Ecology and Fish Conservation
BSc (Hons) (1985), MSc (1987) W Ont,
PhD (1992) Tor
604.822.9377
scott.hinch@ubc.ca

KRZIC, Maja

Associate Professor (Forest Sciences, Land
and Food Systems)
Soil Science
BSc (1986), MSc (1990) (Belgrade),
PhD (1997) Brit Col
604.822.0252
maja.krzic@ubc.ca

MARTIN, Kathy M

Professor (Environment Canada)
Avian Ecology and Conservation
BSc (1970) Prince Edward Is,
MSc (1973) Alta, PhD (1985) Qu
604.822.9695
kathy.martin@ubc.ca

MITCHELL, Stephen J

Associate Professor
Silviculture
BSF (1987), PhD (1999) Brit Col, RPF
604.822.4591
stephen.mitchell@ubc.ca

Forest Sciences
Forest Sciences Centre
3041 – 2424 Main Mall
Vancouver, BC V6T 1Z4

Phone: 604.822.2507
Fax: 604.822.9102

PRESCOTT, Cindy E

Professor and Associate Dean,
Graduate Studies and Research
Forest Nutrition
BSc (Hons) (1981) Brock, MSc (1984),
PhD (1988) Calg
604.822.4701
cindy.prescott@ubc.ca

RICHARDSON, John S

Professor
Stream and Riparian Ecosystems
BSc (1979) Tor, MSc (1983) Alta, PhD (1989) Brit Col
604.822.6586
john.richardson@ubc.ca

RITLAND, Kermit M

Professor
Population and Quantitative Genetics
BSc (1977) Wash, PhD (1982) Calif, Davis
604.822.8101
kermit.ritland@ubc.ca

SIMARD, Suzanne W

Professor
Forest Ecology and Silvics
BSF (1983) Brit Col, MS (1989),
PhD (1995) Oregon
604.822.1955
suzanne.simard@ubc.ca

SULLIVAN, Thomas P

Professor (Forest Sciences, Land and Food Systems)
Wildlife Ecology
BSc (Hons) (1973), MSc (1976),
PhD (1978) Brit Col
604.822.6873
tom.sullivan@ubc.ca

WATTS, Susan B

Lecturer and Director, Communications
Forest Entomology
BSc (1973) Wales, MF (1976),
PhD (1981) Brit Col, RPF
604.822.6316
sue.watts@ubc.ca

Sessional Lecturers

LAVALLEE, Suzie

BSc, MSc, PhD (Brit Col)
Insect Ecology and Conservation

Research Associates

CHAN-McLEOD, Ann C Allaye

BSF, MSc (Brit Col), PhD (Alaska)
Physiological Ecology

CLARK, Timothy

BSc, PhD (La Trobe)
*Ecophysiology and Behavioural Energetics of
Migrating Salmonids*

KRCMAR, Emina

BSc, MSc, PhD (Belgrade)
*Decision Analysis Under Multiple Criteria and
Uncertainty*

RITLAND, Carol

BSc, MSc (Brit Col), PhD (Tor)
Molecular Genetics

SEELY, Brad

BS (Redlands), PhD (Boston)
Nutrient Dynamics and Forest Hydrology

SMETS, Pia

MSc (Leuven), PhD (Brit Col)
Forest Genetics, Genecology

TSUI, Clement

BSc, PhD (Hong Kong)
Mycology, Phylogeny, Evolution, and Population Genetics

WANG, Tongli

MSc, PhD (Helsinki)
Forest Tree Breeding

WELHAM, Clive

BSc, MSc, (Manit), PhD (S Fraser)
Biosciences

WELLS, Ralph

BSc, MRM (S Fraser)
Applied Forest Ecology

Honorary Research Associates

COOKE, Steven J

BES, MSc (Waterloo), PhD (Illinois)
NSERC and Izaak Killam Fellowship
Fish Conservation

DREVER, Mark

BSc (Tor), MPM (S Fraser), PhD (Guelph)
Avian Ecology and Conservation

EVANS OGDEN, Lesley

BSc (Hons) (Tor), MSc (York), PhD (S Fraser)
Wildlife Ecology

JACKSON, Michael

BSc (E Anglia), MSc (Lond), PhD (E Anglia)
*Biology of Shallow Lakes, Ecotoxicology, and
Biodiversity Conservation*

ZHANG, Yixin

BSc (Nanjing), PhD (Umeå)
Stream Ecology

Post-doctoral Fellows

AITKEN, Kathryn

BSc (S Fraser), MSc, PhD (Brit Col)
Applied Conservation Research

BAO, Hua

BSc (S China Normal), PhD (Sun Yat-Sen)
Evolutionary Genomics

BLANC, Lori

BSc, MSc (Calif Polytechnic), PhD (Virg Polytechnic)
Applied Conservation Research

BLANCO VACA, Juan

PhD (Navarra)
Forest Ecology, Nutrient Cycling and Ecosystem-level Modelling

BOIZARD, Sophie

BSc (Vic), PhD (Brit Col)
Marine Biology and Biomechanics

BUSCHIAZZO, Emmanuel

BSc (Heriot-Watt), PhD (Canterbury)
Cellular and Molecular Biology

CROSSIN, Glenn

BA (Maine), BSc (New Hampshire), MSc, PhD (Brit Col)
Behavioural and Physiological Ecology

DESLIPPE, Julie

BSc (Vic), MSc (North Brit Col), PhD (Brit Col)
Arctic Ecology

DORDEL, Julia

BSc (Freiburg), MSc, PhD (Brit Col)
Ecology

DUDANIEC, Rachael

BSc, PhD (Flinders)
Conservation Biology

GREIG, Hamish

BSc, PhD (Canterbury)
Freshwater Ecology

HOOVER, Trent

BSc (Alberta), MSc (North Brit Col) PhD (Brit Col)
Stream Ecology/Open Channel Flow

KANG, Misun

BSc (Tor), MSc, PhD (Windsor)
Riparian and Stream Ecology

KLAPSTE, Jaroslav

BSc, PhD (Czech Republic)
Forest Genetics

KOMINOSKI, John

BA (Augustana Coll), MS (Loyola Chicago), PhD (Georgia)
Ecology

LARRANAGA, Santiago

BSc, PhD (Basque)
Stream Ecology

MARTINS, Eduardo

BSc, MSc, PhD (Estadual de Campinas)
Ecology

MCKOWN, Athena

BSc (Alb), PhD (Tor)
Plant and Microbial Biology

NOSHAD, David

BSc, MSc (Azerbaijan), PhD (Brit Col)
Plant Pathology and Genetics

THORPE, Hilary

BSc, PhD (Tor)
Forest Ecology and Management

VERNE, Sébastien

MSc (François Rabelais), PhD (Poitiers)
Forest Genetics

WERTZ, Sophie

BSc (Marseille III), MSc, PhD (Lyon)
Microbial Ecology

Adjunct Professors

BULMER, Charles

(BC Ministry of Forests & Range)
BSc, MSc, PhD
Productivity of Disturbed and Rehabilitated Soils

COATES, David

(BC Ministry of Forests & Range)
BSF, MSc, PhD
Silviculture and Forest Ecology

HUMBLE, Leland

(Canadian Forest Service)
BSc, PhD
Entomology

MARTIN, Tara

BSc (Griffith), PhD (Queensland)
Population and Conservation Biology

MILLER, Kristina

(Fisheries and Oceans, Canada)
BSc, MSc, PhD
Functional Genomics, Molecular Genetics, Salmon

NEWMAN, Reg

(BC Ministry of Forests & Range)
BSc, BSF, PhD
Range Ecology

SHAMOUN, Simon

(Canadian Forest Service)
BSc, MSc, PhD
Plant Pathology

STOEHR, Michael

(BC Ministry of Forests & Range)
BSc, MSc, PhD
Advanced Generation Seed Orchards

YANCHUK, Alvin

(BC Ministry of Forests & Range)
BSc, MSc, PhD
Gene Conservation

FACULTY AND STAFF

Faculty Associates

DURALL, Daniel
(Okanagan University College)
BSc, PhD
Mycorrhizal Ecology

CLEMENTS, David
(Trinity Western University)
BSc, PhD
Weed Ecologies

Professors Emeriti

BUNNELL, Fred L
Professor Emeritus (2007)

FELLER, Michael
Associate Professor Emeritus (2009)

KIMMINS, JP (Hamish)
Professor Emeritus (2007)

KLINKA, K
Professor Emeritus (2002)

LAVENDER, DP
Professor Emeritus (1992)

McLEAN, John A
Professor Emeritus (2008)

NORTHCOTE, TG
Professor Emeritus (1992)

van der KAMP, BJ
Professor Emeritus (2006)

WEETMAN, GF
Professor Emeritus (1998)

WORRALL, JG
Associate Professor Emeritus (2003)

Staff

AZAM, Shofiu
BSc (Dhaka), MSc (Japan)
Research Assistant/Technician

BERG, Nora
BSc (Alta)
Research Assistant/Technician

CHAN, Andrea
BSc (Brit Col)
Financial Clerk

CHANG, Alice
BSc, MSc, (Brit Col), PhD (Carleton)
Research Scientist

CHENG, Rosemarie
BSIE (UP, The Philippines)
Financial Coordinator

DEL BEL, Kate
BSc (Guelph), MSc (Cal)
Research Scientist

DESCALZO, Rolando
MPM, PhD (S Fraser)
Collections Manager

HODGES, Norman

BSc (Vic)
Computer Specialist

KREMSATER, Laurie
BSF, MSc (Brit Col)
Manager, Sustainable Forestry Project

LIAO, Limin
BSc (Shangsha), MSc (Beijing)
Research Assistant/Technician

LOTTO, Andrew
RMOT (Malaspina)
Research Assistant/Technician

McKAY, D'Arcy
BSc (S Fraser)
Research Assistant/Technician

MISCAMPBELL, Allyson
BSc (Lakehead), MSc (Brit Col)
Research Assistant/Technician

MOY, Arnold
BSc (Brit Col)
GIS Specialist

MUTIA, Christine
B Admin (UP, The Philippines)
Financial Clerk

ROOTMAN, Susan
Departmental Secretary

SETO, Carrie
BA (HK)
Administrator

YUEH, Hesther
BSc (McGill)
Research Scientist

Promotions

Drs Sarah Gergel and Maja Krzic were promoted to associate professors with tenure effective July 1, 2009.

New Appointments

Dr Allan Carroll has joined the department as an associate professor with tenure. Allan worked as a research scientist at Natural Resources Canada, Canadian Forest Service, Pacific Forestry Centre in Victoria. Allan received his BSc from Simon Fraser University and a PhD from the University of New Brunswick. His research interests are focused on the population dynamics of eruptive forest insects, and the role of forest management, climate and climate change in insect-caused disturbances to northern forests.

Dr Richard Hamelin has joined the department as an honorary part-time professor. Richard has been seconded to us from Natural Resources Canada, Canadian Forest Service, where he was stationed at the Laurentian Forestry Centre. Richard received his BSc from McGill University, MSc from Simon Fraser University and PhD from University of Kentucky.

ACHIEVEMENTS AND PLANS

His research interests are in forest pathology, in particular in the use of genetic and genomic approaches to better understand forest disease epidemics and the development of diagnostic and monitoring tools.

Retirement

Dr Michael Feller retired on June 30, 2009 after a long and, we trust, continuing association with the Faculty of Forestry. Michael came out with chemistry degrees from the University of Melbourne to complete his PhD in Forestry at UBC in 1975. After a few years of lecturing back in Melbourne, he returned to UBC in 1979 as a postdoctoral fellow, was made an NSERC University Research Fellow, and then joined the professoriate in 1983. Michael's interests have ranged widely, from seed germination through to long-term ecosystem chemistry. He is perhaps best known for his work in the areas of fire ecology and streamwater quality, and has always been in great demand to speak on these matters to the press. Michael taught courses in forest fire science and was an active and critical participant in all of the forest management and conservation field schools. He played a major role in helping to establish the Natural Resources Conservation program, and served as director of that program in its early years.

In his retirement, Michael will continue to pursue his professional interests, while making more time to indulge his passion for the mountains and backcountry recreation.

ACHIEVEMENTS IN 2009 – 10

- Dr Aitken received the Canadian Forestry Scientific Achievement Award which recognizes unique and outstanding accomplishment in forestry research in Canada. Dr Aitken's work is important to the sustainable practice of forestry in British Columbia, throughout Canada, and internationally.
- Dr El-Kassaby was awarded the IUFRO Scientific Achievement Award. This international award is given in recognition of distinguished scientific achievements and significant contribution to forestry research covered by the International Union of Forest Research Organizations. Only 10 awards are given every five years.
- Dr Sue Grayston received the UBC Killam Faculty Research Fellowship from the 'Izaak Walton Killam Memorial Fund for Advanced Studies'.
- Dr Bohlmann co-chaired with Dr Ian Baldwin the Gordon Research Conference on Floral and Volatile Volatiles at Magdalen College, Oxford, UK, August 9-14, 2009. The conference was to bring together researchers to explore the rapid advances in genomics, analytics and sensory perception of plant volatiles.
- Dr Martin delivered a plenary lecture at the joint Ornithological Society's meeting in San Diego, February on her cavity nesting research.

- Cindy Prescott was appointed Deputy Editor-in-Chief of the NRC Research Press for a five-year term beginning 1 July 2009. NRC Research Press is the foremost scientific publisher in Canada and has been publishing peer-reviewed international science since 1929.
- Carolyn Churchland (PhD, Grayston), was awarded one of the new UBC Graduate Student International Research Mobility Awards in the first competition. Carolyn used the funding to undertake collaborative research assessing the importance of root exudates in fueling soil microbial activity using stem-injection stable-isotope labeling techniques at the University of Lancaster Environment Centre in the UK in the fall term.
- Catherine Buschhaus, a student in the Forest Sciences program, was the recipient of the Thelma Sharp Cook Premier Undergraduate Scholarship and the Westbrook Scholarship. Only a handful of students on campus receive both.
- Dr Grayston was on sabbatical leave from September 2009 to August 2010.
- The 2009 Namkoong Family Lecture was held in October and can be viewed at our website www.forestry.ubc.ca/NewsEvents/
- Drs John Richardson and Kermit Ritland started a successful Wednesday seminar series. The seminar series provided an opportunity for graduate students, post-docs and advanced undergraduates in Forest Sciences to talk about their work in an informal setting.
- Drs Hamelin, Hinch, Krzic and Ritland received new NSERC funding while Drs Aitken, Arcese, Chanway, El-Kassaby, Gergel, Grayston, Guy, Hinch, Martin, Mitchell, Prescott, Richardson, Ritland and Simard received ongoing NSERC funding.
- Drs Bunnell, Chan-McLeod, Grayston, Richardson, Seely, Simard and Sullivan were awarded continuing Forest Science Program grants under the Forest Investment Account.

PLANS FOR 2010 – 11

- Recruit a lecturer in Natural Resources Conservation (NRC). This will be a 12-month term appointment for two years. The lecturer will be involved in the teaching, coordination, and development of undergraduate and graduate courses in the NRC Program.
- Pursue switching Allan Carroll's position into an NSERC IRC Chair.
- Pursue the renewal of the NSERC IRC Chair "Applied Forest Genetics and Biotechnology" with Dr El-Kassaby.
- Maintain high level of proposals to NSERC and other funding agencies.
- Organize the Leslie L Schaffer Lectureship in the Fall.

WOOD
SCIENCE
DEPARTMENT



Paul McFarlane
Head



Stavros Avramidis



Colette Breuil



David Cohen



Patrick Cramond



Simon Ellis



Philip Evans



Robert Fürst



John Kadla



Robert Kozak



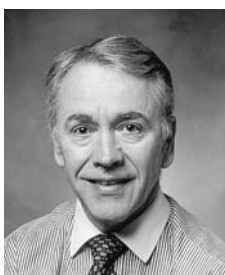
Frank Lam



Shawn Mansfield



Helmut Prion



John Ruddick



Jack Saddler



Gregory Smith



Taraneh Sowlati

McFARLANE, Paul N

Professor and Head
Environmental Aspects of Wood Products and Processing
B Tech (Hons) (1973), PhD (1979) Massey FIAWS
604.822.7667
paul.mcfarlane@ubc.ca

AVRAMIDIS, Stavros

Professor
Wood Physics and Drying
BSF (1981) Thessaloniki, MS (1983),
PhD (1986) SUNY, Syracuse, FIAWS
604.822.6153
stavros.avramidis@ubc.ca

BREUIL, Colette

Professor
Forest Products Biotechnology
BSc (1971) Lyon, MSc (1974) Ottawa,
PhD (1977) Lyon
604.822.9738
colette.breuil@ubc.ca

COHEN, David H

Professor
Forest Products Marketing and Management
Dip For Tech (1976) Selkirk, BSc (1986) Idaho,
PhD (1989) Virginia Polytech
604.822.6716
david.cohen@ubc.ca

CRAMOND, Patrick

Senior Instructor (Wood Science, Mechanical
Engineering)
Wood Products Processing
BAsC (1974) Brit Col, PEng
604.822.1287
pcramond@mech.ubc.ca

ELLIS, Simon C

Associate Professor and Director, Wood Products
Processing Program
Wood Anatomy and Quality
BSc (Hons) (1983) Wales, MSc (1986),
PhD (1989) Brit Col
604.822.3551
simon.ellis@ubc.ca

EVANS, Philip D

Professor and BC Leadership Chair in Advanced
Forest Products Manufacturing Technology
Photoprotection and Modification of Wood
BSc (Hons) (1980), PhD (1985) Wales, FIAWS
604.822.0517
phil.evans@ubc.ca

FÜRST, Robert

Senior Instructor
Manufacture of Secondary Wood Products
Master Dip (1992) Augsburg, Germany
604.822.0034
robert.fuerst@ubc.ca

KADLA, John

Professor and Canada Research Chair in Advanced
Biomaterials Chemistry
Polymer Chemistry and Materials Science
BSc (1989) Brit Col, PhD (1997) N Carolina,
FIAWS
604.827.5254
john.kadla@ubc.ca

KOZAK, Robert A

Professor
Sustainable Business Management
BSc (1988), PhD (1996) Brit Col
604.822.2402
rob.kozak@ubc.ca

LAM, Frank

Professor
Wood Mechanics
BAsC (1982), MASc (1985),
PhD (1992) Brit Col, PEng
604.822.6526
frank.lam@ubc.ca

MANSFIELD, Shawn D

Professor and Canada Research Chair in Wood and
Fibre Quality
Biotechnology and Chemistry of Wood Fibres
BSc (Hons) (1992) Mt Allison, MSc (1994) Dal,
PhD (1997) Brit Col, FIAWS
604.822.0196
shawn.mansfield@ubc.ca

PRION, Helmut GL

Associate Professor (Wood Science, Civil
Engineering)
Engineered Timber Structures Design
BEng (Hons) (1974) Stellenbosch,
PhD (1987) Tor, PEng
604.822.3864
prion@civil.ubc.ca

RUDDICK, John NR

Professor
Wood Preservation
BSc (1965), MSc (1966) Newcastle,
PhD (1970) Lond
604.822.3736
john.ruddick@ubc.ca

Wood Science
Forest Sciences Centre
2900 – 2424 Main Mall
Vancouver, BC V6T 1Z4

Phone: 604.822.9352
Fax: 604.822.9104
woodubc@interchg.ubc.ca
www.wood.ubc.ca

SADDLER, Jack N

Professor and Dean
Forest Products Biotechnology
BSc (Hons) (1975) Edin, PhD (1978) Glas,
FIAWS
604.822.3542
jack.saddler@ubc.ca

SMITH, Gregory

Associate Professor
Wood Composites
BASc (1988), MAsC (1992) Brit Col,
Dr sc techn (1996) Swiss Federal Inst, PEng
604.822.0081
greg.smith@ubc.ca

SOWLATI, Taraneh

Associate Professor
Operational Research, Performance Assessment
BSc (1990) Sharif, MAsC (1996) Tarbiat Modares,
PhD (2001) Tor
604.822.6109
taraneh.sowlati@ubc.ca

Research Associates

ACKOM, Emmanuel

BSc (Hons) (Ghana), MSc, PhD (BTU,
Germany)
Industrial Ecology of Forest Products
Manufacturing; Forest Certification and Chain of
Custody

CHANDRA, Richard

BSc, MSc (Brit Col), PhD (Georgia Institute
of Technology/Institute of Paper Science and
Technology, USA)
Wood Chemistry

MALABADI, Ravindra

BSc, MSc, MPhil, PhD (Dharwad, India)
Plant Biotechnology

PORTH, Ilga

MSc, PhD (Vienna)
Genomics, Plant Biochemistry

TIMKO, Joleen

BSc, MSc, PhD (Brit Col)
Social Equity and Ecological Integrity

TSUI, Kin Ming (Clement)

BSc, PhD (Hong Kong)
Genomics

WANG, Ye

BSc, MSc, PhD (China Agricultural)
Biochemistry and Molecular Biology

YAWALATA, Domingus

PhD (Brit Col)
Wood Mechanics

Post-doctoral Fellows

ALEMAGI, Dieudonne

BSc (Cameroon), MSc, PhD (Brandenburg,
Germany)
Environment and Resource Management

ANDERSSON-ROOS, Alexandra

MSc, PhD (Lund, Sweden)
Forest Product Biotechnology

ARANTES,Valdeir

PhD (San Paulo, Brazil)
Applied Microbiology

GHATORA, Sonia

BSc, MSc, PhD (Guru Nanak Dev, Amritsar,
India)
Microbiology and Enzymology

GONZALES-PENA, Marcos

BEng (Chapingo Autonomous, Mexico), MSc,
PhD (Univ of Wales)
Photo Degradation of Wood

KIM, Yong Sik

BSc, MSc, (Kangwon Nat, South Korea), PhD
(Brit Col)
Paper Science & Engineering

LAZARESCU, Ciprian

BSc, MSc, (Transilvania, Brasov) PhD (Brit Col)
Wood Physics and Drying

LI, Minghao

BSc, MSc, (Tongji, China) PhD (Brit Col)
Structural Engineering

PARK, So Young

BSc (Busan Nat, Korea), MSc, PhD (Chungbuk
Nat, Korea)
Tree Biotechnology

SALLES, Bruno

PhD (Brasilia, Brazil)
Enzymology Applied to Forest Product Biotechnology

SELLA KAPU, Nuwan

BSc (Peradeniya, Sri Lanka), MS, PhD (Penn State)
Lignocellulose to Ethanol/Co-Products Bioconversion

SKYBA, Oleksandr (Alex)

BSc, MSc (Kyiv Polytechnic Institute, Ukraine)
PhD, (Swiss Fed Institute of Tech., Switzerland)
Genomic Analysis of Wood

TOKAREVA, Olena

BSc, MSc (Zapiruzhzhya State Univ Ukraine), PhD
(Tufts)
Chemistry/Biotechnology

WATANABE, Ken

PhD (Tokyo, Japan)
Wood Physics and Drying

XU, Zhi Ming (William)
BEng (Nanjing, China), PhD (Western Ontario)
Chemical and Biochemical Engineering

ZHANG, Xuelian
BE, MS, (Beijing, China)
Wood Based Composites, Nano Composites

Visiting Scholars

SHEN, Fei
BS, MS, PhD Candidate, (Shenyang, China)
Biomass Energy Engineering

JORGENSEN, Henning
PhD (Denmark)
Biorefinery of Bioethanol

MYBURG, Alexander
PhD (N Carolina State)
Genetics and Forestry

ZHAN, Jian Feng
PhD (Northeast Forestry, China)
Wood Drying

ZHONG, Yuehua
BSc, PhD (Sichuan, China)
Forest Products Biotechnology

Adjunct Professors

BEATSON, Rodger
(BC Institute of Technology)
BSc, PhD
Pulp and Paper Chemistry

DAI, Chunping
(FP Innovations Forintek)
BSc, MSc, PhD
Wood Composite Products & Processing, Computer Modeling

GASTON, Chris
(FP Innovations Forintek)
BSc, MSc, PhD
Forest Products Marketing

HE, Minjuan
(Tongji University)
BSc, MSc, PhD
Timber Structures

MORRIS, Paul
(FP Innovations Forintek)
BSc, PhD
Preservation and Protection

OLIVEIRA, Luiz
(FP Innovations Forintek)
BSc, MSc, PhD
Wood Drying

Professors Emeriti

BARRETT, DJ
Professor Emeritus (2005)

GARDNER, JA
Dean Emeritus (1985)

KENNEDY, R
Dean Emeritus (1992)

PASZNER, L
Professor Emeritus (1999)

Staff

ANASTAS, Hiba
MSc (Brit Col)
Research Assistant/Technician

BRAUN, Jennifer
BSc, MSc, PhD (Cincinnati)
Research Scientist

BREMNER, Barbara
BA (Vic)
*Cooperative Education Coordinator/
Recruitment Officer*

CHIU, Jason
BSc (Brit Col)
Training and Continuing Education

CHUNG, Pablo
BSc (UNALM), MSc (Brit Col)
Research Scientist

CULLIS, Ian
BSc, MSc (Brit Col)
Research Assistant/Technician

FISHER, Karen
BEd (Ont)
Administrator

GO, Genevieve
BSc (De la Salle, Philippines) MBA (S Fraser)
Project Manager, Report Writer

GUNTHER, Lawrence
Engineering Technician

HASTINGS, Diana
BSc (Brit Col)
Research Assistant/Technician

HOANG, Sue Ann
BA (Brit Col)
Administrative Support 2

KALYNYAK, Peter
MSc (Ternopil Pedagogical, Ukraine)
Research Assistant/Technician

LEE, George
BSc (China), MSc (Oregon State)
Wood Engineer Scientist

ACHIEVEMENTS AND PLANS

LEUNG, Vincent

BSc (Brit Col), DipT (BCIT)
Technical Facilities Supervisor

LIM, Linette

Research Assistant/Technician

LIU, Winfield

BA (Brit Col)
Computer Support Specialist

MACDONALD, Iain

BA (Scotland), MA (Brit Col)
Managing Director, CAWP

PARK, Ji Young

PhD (Seoul Nat, Korea)

WONG, Debbie

BComm (Brit Col)
Senior Financial Specialist

YAN, Hui Jun

BS (Shandong Inst, China), MAS (Harbin, China)
Research Engineer

YANG, Li

BSc (Northeast Technology, China)
MSc (Idaho)
Research Scientist

ZHANG, Chao (Tom)

Research Assistant/Technician

Promotions

Drs Shawn Mansfield and John Kadla were promoted to professor (tenure).

Dr Taraneh Sowlati was promoted to associate professor (tenure).

ACHIEVEMENTS IN 2009 – 10

- The Wood Products Processing program achieved an enrolment of 104 undergraduate students with a new student intake of 32. There were seven international students.
- The co-op program continued as an integral and highly successful component of the Wood Products Processing program with 32 co-op work terms completed.
- Students from Dr Greg Smith's wood composites class represented UBC in the BC Wood Works/Canadian Wood Council annual engineering design competition. Our Wood Science team placed first in the report category and second and third in the performance trials category.
- Dr Shawn Mansfield was awarded the prestigious IUFRO Scientific Achievement Award. He also served as the Chair of the IUFRO Tree Biotechnology Conference Committee and Chair of IUFRO Working Party 2.04.06 – Molecular Biology of Forest Trees.

- Dr John Kadla was appointed as the Scientific Director for the NSERC Biomaterials and Chemicals Strategic Network. He also received the Hayashi Jisuke Award.
- Dr Phil Evans served as a Visiting Professor Swedish National Technical Institute and a Visiting Fellow in both the Department of Applied Mathematics and the School Environment & Society at the Australian National University.
- Dr Jack Saddler was awarded the LifeSciences BC Leadership Award. He also served as a Board member for the US Department of Energy - Bioenergy Progress.
- Dr Robert Kozak served as the Editor of the Journal of Forest Products Business Research, Associate Editor of the Canadian Journal of Forest Research and the Deputy Coordinator of IUFRO Working Group 5.10.100.
- Dr Callum Hill, Edinburgh, Napier University presented the 2010 Burgess-Lane Memorial Lecture entitled 'The potential for the use of modified wood products in the built environment'.
- Drs Kadla, Evans and Smith received new NSERC funding while Drs Avramidis, Breuil, Dai, Evans, Kadla, Lam, Mansfield, Sowlati, Saddler received ongoing NSERC funding.
- Drs Evans, Kadla, Lam and Smith received ongoing funding from the Value-to-Wood program.
- Dr Kadla received ongoing funding from the Sentinel Network NCE.

PLANS FOR 2010 – 11

- The close coordination of the activities of the Department and CAWP will continue. In order to compensate for an ongoing reduction in endowment revenues, efforts will continue to be made to develop a sustainable funding framework.
- An Associate Chair in Wood Building Design and Construction will be appointed at the assistant professor level. This position will be a joint appointment with the Department of Civil Engineering.
- Despite the challenging funding environment, faculty will continue to vigorously pursue diverse funding sources to support wood products research.



Western larch (*Larix occidentalis*) in a controlled climate chamber

CENTRE FOR ADVANCED WOOD PROCESSING



Iain Macdonald
BA, MSc

Managing Director
604.822.1472

iain.macdonald@ubc.ca

Pat Cramond, BAsC
Senior Instructor

Robert Fürst, M Dip
Senior Instructor

Taraneh Sowlati
BSc, MASc, PhD
Associate Professor

Barbara Bremner, BA
Coordinator, Co-op Education &
Acting Officer, Recruitment

Jason Chiu, BSc
Specialist, Technical

Karen Fisher, BEd
Administrator

Lawrence Günther
Technician, CAWP Lab

Sue Anne Hoang, BA
Administrative Support

Vincent Leung, BSc
Supervisor, Technical Facilities

Winfield Liu, BA
Specialist, Computers

**Centre for Advanced
Wood Processing**
Forest Sciences Centre
2900-2424 Main Mall
Vancouver BC V6T 1Z4
Phone: 604.822.6448
Fax: 604.822.9159
cawp@cawp.ubc.ca
www.cawp.ubc.ca

THE CENTRE FOR ADVANCED WOOD Processing (CAWP) is Canada's national centre for education, extension and research for the advanced wood products industries. The role of CAWP is to provide support to the BSc (Wood Products Processing) (WPP) program in the education and training of students with the capacity to lead and drive change in the industry; offer continuing education and lifelong learning programs aimed at enhancing the skills of existing industry employees; provide technical services to improve the product quality and manufacturing efficiency of SMEs; and to coordinate interdisciplinary applied research. CAWP is funded through an endowment, the CAWP Industry Partnership Program, various project grants, and cost recovery on services.

CAWP is supported by a large number of industrial equipment and technology suppliers, whose in-kind contributions of software, machinery, supplies, and services significantly enhance our facilities and the training and education experiences that CAWP is able to offer. A number of manufacturing companies also support CAWP annually through cash contributions to our industry partnership program.

CAWP has an internal Management Committee, established in 2007, to allow faculty members in the Department of Wood Science to provide input into the activities of CAWP, and it is active in planning and monitoring our technical and educational activities. CAWP also receives guidance from an external Advisory Board consisting of senior personnel from the wood products industry across Canada.

Educational Programs

The Wood Products Processing program remains the largest degree program in wood technology/wood science in North America. In 2009-10 there were 34 co-op work terms completed, reflecting a well-balanced geographical distribution across Canada in British Columbia, Alberta, Manitoba, Ontario, and Saskatchewan. International work terms were completed in Australia, Japan, and the United States. In addition to supporting WPP courses, CAWP provides facilities to support joint project-based courses involving students from Emily Carr University and the Wood Products Processing Program. In 2009 a joint course was held in which mixed student teams from the two institutions designed and built outdoor furniture to be used at hospitality stations at several of the 2010 Winter Olympic venues.

Continuing Education, Communication and Extension

CAWP offers two UBC Certificate Programs to industry professionals - the Industrial Finishing Certificate and the Kiln Drying Certificate. In 2009 CAWP completed the development of a new certificate program for the Wood Manufacturing Council. The program consists of eight 30-hour online course modules

that can be taken by entrepreneurs and management-track employees of wood manufacturing businesses to acquire key management concepts. The eight modules are: Sales and Marketing; Human Resources and Safety; Quality Management & Control; Business Finance & Investment Evaluation; Supply Chain Management; Factory Layout and Equipment Justification; Production Planning; and New Product Development. Authors from UBC as well as external specialists participated in the writing process, and extensive industry input was received via an industry steering committee and a pilot launch of the Quality Management & Control module. Starting in January 2010 the full suite of courses are being offered, with positive feedback industry learners. The latest certificate program rounds out a comprehensive range of lifelong learning programs that CAWP is able to offer decision makers and technical personnel in the wood products manufacturing industry.

In the summer of 2009 CAWP launched a new product development service that is being offered as part of the Business Innovation Partnership, a joint program delivered in cooperation with BC Wood Specialties Group and FP Innovations to provide business development services to the value added wood products industry in British Columbia. The program is funded by Forestry Innovation Investment, and the new service provides funding support for companies that need help with product design, engineering prototyping, cost-benefit analyses, and other related activities. Participating companies can access scientific and technical expertise from within CAWP and related units, and make use of CAWP's state-of-the-art range of CAD/CAM software and manufacturing equipment. In 2009-10 project assignments have included the development of a prefabricated housing module, the utilisation of CAD/CAM and CNC systems to design factory-built housing, and prototyping of consumer wood products and fine furniture. In 2010-11 CAWP aims to increase the number of companies that it services through the BIP program, and upcoming projects include the development of an innovative engineered building product for the timber frame market, the design of furniture and millwork products using reclaimed timber, and the prototyping of curved window components using 5-axis CNC technology. CAWP works with companies throughout North America on product development projects, though the unique funding arrangements of BIP are available to BC companies only.

CAWP's Canadian International Development Agency funded capacity-building project in South Africa will be completed in the summer of 2010. The collaboration with Stellenbosch University will continue through a new e-learning project to create a Postgraduate Diploma in Wood Products Science, and through collaborative research and cooperative education links that have developed as a result of the

six-year project. CAWP and Stellenbosch University are also involved in a major new initiative to assist Ghana's forest product sector with the creation of new education and training offerings for established companies, entrepreneurs, SMEs and university students. CAWP continues to respond to requests for assistance and collaboration from educational institutions, economic development agencies and industry groups worldwide.

In September 2009 CAWP held an industry conference on industrial wood finishing in Toronto at the Woodworking Machinery & Supply Expo in partnership with Vance Publishing. Further joint events are being planned.

Lastly, two projects linked CAWP to the Vancouver 2010 Olympic and Paralympic Winter Games. The first saw WPP students work in mixed teams with Emily Carr University's Industrial Design students to design and build outdoor furniture that was used in the Athlete's Villages and at some event venues to promote the Far Coast coffee brand. In the second project, which also involved students, CAWP's technical team machined the unique medal podiums and medal ceremony trays for the Games using its sophisticated CNC machines. The prototype podium will be displayed permanently at CAWP as a symbol of the innovative design and technological complexity that is a hallmark of today's wood products industry.

Research

CAWP's role under an integrated structure within the Department of Wood Science is to act as a conduit between the industry and academic communities in order to ensure that applied research activities within the department and CAWP fully reflect industry needs. CAWP is active in helping industry find solutions to current competitive challenges by linking them with researchers who may be able to provide avenues for change.

Several faculty members of the Department of Wood Science continue to receive funding for research projects from the NRCan-CFS Value-to-Wood program. These projects cover a wide range of themes, from corporate social responsibility to advanced finishing and building systems and from forest certification and life cycle analysis to advanced wood composites development.

PLANS FOR 2010 – 11

- Increase industry support for CAWP through our industry partnership program.
- Increase awareness and uptake of CAWP's Business Innovation Partnership activities among BC companies.
- Increase awareness and uptake of the WMC Management Training Certificate Program by Canadian and international audiences.

- Launch a new introductory-level e-learning course on the forest products value chain.
- Obtain funding for a comprehensive new education and training capacity-building project in Ghana.
- Continue collaboration with South African university partners to enhance education, training and industry services for South Africa's wood processing sector.
- Enhance informational displays within the CAWP public areas and meeting spaces to highlight innovative industry and student projects
- Leverage existing curricula and educational technologies to offer innovative new training programs in response to industry needs.

Centre Associates

Avramidis, Stavros	UBC
Barrett, David	UBC
Blyt, Christian	Emily Carr University
Bramer, Mark	Conestoga College
Breuil, Colette	UBC
Cohen, David	UBC
Dai, Chunping	Forintek
Ellis, Simon	UBC
Evans, Philip	UBC
Hartley, Ian	UBC
Kadla, John	UBC
Kataoka, Yutaka	FFPRI, Tsukuba, Japan
Kiguchi, Makoto	FFPRI, Tsukuba, Japan
Köster, Heinz	Fachhochschule Rosenheim
Kozak, Robert	UBC
Lam, Frank	UBC
Mai, Carsten	Univ of Göttingen
Mansfield, Shawn	UBC
McFarlane, Paul	UBC
Meincken, Martina	Stellenbosch Univ, South Africa
Militz, Holger	Univ of Göttingen
Morris, Paul	Forintek
Mortimer, John	Stellenbosch Univ, S.Africa
Prion, Helmut	UBC
Romilly, Douglas	UBC
Ruddick, John	UBC
Rypstra, Tim	Stellenbosch Univ, S.Africa
Schajer, Gary	UBC
Scholte, David	Consultant
Smith, Greg	UBC
Yellowly, Ian	UBC

CENTRE FOR APPLIED CONSERVATION RESEARCH



Sarah Gergel
BS, PhD
Co-Director
604.827.5163
sarah.gergel@ubc.ca



Peter Arcese
BA, MSc, PhD
Co-Director
604.822.1886
peter.arcese@ubc.ca

Centre for Applied
Conservation Research
Forest Sciences Centre
3004-2424 Main Mall
Vancouver, BC V6T 1Z4
Fax: 604.822.5410
www.forestry.ubc.ca/conservation

INCREASING DEMAND for natural resources makes the maintenance of healthy, sustainable forests a key challenge for the future. To address this challenge, Dr Fred Bunnell and Dean Clark Binkley established the Centre for Applied Conservation Biology in 1991. Over the past 19 years, our faculty, post doctoral fellows and graduate students have build a reputation for excellence in biodiversity conservation research. In 2001 we became the Centre for Applied Conservation Research (CACR) under the direction of Dr John Innes, reflecting a broader mandate to incorporate social and economic issues into applied conservation research. Drs Peter Arcese and Sarah Gergel now share CACR directorship and draw from across campus, and other universities, for collaborations improving the conservation of species, ecosystems, and landscapes and the responsible management of natural resources.

HIGHLIGHTS OF 2009 – 10 AND FUTURE EVENTS

Innovations in Applied Graduate Research: Forest Science Program Pilot Project

There is a perception among many managers that graduate students rarely gain meaningful experience with government, private sector or non-profit organizations. The Forest Science Program Pilot Project in Graduate Research was created in 2007 to address this gap. The initiative has been administered by the CACR and has awarded scholarships to students from three British Columbia Universities.

The program was established to encourage meaningful collaboration between graduate students, academics and forestry practitioners by attracting 10 top students to questions of immediate importance to private and public sector foresters. The selection team, chaired by the CACR, included researchers from four BC universities, industry, and the FIA-FSP Forest Science Board. In all, 58 researchers from government, industry and NGOs submitted sponsorship requests for a total of 120 research projects. From these, 10 projects were undertaken and received grants totaling \$15,000 in each of 3 years for PhD students, and \$10,000 in each of 2 years for MSc students. March 2010 marked the end of the FSP Pilot Program. The excellent accomplishments of graduate students and responses of sponsors to date suggest the program was highly successful in meeting its goal of encouraging applied research.

Ambassadors to Haida Gwaii / Queen Charlotte Islands: Spot Light on CACR Post-Doctoral Fellow

CACR has a history of attracting exceptional post-doctoral fellows and Dr Hilary Thorpe (NSERC PDF) is no exception. In addition to her research, Dr Thorpe has coordinated two recent educational initiatives on Haida Gwaii.

First, members of the Landscape Ecology Lab (Gergel) and the Tree-Ring Lab (Daniels, Geography) hosted a week-long Aerial Photo / Dendrochronology Workshop on Haida Gwaii in Summer 2009. This well-attended workshop for local managers provided training in cutting edge digital air photo techniques, the primary basis for many of the maps used in forest management. The workshop promoted collaborative opportunities among representatives from Haida Mapping, Ministry of Forests & Range, Parks Canada and many other islanders interested in historical ecology and management. The workshop was graciously funded by Environment Canada's Environmental Damages Fund.

Dr Thorpe also coordinated the first "Haida Gwaii Semester in Natural Resource Studies", an interdisciplinary undergraduate program offered through UBC Forestry by the Haida Gwaii Higher Education Society. The program ran from January to April 2010 and included courses taught by Dr Thorpe and four other CACR members. Pamela Perreault (PhD student) taught First Nations and Forests, Dr Gary Bull and Steven Northway (PhD student) instructed Socio-Economics of Forest-Dependent Communities, Andy MacKinnon (PhD student, MoFR) taught Rainforest Ecology and Management, and Dr Thorpe was the instructor of Case Studies in Haida Gwaii, an interdisciplinary seminar course. Thanks to the efforts of our Associate Dean Peter Marshall, Haida Gwaii Semester students received 15 upper-level credits from UBC. Several students from universities across Canada have applied to transfer to UBC Forestry for fall 2010 following their educational experiences in Haida Gwaii.

Future Events: Training of Global Stewards to Incorporate Local Knowledge

CACR will host an international workshop at the Resilience Centre in Stockholm focused on Incorporating Local Perspectives into Landscape Management. Support from UBC's Teaching and Learning Enhancement Fund will help us develop teaching tools for undergraduates in our Natural Resource Conservation Program. We will be developing a series of global case studies which incorporate and support local and indigenous perspectives on resilience and ecosystem services into our curricula.

Research Groups and Projects

Climate Change and Biodiversity

Fred Bunnell, founder and former director of CACR, and his colleagues continued their work on effects of climate change on biodiversity, primarily focused on wetlands. They also are assisting the BC Ministry of Environment and the forest industry with application of the recently adapted provincial conservation framework that was developed by Fred and co-workers, and with developing more cost-effective approaches to monitoring biodiversity.

Environmentalism in Canada

David Tindall and his research team recently conducted nation-wide social surveys of the general public, and environmental organization members, regarding attitudes about protected areas and parks, as well as other environmental issues. This is part of a larger project examining environmentalism in Canada.

Conservation and Development in Africa

Rob Kozak, Joleen Timko, and others have started the AFRICAD initiative which aims to pursue conservation-based approaches that address poverty alleviation and local livelihood development in forested areas of significant biodiversity value in sub-Saharan Africa.

Conservation Policy

Paul Wood has been continuing his work on the ethics and social acceptability of using genomic tools in reforestation, and has started on a separate project to examine the ethics of using genomic tools in salmon management. He and his students have also been working on stakeholder involvement in groundfish management, professional ethics, and how best to implement the Supreme Court's requirements for consultation and accommodation of First Nations' interests.

Remote Sensing, Biodiversity and Terrestrial Ecosystem Mapping

Nicholas Coops is leading projects applying remote sensing to forest growth and biodiversity issues, including modelling mountain pine beetle damage and mapping biodiversity using satellite data. Of recent interest is the integration of hyperspectral remote sensing and LIDAR data to produce a TEM-based classification of Gulf Islands National Park Reserve in BC. The Gergel Lab explored the utility of imagery from the QuickBird high-spatial resolution satellite to aid TEM in coastal BC, and explored the role of TEM misclassification error in influencing estimates of ecosystem productivity.

Wildlife Biodiversity after the Bark Beetle Epidemic

Since 1995, Kathy Martin and students have studied wildlife ecology in the interior mixed forests that support high biodiversity. Over 40% of wildlife species show significant population trends in relation to forest health with the largest change in resident cavity nesters. Current students will study the impacts on cavity nesters in post-beetle epidemic forests.

Belowground Ecosystem Group's Soil Biodiversity Research

Sue Grayston, Cindy Prescott, Suzanne Simard, Chris Chanway and students are exploring the links between the composition and diversity of soil microbial communities and key processes in the cycling of carbon and nutrients in forest ecosystems. Current projects include assessing variable retention harvesting as a tool to maintain soil

functions and productivity in coastal forests, fertilizing forests as a means of increasing sequestration of carbon in soil, recreating a functioning forest soil in reclaimed oil sands sites in Alberta, using stable isotope probing to identify keystone species in soil food webs.

Stream and Riparian Research Laboratory

John Richardson continues to lead collaborators on the ecology and management of riparian-stream ecosystems, including the influence of reserve strips, ecology of invertebrates and amphibians, and resource limitation in streams.

Centre for Forest Conservation Genetics

The Centre's mandate is to study population and ecological genetic structure of indigenous forest tree species, assess the current degree of genetic conservation in both nature reserves and collections, and evaluate genetic diversity in populations of forest trees to meet current and future environmental challenges. The CFCG is also the home of the climate model ClimateBC, and is undertaking a variety of research to predict the fate of BC's native tree populations and ecological zones in a rapidly changing climate.

Salmon Migration and Fish/Forestry Research

Scott Hinch and colleagues are using physiological biopsy telemetry and lab experiments to study salmon migration behaviour and swim performance, and reveal limitations to ocean and river survival. Long-term field experiments in both southern coastal and northern interior regions of BC are being used to study the impacts of riparian forest practices on fish and habitat in small streams, and the processes of recovery.

Sustainable Forest Management Research Laboratory

Led by John Innes, this lab is an interdisciplinary research unit focusing on sustainable forest management through an understanding of both human and natural systems. Research projects in Canada, China, Brazil, Mexico, Australia and South Africa focus on forest certification, criteria and indicators, effectiveness monitoring, climate change, cumulative impact assessment, geomorphologic processes, biodiversity and social and cultural indicators for resource-dependent and First Nation communities.

The Genetic Data Centre

Directed by Carol Ritland, this group conducts state-of-the art DNA genotyping and sequencing, including projects on coat colour and population structure of Kermode bears, killer whales on the west coast, Alaskan carnivores, western tent caterpillars and social spiders.

UNIVERSITY RESEARCH FORESTS



Bruce Larson
AB, MFS, PhD
Chair, Research Forests
Advisory Committee
604.822.1284
bruce.larson@ubc.ca

**Malcolm Knapp
Research Forest**
PO Box 21120
14500 Silver Valley Road
Maple Ridge, BC V2X 1P7
Phone: 604.463.8148
Fax: 604.463.2712

**Alex Fraser
Research Forest**
72 S. 7th Avenue
Williams Lake, BC V2G 4N5
Phone: 250.392.2207
Fax: 250.398.5708

**Aleza Lake
Research Forest**
3333 University Way
Prince George, BC V2N 4Z9
Phone: 250.960.6674/6339

THE FACULTY OF FORESTRY operates three Research Forests: The Malcolm Knapp Research Forest near Maple Ridge on the coast, the Alex Fraser Research Forest near Williams Lake in the central interior of BC and the Aleza Lake Research Forest, near Prince George (jointly operated with the University of Northern British Columbia).

The mission of the Research Forests is to support the Faculty of Forestry, other partner universities and research organizations in serving the people of BC through teaching and research. This is accomplished by hosting research from a variety of disciplines in order to create teaching opportunities for students from UBC, other post-secondary institutions and continuing education programs.

The location of the forests, covering eight diverse biogeoclimatic subzones and three tenure systems, offers a variety of research and education opportunities.

ACHIEVEMENTS IN 2009 – 10



**MALCOLM KNAPP
FOREST**
Paul Lawson
BSF, MBA, RPF
Manager
paul.lawson@ubc.ca

- Initiated 10 new research projects.
- Employed 2 forestry students on 4-month internships.
- Completed construction of the Norm and Betty Pelton Rotary Field, the Loon Lake outdoor activity shelter, and the Loon Lake Camp host residence.
- Increased Loon Lake facility use to 19,540 overnight stays in 2009 – an increase of 9% from 2008.
- Hosted the Faculty's Spring Field School in April and Conservation Field School in October.
- Hosted the IEA International Bioenergy Conference at Loon Lake in August.
- Hosted over 400 children and over 300 volunteers at the sixth Canadian Cancer Society Camp Goodtimes held at Loon Lake.
- Milled over 453,000 board feet of lumber at our sawmill facility, an increase of 3% from 2008.
- Completed silviculture surveys on 154 ha, brushing and deer protection installation on 16 ha, and planting of 65,235 trees on 45 ha.
- Constructed 2,879 meters of new road.
- Upgraded wireless internet service and added wireless VOIP phone service to Loon Lake.
- Negotiated and signed a Protocol Agreement between UBC and the Katzie First Nation as a commitment to work together on a wide variety of issues.
- Reduced full time staff from 9 to 8.



ALEX FRASER FOREST
Ken Day
BScF (Hons), MF, RPF
Manager
ken.day@ubc.ca

- Initiated 6 new research projects and reported on long-term in-house projects.
- Recorded 453 contact days for extension with 239 attendees, including Fall Field School.
- Provided 11 tours and 2 presentations for researchers, professionals, students, teachers and donors.
- Hosted a visiting scholar from the Instituto Nacional de Tecnologia Agropecuaria, Argentina, a German intern, and employed a short-term technician.
- A donor-supported small sawmill venture was considered but postponed in favour of pursuing collaboration with the BC Community Forest Association to provide extension services and promote Faculty expertise regarding forest management planning, forestry administration, data management, timber sales and wood products manufacturing.
- Silviculture: Juvenile Spacing 110.7 ha; Fuel Management Treatments 14.2 ha; Surveys 124.9 ha
- Spot graveled 4.2 km research access roads.
- Improved interpretive signage facilitating knowledge transfer and increased public awareness.
- Maintained recognition for consulting expertise regarding woody biomass management for biofuels, as well as urban/wildland interface fire hazard reduction planning and implementation. Extension, education and research services also in demand.
- Continued managing the application process for the Williams Lake Community Forest in cooperation with the Williams Lake Indian Band.
- Participated on boards for the Gavin Lake Forest Education Society, local Invasive Plant Committee, and Southern Interior Silviculture Committee.



ALEZA LAKE FOREST
Michael Jull
 BSF, MSc, RPF
 Manager
 jullm@unbc.ca

- Initiated 9 new research projects.
- Remeasured and maintained 36 growth and yield research plots.
- Hosted the 2009 Forest History Association of BC conference, field tour, and AGM.
- Inventoried coarse woody debris (CWD) loadings on ALRF recently-harvested areas under different utilization regimes.
- Conducted operational trial of on-block chipping of woody logging debris for bio-energy products.
- Upgrading and brushing of 4 km of forest roads
- Silviculture: planted 75,000 seedlings including spruce and Douglas-fir.
- Vegetation management on 16 hectares; surveys on 205 hectares.
- Completed partial-cutting of a group shelterwood demo site in a mature stand, and overstory-removal demo site in a 14-year-old uniform shelterwood.
- Completed a new ALRF timber supply analysis for 2010-2015, with review and input from the BC Ministry of Forests and Range.
- Completed 1st phase of total resource planning initiative.

Research Forests harvesting 2009

		Knapp	Fraser	Aleza	Total
Logging	m ³	22,661	0	25,000	47,661
	ha	34	0	69	103
Commercial Thinning/Partial Cutting	m ³	3,391	0	1,500	4,891
	ha	12	0	5	17
Road Right-of-Way	m ³	2,724	0	0	2,724
Salvage	m ³	158	0	0	158

Malcolm Knapp Forest utilized a variety of harvest methods in 2009 including ground based and skyline. Silvicultural systems ranged from clearcut with reserves to variable retention. Commercial thinning was carried out on three blocks, but was curtailed due to market conditions

PLANS FOR 2010 – 11

Malcolm Knapp Forest

- Install a wood fired dry kiln and a moulder at our sawmill.
- Increase Loon Lake visitor days to over 20,000 based on improved accommodations and marketing.
- Decrease timber harvest levels to 11,000 m³.
- Prepare a Woodlot License Plan for Woodlot 37.
- Prepare a carbon management strategy for the Forest.
- Reduce permanent staff from 8 FTEs to 5.
- Investigate and pursue bioenergy opportunities for Loon Lake.
- Upgrade main gate trails and signage with grant funding.

Alex Fraser Forest

- Continue diversifying revenue streams, including sales, services and funded projects.
- Continue to provide consulting services in fuel reduction treatments.
- Submit application for Williams Lake Community Forest.
- Work with the BC Community Forest Association to provide extension services and linkages to the Faculty of Forestry for Community Forests.
- Continue pre-commercial thinning via Job Opportunities Program.
- Pursue timber harvest if markets allow.
- Pursue bioenergy research opportunities and promote research opportunities more generally.
- Initiate forest cover inventory project.

Aleza Lake Forest

- Interpretive trail improvements and installation of signage.
- New bridge installation and major road upgrade on > 2 km of road.
- Conduct further planning for a forest research and education centre at the ALRF.
- Outreach to local rural communities.
- Participation in the Prince George Community Forest advisory committee.

UNIVERSITY RESEARCH FORESTS

FOREST STAFF

Cheryl Power
 BSF, RPF
 Resident Forester
 Malcolm Knapp Research Forest
 cheryl.power@ubc.ca

Cathy Koot
 BSc, RPBio
 Research Coordinator
 Alex Fraser Research Forest
 cathy.koot@ubc.ca

Melanie Karjala
 MNRES
 Research Coordinator
 Aleza Lake Research Forest
 karjala@unbc.ca

OFFICES, AWARDS AND DISTINCTIONS

A LONGSIDE THEIR TEACHING and research commitments, most Faculty members have committee responsibilities with off-campus organizations and groups. These involvements are listed below together with various distinctions and awards (in bold-face type) bestowed on Faculty members during the past year.

AITKEN, Sally

- **Killam Teaching Award for Forestry (2010)**
- **Canadian Institute of Forestry Scientific Achievement Award.**
- Associate Editor, Tree Genetics and Genomes.
- Member, WT Adams Symposium Organizing Committee, Western Forest Genetics Association 2009.

BULL, Gary Q

- Member, Worldwide Fund for Nature Forest Carbon Standards Committee.
- Chair, Quantification Committee, North American Forest Carbon Standards Committee.
- Member, Scientific Advisory Committee – Mistra Foundation, Sweden.
- Scientific Advisor, Chinese State Forest Administration.

COOPS, Nicholas

- Editor in Chief, Canadian Journal of Remote Sensing.

EL-KASSABY, Yousry

- **IUFRO Scientific Achievement Award.**
- Associate Editor, Canadian Journal of Forest Research.
- Taskforce Coordinator, IUFRO Forests and Genetically Modified Trees.
- Member, Editorial Board, International Journal of Forestry Research.

EVANS, Phil

- BC Leadership Chair.
- Member, Editorial Board, International Wood Products Journal.
- Visiting Fellow, Dept Applied Mathematics, The Australian National University.
- Visiting Professor, Swedish National Technical Institute.
- Member, Organizing Committee, Pacific Rim Bio-based Composites Symposia.
- Fellow, International Academy of Wood Science.
- Member, Editorial Board, Wood Science and Technology.

GUY, Rob

- Senior Director, Canadian Society of Plant Physiologists.
- Managing Editor, Trees Structure and Function.
- Member, Forest Genetics Council of BC.

GERGEL, Sarah

- Co-Director, Centre for Applied Conservation Research.
- Councillor-at-Large, US International Association for Landscape Ecology.

GRAYSTON, Sue

- Canada Research Chair in Soil Microbial Ecology.
- UBC Killam Faculty Research Fellowship.
- Associate Editor, Soil Biology & Biochemistry.
- Associate Editor, Canadian Journal of Soil Science.

HAMELIN, Richard

- Senior Editor, Phytopathology.
- Section Editor, Canadian Journal of Plant Pathology.
- Associate Editor, Phytopathology.
- Member, Evaluation commission, Centre de Recherche en Agriculture et Développement, Analyse et maîtrise du risque lié aux bioagresseurs dan les écosystèmes tropicaux, Montpellier, France.

HINCH, Scott

- Member, Board of Directors (Council) for the Ocean Telemetry Network.
- Canada's Representative, Scientific Advisory Committee for the Ocean Telemetry Network Western.

INNES, John

- Associate Editor, Journal of Environmental Management.
- Associate Editor, Environmental Conservation.
- Member, Editorial Advisory Board, Forest, Snow and Landscape Research.
- Associate Editor, Dendrochronologia.
- Member, Editorial Board, Forestry.
- Member, Editorial Advisory Board International Forestry Review.
- Member, Editorial Advisory Board, BC Journal of Ecosystem Management.
- Member, Editorial Advisory Board, Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources.
- Member, Committee for Research Evaluation Board of Experts, Italy.
- Member, Advisory Committee, C-Questor Scientific.
- Lead Author, Collaborative Partnership on Forests, Team of Experts on Adaptation of Forests to Climate Change.

- Member, Publications Committee, Commonwealth Forestry Association.
- Vice Chair, Commonwealth Forestry Association.
- Chair, FORREX International Committee.
- Member, Interdisciplinary Committee, World Cultural Council.
- Member, IUCN/SSC Sustainable Use Specialist Group.
- Member, IUFRO 2010 Congress Scientific Committee.
- Vice President, IUFRO.
- Member, IUFRO Honours and Awards Committee.
- Member, IUFRO Management Committee.

KADLA, John

- **Hayashi Jisuke Award.**
- Canada Research Chair in Advanced Biomaterials.
- Editor, Journal of Wood Chemistry and Technology.
- Fellow, International Academy of Wood Science.
- Member, Executive Committee, ACS CELL Division.
- Associate Editor, Holzforschung.
- Adjunct Professor, NC State University.
- Member, INWFPPC Scientific Program Committee.
- Member, ISETPP Scientific Program Committee.
- Member, ISWPC Scientific Program Committee.

KOZAK, Rob

- Deputy Coordinator, International Union of Forest Research Organizations, Working Group.
- Member, UN Economic Commission for Europe, Team of Specialists on Forest Products Marketing.
- Associate Editor, Canadian Journal of Forest Research, Editorial Board.
- Editor, Journal of Forest Products Business Research.

KRZIC, Maja

- **CNIE Award of Merit in the Media Festival by the Canadian Network for Innovation in Education.**
- Western Counselor, Canadian Society of Soil Science Executive.

LEMAY, Valerie

- Adjunct Professor, Beijing Forestry University.
- Co-ordinator, IUFRO 4.01.
- Council Member, Association of BC Forest Professionals.
- Guest Editor, Canadian Journal of Forest Research.

- Associate Editor, Forest Science.
- Associate Editor, The Forestry Chronicle.
- Member, Organizing Committee, IUFRO Extending Forest Inventory and Monitoring Conference, Quebec, 2009.
- Member, Organizing Committee, IUFRO Meeting Multiple Demands Conference, Australia.

MANSFIELD, Shawn

- **IUFRO Scientific Achievement Award.**
- Canada Research Chair in Wood and Fibre Quality.
- Associate Editor, Holzforschung.
- Associate Editor, BioEnergy Research.
- Associate Editor, Journal of Industrial Microbiology.
- Member, International Scientific Committee for the International Conference on Biotechnology in the Pulp and Paper Industry.
- Chairperson, 2009 IUFRO Tree Biotechnology Symposium.
- Chairperson, IUFRO Working Party 2.04.06 – Molecular Biology of Forest Trees.
- Member, Canadian Society of Plant Physiologists.

MARSHALL, Peter

- President/Immediate Past President, Canadian Institute of Forestry.
- Associate Editor, Forestry Chronicle.

MARTIN, Kathy

- Associate Editor, Studies in Avian Biology.
- Associate Editor, Avian Conservation and Ecology.
- Member, Committee, CAGS/UMI Distinguished Dissertation Awards for Engineering, Medical Sciences and Natural Sciences to select top PhD thesis for Canada.
- Member, Canadian Society of Ecology and Evolution Council.
- Member, National Science Advisory Council, Bird Studies Canada.
- Member, Williamson's Sapsucker, Recovery Team.

MITCHELL, Stephen

- Coordinator, IUFRO 8.01.11 'Wind and Trees' section.
- Member, Scientific Committee – International Conference on Wind Effects on Trees, Freiburg, Oct 2009.
- Editor, Forestry – An International Journal of Forest Research.

MOORE, Dan

- Canadian Representative, International Association of Hydrological Sciences.
- Member, College of Reviewers, MITACS.

PRESCOTT, Cindy E

- Deputy Editor-in-Chief, NRC Press.
- Member, Future Forest Ecosystems Scientific Council.
- Associate Editor, Ecosystems.
- Member, Editorial Board, Acta Universitatis Carolinae Environmentalica (Prague).

RICHARDSON JS

- Associate Editor, Journal of Applied Ecology.
- Associate Editor, Canadian Journal of Fisheries and Aquatic Sciences.
- Associate Editor, Washington State Fish and Wildlife Riparian Trial.

RITLAND, K

- Member, Editorial Board, Heredity.

SADDLER, Jack

- **LifeSciences BC Leadership Award.**
- Fellow, Royal Society of Canada.
- Editor, World Journal Microbiology and Biotechnology.
- Task Leader, IEA Biotechnology Network.
- Member, US DoE Biofuels Review Program.
- Board Member, Cellulosic Biofuels (CBioN) network.
- Project Leader, GenomeBC.
- Member, BC Bioenergy Network.
- Board Member, Alberta Innovates Bio Solutions.
- Board Member, LifeSciences BC.
- Board Member, NSERC Bioconversion Network.
- Member (Reviewer), Scientific Committee of the 17th European Biomass Conference and Exhibition.
- Member, Scientific Advisory Board, Mascoma Corporation.
- Member, Scientific Advisory Board, Lignol Corporation.
- Member, Innovative Clean Energy (ICE) Fund Governance Committee.
- Board Member, US Department of Energy, Bioenergy Progress.
- Leader, IEA Bioenergy Liquid Biofuels Task 39 Leader.

SOWLATI, Taraneh

- Member, Association of Professional Engineers and Geoscientists of British Columbia.
- Council Member, Canadian Operational Research Society.
- Chair, Membership Committee, Canadian Operational Research Society.
- President, Canadian Operational Research Society, Vancouver Chapter.
- Member, College of Reviewers, MITACS.
- Member, Editorial Board, International Journal of Data Analysis Techniques and Strategies.
- Member, Editorial Board, International Journal of Applied Management Science.

SHEPPARD, Stephen

- **Peter Wall Distinguished Scholar in Residence.**
- Member, Landscape Research Group, UK.
- Member, International Association of Society and Natural Resources, USA.
- Member, West Vancouver Climate Action working Group.
- Member, Real Estate Institute of British Columbia, Climate Change Advisory Panel.
- Member, Editorial Review Board, Landscape Journal.
- Theme-leader, Social Mobilisation Research Theme with Pacific Institute for Climate Solutions.

SIMARD, Susan

- Member, Editorial Board, Forest Ecology and Management.
- Referee, Government of Sweden Infrastructure Grants for Forestry and Mining.
- Member, Organizing Committee, Pacific Regional Soil Science Society.
- Invited Expert, Scoping Committee, US Dept of Energy: Next-Generation Climate Change Ecosystem Experiment: Arctic Tundra.

TINDALL, David

- Editor, ASA Digital Area Editor for Teaching and Learning Materials Related to "Social Networks".
- Associate Editor, Korean Journal of Canadian Studies.

TROSPER, Ron

- Subject Editor, Ecology and Society.

WOOD, Paul

- Member, Board of Referees, Environmental Ethics.



Forestry experiment in UBC's horticultural greenhouse

EXTRAMURAL FUNDING AND SPONSORED RESEARCH



Cindy E Prescott
BSc (Hons), MSc, PhD
Associate Dean
Graduate Studies and Research
604.822.4701
cindy.prescott@ubc.ca

INCOMES

Research funding in the Faculty of Forestry was not immune to the economic troubles of the past year, particularly funding from provincial programs. Between April 1, 2009 and March 31, 2010 members of our faculty were awarded a total of \$12.2 million in research funding. This represents a decrease of 9.4% over the previous year.

Federal funding was up by 12.5% and represented 45.8% of our total funds received. Tri-Council (NSERC and SSHRC) award were up by 17.5%. Members of the faculty held 23 NSERC Strategic grants, 3 Collaborative Research and Development grants, 1 Special Research Opportunity grant, 1 Industrial Research Chair, 31 Discovery grants and 4 SSHRC grants for a total Tri-Council funding of \$3.2 million. Natural Resources Canada, Environment Canada and Parks Canada contributed a combined total of \$1.07 million in support of 19 research projects. Canada Research Chair awards (Coops, Grayston, Kadla, Mansfield) contributed another \$400,000. Agriculture and Agri-Food Canada provided \$389,742 in support of ABIP, the Agriculture Bioproducts Innovation Program (Saddler).

Provincial funding dropped by 23.5% in 2009/10. Overall provincial funding was \$5.3 million, down from almost \$7 million in the previous year. Provincial funding represented 43.5% of our total research funding. Over one-third of our provincial funding was in the form of research awards through Genome BC (10 projects totaling over \$1.8 million). The BC Ministry of Forests and Range funded 12 projects for a total of \$1.2 million (a drop of 26.1% from 2008/09). The FIA-Forest Science Program (FSP) funded an additional 22 projects, down from 49 in the previous year, for a total of almost \$1.1 million (a decrease of 52.5% over the previous year). Forestry Innovation Investment funds supported 3 projects for a total of \$585,588, a drop of 13.9% over funds received in 2008/09.

Private funding support for research contributed \$942,500 through 27 projects. The largest indus-

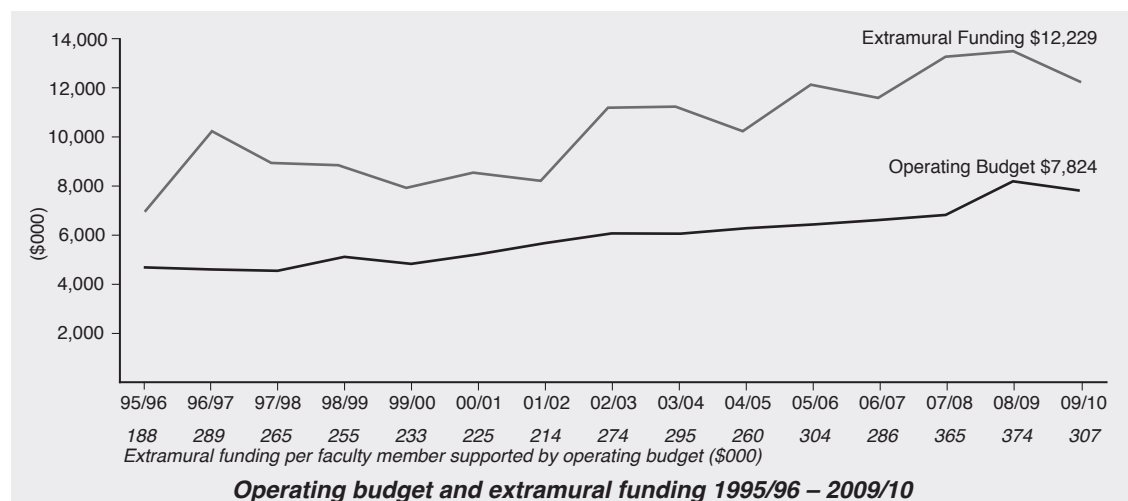
<i>Extramural funding sources 2009 – 10*</i>			
Source	\$000	Count	%
Federal			
Tri-Council	3,151	67	25.8
Natural Resources Canada	603	13	4.9
Environment Canada & Parks Canada	463	6	3.8
Canada Research Chairs	400	4	3.3
ABIP	390	1	3.2
CFI/KDF	356	9	2.9
Network of Centres for Excellence	235	8	1.9
<i>Subtotal</i>	<i>5,597</i>	<i>108</i>	<i>45.8</i>
Provincial			
Genome BC	1,856	10	15.2
BC Ministry of Forests & Range	1,160	13	9.5
Forest Science Program	1,094	22	8.9
Forestry Innovation Investment	586	3	4.8
Forest Genetics Council	147	2	1.2
Government of the Yukon	131	5	1.1
SRD Alberta	120	2	1.0
BC Innovation Council	99	1	0.8
Other	124	10	1.0
<i>Subtotal</i>	<i>5,318</i>	<i>68</i>	<i>43.5</i>
Private			
Industry	588	26	4.8
Other	354	8	2.9
<i>Subtotal</i>	<i>942</i>	<i>34</i>	<i>7.7</i>
International			
	371	13	3.0
Total	12,229	223	100

* Excluding endowments.

try supporters were the Foothills Research Institute who funded one project (Coops) and the Coast Forest Products Association who funded 2 projects (Avramidis and Lam). Overall, private funding for research was down by 24.9% over the previous year.

International funds in support of research were up by 18.3% for a total of \$371,471 backing 10 projects (up from 6 projects in the previous year).

We also received endowment income of \$1.2 million (down by 3.5% from the previous year). This funding is provided by endowments originally set up by Forest Renewal BC, as well as from private sectors.



OUTCOMES

In the past year faculty members authored 248 articles in 146 peer-reviewed journals.

Faculty members (Coops, Guy, Kadla, Kozak, Hamelin, Innes) serve as senior editors for 6 international peer-reviewed journals (Canadian Journal of Remote Sensing, TREES – Structure and Function, Journal of Wood Chemistry and Technology, Journal of Forest Products Business, Forestry: An International Journal and Phytopathology). One faculty member (Prescott) was recently appointed as the Deputy Editor-in-Chief of the National Research Council Press. As well, 15 faculty members serve as associate editors of 23 different journals and 9 individuals serve on editorial boards of 15 journals across the spectrum of forest-related journals.

Faculty members made presentations at close to 50 scientific conferences outside Canada including Korea, China, New Zealand, Switzerland, Great Britain, Japan, Argentina, Germany, France,

French Guyana, Greece, Austria and the USA. Fifty-one talks were given to professional groups within Canada.

During the past year 23 faculty members welcomed 64 visiting researchers from 31 countries. Twenty-three faculty members hosted a total of 44 post-doctoral fellows.

Twenty-five of our faculty members were engaged in a total of 56 grant reviews for outside funding agencies during the year.

During the past year, researchers in the Faculty of Forestry were cited 25 times in the media. These research stories included diverse topics such as saving BC's forests in the light of climate change, the mountain pine beetle fungus genome, forest fires in BC, wooden podiums for the Olympic games, energy and biofuels and forest industry emissions in northern BC.

The following list reflects research funding obtained between April 1, 2009 and March 31, 2010.

AITKEN, Sally

- Towards a framework for the operational assessment of ecological resilience in temperate and boreal ecosystems (**BCMof&R \$10,000**)
- Population genomics of cold adaptation in spruce (**NSERC \$34,000**)
- Potential impacts of climate change on the distribution of ecosystems and tree species in BC (**BCMof&R \$40,000**)
- Conifer hybrid zones as genomic laboratories for adaptation to new climates (**Genome British Columbia \$110,903**)
- Proposal to establish a Centre for Forest Gene Conservation at the University of British Columbia (**BCMof&R \$165,000**)
- Climate maps for climate based seed transfer (Future Forest Ecosystems Scientific Council projects) (**\$10,000 BCMof&R**)

ALILA, Younes

- Forest management effects on flooding in rain-on-snow coastal British Columbia: an innovative experimental-numerical modelling approach (**NSERC \$39,000**)

ARCESE, Peter

- Long-term population change in glaucous-winged gulls of the Georgia Basin (**Environment Canada \$12,000**)
- Application of ecological and evolutionary theory to the conservation of populations and species (**NSERC \$48,300**)

AVRAMIDIS, Stavros

- Pasteurization of lumber using dielectric heating (**Council of Forest Industries of British Columbia \$12,495**)
- Modeling of wood thermo-sorptive behavior with artificial neural networks (**NSERC \$28,000**)
- Eliminating wet-spots in BC coastal hemlock lamstock. Phase 2: evaluation of NIR technology to detect wet-spots (**co-investigator**) (**Coast Forest Products Association \$37,260**)
- RF heating for phytosanitation of green logs and lumber (**Canada Wood \$39,000**)
- Assessment and optimization of radio frequency heating technology as treatment to protect Canadian green log and timber exports by killing microbes and other pests (**NSERC \$146,400**)

BREUIL, Colette

- Exploring how the mountain pine beetle fungal associate *Ophiostoma clavigerum* overcomes lodgepole pine defenses (**NSERC \$30,000**)
- Indicators of conifer forest health in bark beetle-vectored fungal epidemics (**NSERC \$80,000**)
- Mountain pine beetle epidemic – phase 1 (**Genome BC \$192,500**)
- Genomics-enhanced forecasting tools to secure Canada's near-term lignocellulosic feedstock supply for bioenergy using the mountain pine beetle (**Genome BC \$226,315**)

BUNNELL, Fred

- Developing and validating habitat-based management models for species at risk in northeastern BC (**BCMof&R \$21,416**)
- Mountain pine beetle: A synthesis of the ecological consequences of large scale disturbances on sustainable forest management (**NRC \$27,500**)
- Using few species to assess the sustainability of many species (**BCMof&R \$34,293**)
- Future vegetation structure and vertebrate distributions based on changes in moisture balance and temperature (**BCMof&R \$47,371**)

CARROLL, Allan

- Towards a framework for the operational assessment of ecological resilience in temperate and boreal ecosystems (**BCMof&R \$7,000**)

CHAN-MCLEOD, Ann C Allaye

- An experimental study of variable-retention harvest methods on forest birds (**BCMof&R \$55,961**)
- Integrating climate change adaptation strategies with sustainability and socioeconomic objectives for the Quesnel timber supply area (**BCMof&R \$85,655**)

CHANWAY, Chris

- Nitrogen balance in pine forests: Comparing the efficacy of nitrogen fixing endophytes above and below ground (**NSERC \$15,000**)

COHEN, Stewart

- Impacts of climate change in the Columbia River Basin (**Columbia Basin Trust \$19,000**)

COOPS, Nicholas

- Canada Research Chair in Remote sensing (**CRC \$100,000**)
- LiDAR sampling context and trial (**CFS \$15,000**)
- Segmentation and classification of very high spatial resolution satellite imagery (**NRC \$23,000**)
- Estimate the above ground biomass and carbon content of the boreal forest of NA (**Caelum Research Corporation \$27,615**)
- Canadian carbon program: 3-PG modelling (**Canadian Foundation for Climate and Atmospheric Sciences \$30,000**)
- A monitoring system for nearshore aquatic habitats (**MITACS, NCE \$30,000**)
- Detection of vegetation canopy stress dynamics using integrated near-ground and airborne remote sensing data over coastal and boreal forests (**NSERC \$31,500**)

- BioSpace – NERIS acquisition and analysis enabling regional implementation and demonstration (**CFS \$31,500**)
- Mapping of composite burn index for Canadian parks from remote sensing (**Parks Canada Agency \$34,364**)
- Detection of vegetation canopy stress dynamics using integrated near-ground, and airborne remote sensing data over coastal and boreal forests (**NSERC \$40,000**)
- Remote sensing of forest functioning and structure (**BCKDF, CFI \$118,500**)
- Evaluation of LiDAR-derived estimates of tree and stand parameters as predictors of fibre quality (**NRC \$60,000**)
- Image analysis to support grizzly bear mountain pine beetle research (**Foothills Research Institute \$73,000**)
- Derivation of landscape scale solar radiation potential for renewable energy strategies (**NSERC \$24,500**)

DAI, Chunping

- Modeling bonding properties of wood-based composites (**NSERC \$23,100**)

DAY, Ken

- Alex Fraser Research Forest (**BCMof&R \$31,598**)

EL-KASSABY, Yousry

- Industrial Research Chair: Applied Forest Genetics and Biotechnology (**FERIC, Forest Genetics Council of BC, NSERC, industry \$262,000**)
- Elucidating conifer juvenility through functional genomics (**co-investigator**) (**The Minister of Sustainable Resource Development, Alberta \$100,000**)
- Applied forest genetics and biotechnology (**Forest Genetics Council of BC, BCMof&R, Genome BC, NSERC Discovery, \$351,000**)
- Optimized *Populus* feedstocks and novel enzyme systems for a British Columbian bioenergy sector (**co-investigator**) (**Genome BC \$186,115**)
- Molecular breeding using forest trees as a model (**NSERC \$39,000**)

EVANS, Phil

- Wood products processing education (**AUCC \$83,375**)
- Infrastructure operating funds (**CFI \$5,437**)
- ForValueNet project 4.3: Improving the performance of natural finishes on Canada's boreal wood species (**NSERC \$19,500**)

- ForValueNet Project 4.1: Plasma treatment to improve the surface finishing characteristics of boreal wood species (NSERC \$22,250)
- Wavelength dependent photodegradation of wood (NSERC \$30,030)
- Integrated approach to creating durable clear finishes for wood (NSERC, Arclin \$117,000)
- Development of a simple test to predict the surface cracking of coatings on cabinets (NRC \$49,940)

GERGEL, Sarah

- Yeendoo nanh nakhweenjit k'art' ahanahyaa – Environmental change and traditional use of the Old Crow flats in northern Canada (NSERC \$8,000)
- Multi-scale assessment of river-floodplains (NSERC \$17,500)
- Air photo training workshop and extension activities (Environment Canada \$19,000)
- Analysis of historical aerial photos of the Interior Columbia Basin (NOAA \$20,685)

GRAYSTON, Sue

- Canada Research Chair in Soil Microbial Ecology (CRC \$100,000)
- Stable isotope and molecular biology laboratory for the identification and development of indicators of forest sustainability (CFI \$12,846)
- Green Crop Research Network – 2d “Transforming plant carbon into soil carbon: process level controls on carbon sequestration” (NSERC \$20,000)
- Potential of forest fertilization to alleviate effects of climate change-induced insect infestation (NSERC \$31,200)
- Developing a new indicator of soil functioning for use in designing variable-retention harvesting (BCMoF&R \$57,321)
- Microbial diversity and function in forest soils and the influence of rhizosphere carbon flow (NSERC \$71,000)
- Green tree retention as a tool to maintain soil microbial diversity and function after harvest (NSERC \$67,100)
- Stable isotope probing and molecular mining to ascertain keystone, functioning microbes in forests (UBC Killam Faculty Research Fellowship \$18,000)

GUY, Rob

- Poplar research program (The Minister of Sustainable Resource Development, Alberta \$20,000)

- Comparative physiology of plant adaptation: C and N isotope discrimination and trade-offs in traits related to resource acquisition in black cottonwood (NSERC \$44,000)
- Optimized *Populus* feedstocks and novel enzyme systems for a British Columbian bioenergy sector (co-investigator) (Genome BC \$186,115)
- Elucidating conifer juvenility through functional genomics (co-investigator) (The Minister of Sustainable Resource Development, Alberta \$100,000)

HAMELIN, Richard

- Elucidation of rust life-cycle using molecular approaches (NSERC \$20,000)
- Risk assessment of *Septoria musiva* (BCMoF&R \$70,200)
- SPP system (Genome BC \$122,792)

HARSHAW, Howard

- Sustainable forest management public opinion survey: Prince George TSA (Canadian Forest Products Ltd. \$16,992)

HINCH, Scott

- Increasing the sustainability of multi-sector pacific salmon fisheries in coastal rivers of British Columbia by quantifying and reducing mortality of released fish (NSERC \$18,700)
- Climate warming and high salmon migration mortality (NSERC \$232,000)
- Genomics tools for fisheries management (co-investigator) (Genome BC \$257,328)
- Salmon and water transport (NSERC \$62,740)

INNES, John

- Coarse/fine filter biodiversity linkages in the Champagne and Aishihik Traditional Territory (Government of the Yukon \$8,000)
- SFM in beetle affected forests of the Yukon: confronting rapid ecological and socio-economic change (Government of the Yukon \$8,000)
- Identification of management indicators for the Teslin Tlingit traditional territory and application to State of Yukon Forests reporting (Government of the Yukon \$8,000)
- CONFOR West 2010 (SFM NCE \$11,400)
- Development of appropriate economic and social indicators of sustainable forest management (BCMoF&R \$36,543)
- Impacts of forestry property markets on the livelihoods of local people in China (SSHRC \$45,010)

- Assessing the potential climate change impacts of the susceptibility of the pine inventory to mountain pine beetle attack (**Government of the Yukon \$50,000**)
- A retrospective study looking at the relationship between levels of retention and lichen abundance in historic harvesting in the Lewes marsh area (**Government of the Yukon \$57,240**)
- Impacts of changes in forest health on the cultural and social values associated with forests (**SSHRC \$78,900**)
- Climate change adaptation research for forest and rangeland ecosystems: resiliency implications at the landscape level. (**BCMoF&R \$83,926**)
- Development of the Chinese national sustainable forest management systems and the national forest certification standard (**BCIC \$99,225**)

KADLA, John

- Canada Research Chair Tier II (**CRC \$100,000**)
- Renewable, recyclable and lightweight structural prototype greener auto parts (**The Automobile of the 21st Century, NCE \$17,250**)
- Lignocellulosics as precursors of high performance biopolymer structures (**USDA \$34,478**)
- SENTINEL research network – Nanoscale fibrous structures through electrospinning of novel cellulosic systems (**NSERC, industry \$85,500**)
- Advanced materials from natural polymers (**NSERC \$76,000**)
- Laboratory for characterization of novel lignocellulosic materials (**CFI, BCKDF \$196,100**)
- Lignin-based advanced materials as part of a pulp and paper biorefinery (**NSERC \$142,500**)
- Biomaterials and chemicals strategic research network (**NSERC \$119,700**)
- High-strength wood composite materials through nanotechnology (**NRC \$66,700**)

KIMMINS, Hamish

- Development of tree ring – climate relationships boreal forests (**MITACS \$15,000**)
- Application of habitat suitability models in boreal forest reclamation (**MITACS \$15,000**)

KOZAK, Rob

- Rethinking sustainable supply chains: A case study of paper and digital media (**NSERC \$15,000**)
- Forests and communities in transition (**co-investigator**) (**Real Estate Foundation of BC \$3,750**)
- Assessing the enabling conditions and constraints facing alternative business models on publicly held forestlands: Case studies in Canada and central and west Africa (**SSHRC 45,600**)
- Value chain optimization (**co-investigator**) (**\$954,200**)
- Using red alder as an adaptation strategy to reduce environmental, social and economic risks of climate change in coastal BC (**co-investigator**) (**BCMoF&R \$159,953**)
- Reducing vulnerability and susceptibility through increased understanding: Health and environmental interactions of forest-dependent HIV/Aids affected African households (**SSHRC \$38,850**)
- Reviewing decades of socio-economic impact assessment in rural BC: A preliminary assessment (**SSHRC \$36,457**)

KRCMAR-NOZIC, Emina

- Uncertainty in adaptation to climate change in forest management: selected case studies in British Columbia (**BCMoF&R \$55,723**)

KRZIC, Maja

- Soil: Charting new territory in high school education (**NSERC/PromoScience \$15,000**)

LAM, Frank

- For ValueNet – Utilization of trembling aspen as lamstock in gulam posts (**NSERC \$7,375**)
- Plant layout, economic study of Canadian cross laminated timber development (**MITACS \$15,000**)
- Seismic performance of post and beam buildings in Japan (**Coast Forest Products Association \$17,280**)
- Performance of OSB, rimboard, and OSL (**Ainsworth Engineered Canada LP \$21,581**)
- Performance of glulam post (**CST Innovations Ltd. \$24,500**)
- Reliability of timber structural system under seismic loading (**NSERC \$35,000**)
- Study of production of laminae and performance of laminated structural products from BC Coastal hemlock (**FII Ltd. \$208,450**)

- Development of cross lamination technology for MPB engineered wood products (**FII Ltd. \$217,248**)
- Size effect adjustment factor of glulam (**NRC \$66,420**)

LARSON, Bruce

- Develop protocols for evaluating, treating, and monitoring the forest of San Juan Island National Historical Park (**National Park Service \$6,279**)
- Crown competition, crown efficiency, tree growth and site type: Quantification with terrestrial LIDAR (**BCMoF&R \$39,567**)
- Promotion and coordination of research under Adaptation and Impacts Research Division (**Environment Canada \$80,000**)
- Using red alder as an adaptation strategy to reduce environmental, social and economic risks of climate change in coastal BC (**BCMoF&R \$138,395**)

LEMAY, Valerie

- Modelling the development of coastal BC stands: An individual tree model linked to a variable retention microclimate model (**Island Timberlands \$27,964**)

LYONS, Kevin

- Developing a remotely operated falling wedge (**WorkSafe BC \$32,280**)

MACDONALD, Iain

- Business Innovation Partnership (**FII Ltd. \$159,890**)

MANESS, Thomas

- An agent-based model to assess the climate mitigation potential of forest-based bioenergy projects (**NSERC \$24,000**)
- Optimized *Populus* feedstocks and novel enzyme systems for a British Columbian bioenergy sector (**co-investigator**) (**Genome BC \$16,1410**)

MANSFIELD, Shawn

- Canada Research Chair in Wood & Fibre Quality (**CRC \$100,000**)
- Green Crop Research Network - 2a "Manipulating lignin deposition" (**NSERC \$2,500**)
- Improved enzyme systems for woody biomass utilization (**USDA \$21,500**)
- For ValueNet – investigating the variability and the influence of site and stand dynamics on aspen wood quality traits (**NSERC \$22,958**)

- Biomass improvement through genomics in populus (**NSERC \$31,484**)
- Elucidating conifer juvenility through functional genomics (**co-investigator**) (**The Minister of Sustainable Resource Development, Alberta \$100,000**)
- Modelling the impacts of silvicultural treatments on the wood quality of interior spruce (**BCMoF&R \$110,000**)
- Optimized *Populus* feedstocks and novel enzyme systems for a British Columbian bioenergy sector (**co-investigator**) (**Genome BC \$1,283,404**)
- From source to sink – carbon allocation in poplar (**NSERC \$30,000**)
- WoW: Working on Walls (**co-investigator**) (**NSERC \$300,000**)
- Eliminating wet-spots in BC coastal hemlock lamstock. Phase 2: evaluation of NIR technology to detect wet-spots (**co-investigator**) (**Coast Forest Products Association \$37,260**)
- Laboratory for wood cell wall characterization (**CFI \$162,633**)

MARSHALL, Peter

- For ValueNet – Model evaluation and validation (**NSERC \$4,625**)
- Collection and analysis of individual tree growth & yield data in SBS and SBPS zones (**BCMoF&R \$60,000**)

MARTIN, Kathy

- Avian ecology and climate variability in Kluane alpine ecosystems (**NSERC \$10,000**)
- Alpine and forest landbird ecology and conservation research (**Environment Canada \$67,500**)
- Biodiversity maintenance in post-epidemic MPB forests (**NSERC \$82,082**)
- Ecology of Alpine and Northern birds (**NSERC \$35,300**)
- Cavity nesting youth internship (**Environment Canada \$12,000**)
- Climate forcing of alpine tundra ecosystems in southwest Yukon: A Canadian contribution to the international polar year (**NSERC \$31,000**)

MEITNER, Michael

- Integrated modelling and assessment of forest harvest patterns (**NSERC \$24,000**)

MITCHELL, Stephen

- Effects of root system configuration and partial excavation on tree stability (**Tree Research and Education Endowment Fund, Tree Fund, J Duling Grant \$10,000**)
- Drag and resistance in mangroves (**NSERC \$22,910**)
- Stanley Park Forest Management Plan (**City of Vancouver \$40,000**)
- Wind hazard assessment for forested state trust lands in coastal Washington State (**Washington State Natural Resources Agency \$4,540**)
- Windthrow modelling with BC Transmission Corp power outage database (**BC Transmission Corp \$88,452**)

NELSON, Harry

- Review of forest management models (**FPInnovations \$50,000**)
- Assessing alternative forest management strategies under climate change (**BCMof&R \$55,752**)
- Preparing for changes in hydrological cycles and surface hydrology in BC (**NRC \$57,500**)
- Validating impacts, exploring vulnerabilities, and developing robust adaptive strategies under the Kamloops future forest strategy (**BCMof&R \$369,470**)
- Novel pests (**CFS \$37,500**)

NELSON, John

- Decision support systems for forest land use planning (**NSERC \$25,000**)
- Carbon offset potential of UBC research forests (**UBC Sustainability Office \$35,000**)

NITSCHKE, Craig

- Climate change impacts on BC native tree species (**BCMof&R \$15,000**)

PRESCOTT, Cindy E

- Nutrient availability and late-stage decomposition (**NSERC \$42,000**)

RICHARDSON, JOHN S

- Review of possible effects of high water hardness on aquatic life (**BCMofE \$3,000**)
- Resource heterogeneity and the environmental basis of productivity in flowing waters (**NSERC \$19,700**)
- Assessing the sensitivity of streams to riparian changes: Does channel geomorphology determine how tightly forests and small streams are linked to downstream reaches? (**BCMof&R \$49,807**)

- Ecosystem functioning in small streams and their riparian areas in response to partial harvest riparian management (**BCMof&R \$51,931**)
- How does past climate predictability influence organismal and community resilience to climate change? (**New Zealand Foundation for Research, Science and Technology \$60,000**)
- Biogeochemical indicator and threshold for assessing ecological impacts of riparian forest management on downstream ecosystems (**BCMof&R \$61,796**)
- Conservation genetics and ecology of the threatened coastal giant salamander in managed forests of BC: Setting priorities for an integrative species recovery plan (**BCMof&R \$80,427**)
- Recovery processes of small streams and their riparian areas from clear-cutting and partial harvest riparian management (**BCMof&R \$122,992**)
- The role of riparian management on small stream technology (**NSERC \$12,000**)

RITLAND, Kermit

- Population genomics of plants (**NSERC \$54,000**)
- Conifer genome exploration (**Genome BC \$199,804**)
- Canadian pollination initiative (**NSERC \$42,000**)

RUDDICK, John

- Enhancing wood durability for above ground structures (**NSERC \$24,670**)

SADDLER, Jack

- Biofuels and bioenergy: A changing climate (**NRC \$20,000**)
- Bioprocessing Centre for Sustainable Fuels – Operations (**CFI \$20,403**)
- IEA Bioconversion Task (**IEA \$25,397**)
- Elucidating the substrate and enzyme factors that control the hydrolysis of lignocellulose (**NSERC \$28,870**)
- Conversion of lignocellulosic biomass to biofuels and chemicals (**NSERC \$161,075**)
- The development of biorefinery technologies for conversion of softwood residues to ethanol and co-products (**NSERC \$95,467**)
- Optimizing hydrolytic enzymes and lignocellulosic substrates toward maximizing the saccharification and fermentation of lignocellulosic biomass for bioethanol production. (**Genome BC \$159,628**)

- Conversion of lignocellulosic biomass to ethanol (**Environment Canada \$250,000**)
- Linking the process steps in the bioconversion of lignocellulosics to ethanol (**NSERC, Novozymes, Inc. \$421,263**)
- ABIP Network: Cellulosic Biofuel Network (**Agriculture and Agri-Food Canada \$389,742**)
- Development of integrated forest management and wood manufacturing decision-support systems for a value-added forest industry (**NSERC \$33,625**)

SOWLATI, Taraneh

- Modeling of off-gassing for wood pellets (**NSERC \$104,000**)

SEELY, Brad

- Representation of climate change impacts on forest growth in FORECAST (**BCMof&R \$66,528**)

SHEPPARD, Stephen

- Visualizing the industrial north: Exploring new ways to engage and inform the public on extremely large projects (**SSHRC \$18,540**)
- Community climate change solutions program – Metro Vancouver (**Greater Vancouver Regional District \$25,000**)
- Energy modeling & benefits analysis for GHG reductions for existing building and neighbourhood retrofits in BC (**Real Estate Institute of British Columbia \$45,000**)
- Delta flood planning (**NRC \$47,843**)
- Local climate change visioning tools and process for community decision-making (**GEOIDE, NCE \$164,218**)

SIMARD, Susan

- Modeling transpiration deficits after disturbances and evaluating the sensitivity of south-west Yukon forest ecosystems to climate change (**FORREX, BCMoSBED, MITACS \$15,000**)
- Ecosystem recovery after disturbance: thresholds for biodiversity and resiliency indicators (**BCMof&R \$20,244**)
- Effects of climate change on high-elevation plant communities and their ecological processes (**BCMof&R \$30,606**)
- Mycorrhizal fungi: Unlocking its ecology and role for the establishment and growth performance of different conifer species in coastal ecosystems (**BCMof&R \$32,695**)

- The role of mycorrhizae and mycorrhizal networks in tree species range shifts with climate change and disturbance (**NSERC \$50,000**)
- Predicting development and productivity of southern interior mixed species stands following mountain pine beetle attack (**BCMof&R \$52,191**)
- Carbon-flux and plant-microbial community dynamics in low-Arctic tundra (**NSERC \$10,000**)
- Forest resilience to disturbance and climate change (**NSERC \$10,000**)
- CFI Infrastructure operating fund (CFI **\$2,442**)

SMITH, Gregory

- Investigation of the resination process for oriented strand board (**NSERC \$25,100**)
- Performance improvements of particleboard by adding nano-clay materials (**NRC \$63,000**)
- Further development of lightweight sandwich panels for higher requirement applications (**NRC \$75,000**)

SOWLATI, Taraneh

- Feasibility assessment of wood pellet production in British Columbia (**Korea Wood Pellet Corporation \$14,000**)
- Optimization of forest biomass supply chain - incorporating uncertainties (**NSERC \$24,000**)
- Performance improvements of particleboard by adding nano-clay materials (**co-investigator**) (**NRC \$63,000**)
- Modelling of off-gassing for wood pellets (**NSERC \$104,900**)

SULLIVAN, Tom

- Creation of habitat for small mammal prey and their predators on clearcuts: coarse woody debris in piles and windrows (**BCMof&R \$37,480**)
- Influence of forest harvesting and succession on vole populations and feeding damage to populations (**BCMof&R \$47,892**)

TIMKO, Joleen

- Reducing vulnerability and susceptibility through increased understanding: Health and environmental interactions of forest-dependent HIV/AIDS-affected African households (**SSHRC \$28,400**)

THIS LIST INCLUDES documents published between April 1, 2009 and March 31, 2010. Names appearing in **bold-face** type are those of UBC Forestry Faculty members. For further information on any of these publications (many of which are available in libraries), please contact the appropriate Faculty member directly.

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- Bater CW, **Coops NC**, **Gergel SE**, **LeMay VM**, Collins D. 2009. Estimation of standing dead tree class distributions in northwest coastal forests using LiDAR remote sensing. *Can J For Res* 38(6):1080-1091.
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Kitasato flask containing high-performance liquid chromatography solution

FACULTY DEVELOPMENT AND ALUMNI



Christoph Clodius
BA, MEd

Director, Development
604.822.8716
christoph.clodius@ubc.ca



Jenna McCann
BA

Officer, Development
604.822.8787
jenna.mccann@ubc.ca



Katherine Quinn
BA

Coordinator, Development
604.822.0898
katherine.quinn@ubc.ca

The Faculty of Forestry is proud to have an engaged and dedicated group of alumni, donors and friends who show support in a number of different ways. From attending events, to joining the Tri-Mentoring program, to generously making gifts in support of our students and researchers, the Faculty would not be where it is today without our valued alumni and friends community.

Despite recent sector and economic challenges, UBC Forestry remains in a position of strength. We are a world-class institution, building for the future and providing innovative and important research, education, and outreach. Now, more than ever, our students, faculty and programs need support to ensure that the Faculty maintains its position as the leading school of Forestry in Canada.

We are proud to report that for the period April 2009 to March 2010 the Faculty of Forestry raised over \$1.8 million in cash and stock gifts, in-kind support, and other contributions and pledges in support of student awards, research, endowments and upgrading of our facilities.

Forestry Alumni Support

The Faculty of Forestry would like to thank our alumni for their generous and continued support of our programs and students. This year's annual appeal raised over \$56,000 in support of projects such as the Loon Lake redevelopment (\$17,778), the Dean of Forestry Scholarship Fund (\$8,747), and the John Worrall Alumni Bursary in Forestry (\$7,040).

The Faculty would also like to recognize the contributions of numerous alumni volunteers and thank them for their continued dedication to the many events and Faculty activities throughout the year. We look forward to welcoming you back in 2010/2011.

HIGHLIGHTS IN 2009 – 10

The following events, activities and milestones were reached this year:

- The Alumni and Friends Forest Tour and Dean's BBQ at the Malcolm Knapp Research Forest and Loon Lake was held on April 30, 2009 in conjunction with the annual undergraduate Spring Camp. The group was treated to a tour of the sawmill and witnessed conservation research taking place at East Creek. Later in the day, guests visited the newly renovated facilities at Loon Lake and heard from Evan Stewart of the Tsleil-Waututh First Nation.
- On May 23, 2009, the Faculty hosted UBC alumni at an Open House during Alumni Weekend. A reception and lab tours welcomed numerous guests throughout the day, as did a host of other activities across campus.

- The Faculty was pleased to recognize the accomplishments of three illustrious alumni at a celebration evening on May 25, 2009. Dr Mike Apsey received an honorary doctorate from UBC in recognition of his lifetime of service to the forest industry and the province of BC; Dr Joseph Gardner was recognized for his outstanding career accomplishments, including his role as Dean of the UBC Faculty of Forestry from 1965 – 1983, and for establishing a scholarship in support of Forestry undergraduate students; and Mr Gordon Prest, Co-Chair of the First Nations Council of Advisors and recipient of the 2009 Aboriginal Achievement Award, was recognized for his outstanding efforts to promote and encourage First Nations participation in forestry.

- This year we hosted two Forestry Lectures in Sustainability, supported by the Koerner Foundation. The first was held on September 17, 2009. This lecture featured Dr John Helliwell, the Arthur JE Child Foundation Fellow of the Canadian Institute for Advanced Research and co-director of CIFAR's program on Social Interactions, Identity and Well-Being. Dr Helliwell drew upon a growing set of research results linking social capital and well-being to discuss how natural disasters and other crises can either make a community stronger, working together in common cause, or drive it apart, depending on the quality of its social connections and the operating framework of institutions and policies. In addition to Dr Helliwell, the Faculty was pleased to welcome a special panel of experts to provide their opinions on the lecture topic. Included in the panel were Ms Dana Hayden, Deputy Minister, Ministry of Forests and Range; Doug Konkin, Deputy Minister, Ministry of Environment; and Don Roberts, Managing Director, CIBC World Markets.

- The second Forestry Lecture in Sustainability this year was planned as a part of UBC's Celebrate Research Week, and was held on March 8, 2010. We welcomed Mr Tim Rollinson, Director General and Deputy Chair of the UK Forestry Commission. Mr Rollinson took lecture attendees back through history to look at the UK forestry experience in responding to the changing needs of society and then looked forward to the challenges coming over the horizon, to discuss what BC could learn from the UK experience. We learned that what society wants from forests today is very different from what the nations wanted years ago and that the range of goods delivered by forests to multiple stakeholders now play larger roles in forest management.

- On October 14, 2009, the Haney and Meadowridge Rotary Clubs hosted a ribbon cutting ceremony and reception at Loon Lake to mark the opening of the Norm and Betty Pelton Rotary Field. Renovations to the playing field were made possible through a gift of \$100,000, providing for a new washroom and changing room facility and upgrades to the field. The Rotary Clubs chose to name the field for Norm and Betty Pelton in honour of their years of service to the local community. Norm Pelton is a 1955 Forestry graduate.
- The Forestry Class of 1963 held a reunion at Harrison Hot Springs from May 20 – 22, 2009. Part of the reunion activities included a visit to the Malcolm Knapp Research Forest with a luncheon in the Walter C Koerner Forestry Centre at Loon Lake.
- The Forestry Class of 1959 celebrated their 50th reunion in August 2009 with a four-day program that included an evening welcome reception, tour of the UBC campus, two days at the Malcolm Knapp Research Forest and concluded with a tour of Stanley Park to view the results of the remediation work. Fifteen graduates plus spouses participated, of the original class of 29. In celebration of the reunion, the class generously made a gift to the redevelopment project at Loon Lake.
- The Faculty received a gift of artwork from Della Englehart. The collection represents her late husband Lou's passion for forest history, as he captured the images of BC's beehive burners. More information on this collection will be available soon, as a number of the pieces will be available for viewing in the Forest Sciences Centre and the Malcolm Knapp Research Forest, as well as online.
- The First Nations Council of Advisors, made up of many Forestry alumni, supported the development of a new Community and Aboriginal Forestry specialization within the Forest Resources Management program. This interdisciplinary specialization will provide awareness and skill in cross cultural communications, facilitation, policy, and small business management.
- This year we were a proud to announce the establishment of the Wright Scholarship in Forestry, endowed by members of the Heath family, to recognize student achievement in the Faculty of Forestry. This award is in memory of Tom Wright, Dean of the Faculty of Forestry from 1963 – 1964, and Virginia Wright.

PLANS FOR 2010 – 11

- Advance "Place and Promise", UBC's strategic plan that contains concrete steps to achieve UBC's vision of creating an exceptional learning environment that fosters global citizenship, advances a civil and sustainable society, and supports outstanding research to serve the people of British Columbia, Canada and the world.
- Introduce our new Dean of Forestry and share the incumbent's vision and direction for Forestry, to alumni and our other community partners.
- Strengthen opportunities for alumni and partners to engage with Forestry, through activities such as email and other web-based updates; invitations to key lectures and events; and opportunities for supporters of Forestry student awards to meet their respective award winners.
- Work with specific groups, sectors, and concerned individuals to advance the Faculty's areas of greatest needs, which include but are not limited to: the redevelopment of Loon Lake; our national centre of excellence, the Centre for Advanced Wood Processing; the Natural Resources Conservation program, our innovative, award-winning and largest undergraduate program; the First Nations Initiative, designed to build greater understanding and involvement in First Nations forestry.

Once again, thank you for your continued support of the Faculty of Forestry over the past year and we look forward to partnering with all our alumni, friends and community members again in 2010/11.

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Questions concerning this report or requests for mailing list updates, deletions or additions should be directed to:

Dr Susan Watts, RPF

Annual Report Editor
Faculty of Forestry, Dean's Office
Forest Sciences Centre
University of British Columbia
2005 – 2424 Main Mall
Vancouver, BC V6T 1Z4
CANADA

Phone: 604.822.6316

Fax: 604.822.8645

E-mail: sue.watts@ubc.ca

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UBC Faculty of Forestry website

www.forestry.ubc.ca



The Faculty of Forestry web site features:

- academic program outlines and registration guides;
- profiles of Faculty members;
- department and allied program descriptions;
- Faculty newsletters, Annual Reports and special event announcements;
- course materials and educational multimedia;
- general interest articles and web feature presentations.

Any comments or suggestions about our web site can be addressed to our Education and Web Technology Coordinator at 604-822-0024.



Office of the Dean
Faculty of Forestry
University of British Columbia
Forest Sciences Centre
2005 – 2424 Main Mall
Vancouver, BC, V6T 1Z4
CANADA

Phone: 604-822-2727
Fax: 604-822-8645
www.forestry.ubc.ca

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