### Dean’s Message

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In our efforts to maintain focus on the Faculty’s three “R”s of forestry, namely recruitment, reinvention and research, we have had a very challenging year in the areas of both recruitment and reinvention and a very rewarding year in our research activities. As the table below illustrates, overall undergraduate enrolment in the Faculty was down for the fourth year in a row – a situation not unique to UBC’s Faculty of Forestry by any means. In fact, recognizing the urgency of the forestry enrolment problem across Canada, the Association of University Forestry Schools of Canada (AUFSC) drafted a common recruitment resolution this past January. The resolution, signed by the eight forestry school deans, states that the deans are “prepared to commit resources to catalyze a response to this crisis since it represents an urgent challenge to our ability to educate the high quality human resource base required to support the Canadian forest sector”.

Faculty of Forestry Activities, 1993/94 – 2002/03

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<td>265</td>
<td>255</td>
<td>233</td>
<td>225</td>
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</table>

1Headcount unless otherwise noted

2Average numerical score of several criteria used by students to assess teaching performance of Faculty members.
3 = Excellent; 2 = Very Good; 3 = Good; 4 = Fair; 5 = Poor; 6 = Very Poor.

3GPOB = base recruiting budget.

4WFTE calculated as 2 x (undergraduate + extrasessional + diploma/3) + 4 x masters + 6 x Ph.D. students.

5Research + special purpose + endowment (until 1996/97, shown separately after this).

6Endowment income separated from extramural income from 1996/97 onwards.

This past year we have committed considerable resources to working towards attracting the brightest and best students to our undergraduate programs. We have created a core recruitment team within the Office of the Dean to develop and implement an undergraduate recruitment strategy for the Faculty. In June, 2002, Dr. Simon Ellis took on the role of Director, Recruitment and Co-op. At the same time, Sandy McKellar, undergraduate promotions for the Wood Products Processing program, changed her focus towards all of the Faculty’s undergraduate programs. In August, 2002, Stephen Baumber was hired as an additional forestry recruitment officer. In October, 2002, this recruitment team produced a draft recruitment strategy for comment. In January, a group consisting of our newly appointed program directors for each of our five undergraduate programs and Simon Ellis as chair, began work on a detailed Undergraduate Recruitment and Retention Action Plan for the Faculty. This plan will be finalized and put into action by July of 2003. A set of newly designed full colour brochures describing our undergraduate programs were released in the spring of 2003 to help better promote our programs to prospective students.

We hope that the addition of a co-op option to all of our programs (previously co-op was only available to wood products processing students) will further help in our recruitment efforts. To this end, we hired Geoffrey Anderson, in August, 2002, as cooperative education coordinator to help develop our new co-op options. Our new Co-Op Office organized a very successful Forestry Career Day in March, for students to meet with potential employers, and produced a new brochure for employers in April.
Our graduate student number showed a decline this past year, due primarily to a record number of students completing their graduation requirements in the previous year. The lack of multiple year funding commitment from the provincial Forest Innovation Investment program has also impacted on our numbers.

During the year, we have been fortunate to have received valuable support from our Forestry Advisory Council (FAC) members as we have wrestled with our recruitment and reinvention issues. The FAC members generously agreed to form three working subcommittees in the areas of research, communications and recruitment. All three of these groups have given considerable time to the Faculty and have provided us with invaluable insight into our planning needs.

The quality of our teaching, as evaluated by our students, is high and improving steadily. Each year we ask students to evaluate each course anonymously. The table on the previous page includes students’ responses to a summary question about overall instructional effectiveness. On a six point scale (with 1.0 = "excellent" and 6.0 = "very poor"), the average class rating for this past year was 1.88, the best score since we have been keeping this record. Smaller class sizes have obviously helped to improve our instructional quality.

During the past year we have welcomed three new Faculty members and said farewell to two retirees. Dr. Sumeet Gulati joined the Forest Resources Management Department as an assistant professor in resource economics. Sumeet is jointly appointed with the Faculty of Agricultural Sciences. Dr. Bruce Larson joined the Forest Sciences Department as professor and Forest Renewal BC Chair in Silviculture. Finally, Dr. Suzanne Simard joined Forest Sciences as an associate professor in forest ecology and silvics. In June, 2002, Drs. John Barker and Karel Klinka retired from the Faculty. John was incumbent of the Forest Renewal BC Chair in Silviculture for three years and Karel gave 25 years of exemplary service as an inspirational teacher and scientist in the area of forest ecology.

In June of 2003, Dr. Sarah Gergel will join the Faculty as an assistant professor in landscape ecology. In August, Dr. Susan Grayston will join us as the Canada Research Chair in soil microbial biology, and Dr. John Kadla will start his new appointment as Canada Research Chair in advanced biomaterials. We will continue to seek funding for new chairs in First Nations forestry, wood building design and forest health.

The Centre for Advanced Wood Products Processing (CAWP) has had a very productive year. In particular, CAWP was involved in two high profile events including an international conference on industrial wood finishing held in Atlanta, Georgia, and a major exhibit of Italian furniture design at UBC’s downtown campus. In November, the Wood Products Processing undergraduate degree program proudly accepted the prestigious Yves Landry Award for the most advanced university-level course in manufacturing.

Dr. Fred Bunnell stepped down as co-director of the Centre for Applied Conservation Research this past year due to ill health. Dr. John Innes, co-director for the past 18 months, has assumed the role of director. The Centre embarked on a new activity through the organization of a highly successful public forum on salmon farming. Funding will be sought to continue such public fora activities.

Our extramural financial support for forestry research increased markedly this year, up 36% from 2001/02 levels. Much of this increase can be attributed to funds from the Canadian Foundation for Innovation and matching funds from the BC Knowledge Development Fund that support Drs. Kimmins and Mansfield, two of our Canada Research Chairs. Substantial funding was also received as a major installation grant (~$2.8 million) for the establishment of a bioprocessing centre for sustainable fuels (Saddler). We are also pleased to report that our support from the Natural Sciences and Engineering Research Council of Canada (NSERC) increased by 29% in 2002/03, well above the 10% target set by the university. Four of our Faculty members received new strategic grant awards: Dr. Hinch received a 5 year $1.1 million strategic grant to investigate why salmon have begun entering rivers earlier and dying at high rates prior to spawning; Dr. Mansfield received a 3 year $500,000 grant to investigate the potential of characterizing wood and fibre properties by metabolic profiling; Dr. Breuil was awarded a 4 year $315,000 grant to examine the premature failure of old and second-growth western red cedar products; and Dr. Guy received a 3 year $135,000 strategic grant to determine whether the isotopic composition of carbon in western hemlock can be used to assess nutritional status and response to fertilization. We now have a record of close to 50% of our faculty receiving support from NSERC and SSHRC. Industry support of research activities was also up considerably from last year with a 44% increase in funding for 2002/03.

Several members of the Faculty have been working with a group of senior forest sector executives to help establish a forest science and innovation research cluster in British Columbia. Towards this end, we hosted Dr. Leena Paavilainen as a Jubilee lecturer in January, 2003, to help us better
understand Finland's successes in promoting a forest research cluster. In conjunction with this lecture we organized and hosted a full-day workshop, "Accelerating Forest Sector S&T", with forty invited individuals from industry, government, academia, consulting and research organizations in attendance. Our involvement with the establishment of a forest sector research cluster for B.C. is ongoing.

In August we welcomed Katrina Evans to the Faculty as our new senior development officer. Gifts to the Faculty were up this year. During the period of April 2002 to March 2003 we received seven hundred gifts from donors for a total of close to $590,000. Our annual alumni appeal, which focused on enhancing the educational experience of our students, raised over $121,000 for projects such as the redevelopment of the Loon Lake Research and Education Centre, the John Worrall Bursary and the Tony Kozak Scholarship. In October, the university signaled its commitment to fundraising for construction of the new Loon Lake lodge when UBC president Martha Piper visited the Research Forest.

With the help of a part-time alumni assistant Clare Keating-Husk, we were able to focus more effort on our alumni connections. The past year saw the resurrection of the Forestry Alumni Newsletter, the launch of a vibrant alumni section to our web site and the organization of several social events that were extremely well attended by alumni. We recognize our alumni as vital ambassadors for our academic programs and plan to take full advantage of this next year as we approach alumni for help as volunteer recruiters of new students to our Faculty.

The second year of our public lectures known as the Jubilee Lecture Series (we launched the series in our 50th anniversary year), met with great success. The final lecture of the year, which was given by Chief Forester Larry Pedersen, was dedicated to the memory of Professor Emeritus Dr. J.G. Harry Smith, who sadly passed away in June of 2002.

Plans for 2003/2004

Our year ahead promises to be full of challenges as we continue to address the three "R's" of forestry (recruitment, reinvention and research).

Our biggest challenges will be to recruit and retain good students into each of our five undergraduate programs. The Faculty, by its very nature, spans the range of expertise and skills that represents the forest sector, broadly defined. The leadership provided by each of our department heads and program directors, working with our student services team and the recruitment team in particular, will provide effective strategies for increasing both the quantity and quality of students into each of the five undergraduate program areas. This will be challenging as the overall decline in forest related programs in North America is likely related to the overall, poor image of the forest sector and is symptomatic of a lack of appreciation of what Canada's forest sector could be.

This is closely related to the second "R", reinvention, as B.C. and Canada wrestle with the consolidation and globalization of the forest products industry and the effect that government and public policies and attitudes towards our forests have on the debate and actions that are taken by our government leaders. The establishment of the Canadian Forest Innovation Council (CFIC), and its efforts to chart an effective road map of how an integrated, inclusive and cooperative and globally competitive Canadian forest community/sector might evolve, is encouraging.

This theme is also related to the last "R", research. The Faculty continues to be one of UBC's most research intensive units as measured by research dollars attracted, papers published, graduate students trained and graduated per Faculty member. We have been able to attract top level candidates to our Canada Research Chairs, continue to increase our tri-council (NSERC, SSHRC) funding and play a pivotal role in networks and consortia such as Genome Canada and the Sustainable Forest Management Network of Centres of Excellence (SFM-NCE), to name but a few.

As the province of British Columbia refines its "Life Sciences" strategy, forestry is well positioned to be the key foundation sector, showing how "enabling technologies" such as proteomics and bioinformatics can help us monitor and assess the viability and importance of all the living components that constitute a viable and vibrant forest. However, it is important to recognize that life sciences covers more than just the molecular world and that the numerous creatures, individuals and communities that constitute a living and evolving forest are also integral components of British Columbia, Canada and the world's forests. The Faculty of Forestry at UBC is well positioned to be an important contributor to the debate and action plan to "reinvent" what society thinks of as the forest sector.

Jack Saddler
Dean, Faculty of Forestry
THE Faculty of Forestry offers four-year degree programs in the following five areas:

■ Forest Resources Management – B.S.F.

This major focuses on the multidisciplinary aspects of forest resources biology and management of forested ecosystems for such products as timber, grazing, wildlife, recreation, aesthetics, fish and water. 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 social and economic environments. The program prepares graduates for responsible careers as professional foresters. This program is also offered as a four-year International Forestry Specialization.

Advisor: Helen Samson
(e-mail: helens@interchg.ubc.ca)

■ Forest Operations – B.S.F.

This major prepares the graduate for professional forestry responsibilities, with an emphasis on planning, design and administration of forest harvesting operations. Areas of study include: design and construction of forest roads and drainage structures; selection, planning and supervision of logging systems; site protection and rehabilitation; and the development of computer applications for harvesting systems.

Advisor: Dennis Bendickson
(e-mail: dbendick@interchg.ubc.ca)

■ Forest Science – B.Sc. (Forestry)

This degree is for students interested in more specialized study of the scientific principles related to the growth, development, and ecology of forest species. Emphasis is placed on basic and interactional phenomena that influence the establishment, growth, and development of trees and other forest resources. The core subjects include genetics, soils, weather and climate, tree form, tree function, ecology, entomology, pathology, silvics, silviculture, and fire science. This program is also offered as a four-year International Forestry Specialization.

Advisor: John Worrall
(e-mail: worrall@interchg.ubc.ca)

■ Wood Products Processing
B.Sc. (Wood Products Processing)

This program provides students with a broad knowledge of the wood products industry, including wood manufacturing, business management, and marketing. State-of-the-art wood processing equipment used during laboratory exercises enables students to develop skills in technical processes and operations carried out in today’s industry. Students may choose an area of concentration in business, primary processing, product development or wood building and design. Qualified fourth year students may opt for a minor in Commerce.

Advisor: Simon Ellis
(e-mail: sellis@interchg.ubc.ca)

■ Natural Resources Conservation
B.Sc. (Natural Resources Conservation)

This multidisciplinary program provides students with a solid foundation in the natural and social sciences underlying management and conservation of natural resources, as well as an appreciation for the political and socioeconomic contexts which affect conservation strategies. Students develop a working knowledge of the tools and quantitative techniques used by resource planners. A notable feature of the program is the Integrated Field School offered in the fourth year which features integrated field and classroom instruction throughout the fall term.

Advisor: Scott Hinch
(e-mail: shinch@interchg.ubc.ca)

PROGRAM UPDATES IN 2002-03

• Year three of the revised Forest Resources Management program was implemented.

PLANS FOR 2003-04

• Implement the fourth year of the revised Forest Resources Management program, which includes a capstone course in Sustainable Forest Management.

• Complete revisions of the undergraduate students web page, which will include a new section for domestic and international prospective students.

• Maintain focus on increasing undergraduate enrollment and expand undergraduate recruitment strategies to include increased faculty member involvement.

• Finalize appointments of program directors for each of the five undergraduate programs.

• Expand international and First Nations student recruitment efforts.
Cooperative Education

Cooperative education is a three-way partnership between employers, students, and the University. This partnership provides an opportunity for students to gain practical work experience, related to their program of study, by alternating academic terms with paid work terms. Graduates of a co-op program are well prepared, academically and professionally, for their future career. Participating employers have access to an excellent staffing resource for peak periods or special projects as well as the opportunity to recruit, train and assess potential future employees.

The cooperative education option in the Wood Products Processing program was initiated in 1996. Building on the positive experiences of the students, employers and faculty members it was decided to expand the co-op option to the Faculty's other four undergraduate programs. Funds were awarded from the UBC Teaching and Learning Enhancement Fund for the establishment of a Forestry Student Careers Centre. The central element of the Careers Centre is the cooperative education program. In June, 2002, Dr. Simon Ellis was appointed as director, Recruitment and Co-op and in August, 2002, Geoffrey Anderson was hired as Cooperative Education coordinator to develop these co-op options. Students were accepted into the new programs in the fall of 2002 and the students will begin their first, junior, work placements in May 2003.

Co-op students are available for four or eight month work terms commencing each year in January, May and September. Over the course of their programs, students complete eight academic terms and five work terms to meet their co-op degree requirements. Employers interested in hiring a co-op student should contact one of the cooperative education coordinators.

ACHIEVEMENTS 2002-03

Forestry Programs
- Establishment and implementation of Co-op Program for undergraduate students enrolled in Forest Resources Management, Forest Operations, Natural Resources Conservation and Forest Science.
- Contacts were made with over 150 employers which resulted in 21 co-op job postings. Locations included B.C., Alberta, Manitoba, Northwest Territories, Ontario and the USA.
- Ten students were accepted into the new programs.
- UBC Arts Co-op student hired as a promotions and program assistant to develop an employer brochure and to complete a revamping of existing marketing materials.
- Under the auspices of the Co-op Office, a Forestry Career Day was organized and held in March, 2003, which brought students together with over twenty organizations including industry, non-profit organizations and professional associations for a day of information exchange.

Wood Products Processing Program
- Our 100 per cent record for the placement of co-op students was maintained. Placements were located in B.C., Manitoba, Ontario and Quebec, as well as in Australia and the USA.
- Forty-five 4-month placements were made.
- New co-op student enrollment increased by 45 per cent.
- Employability skills workshops were delivered to co-op students from all Forestry undergraduate programs.
- A new workshop on workplace safety was delivered by the Workers' Compensation Board. Content included general duties and responsibilities of employers and employees, as well as workplace risks and hazards from a forestry perspective.
- Coordinated company information sessions were held by Canfor and Tembec. Each session had an average attendance of fifty undergraduate students.

PLANS FOR 2003-04
- Continue development of a Forestry Co-op web site with an expected implementation date of fall 2003.
- Research various database options with goal of selecting a program suitable for employer contact management.
- Establish scholarships and awards to recognize co-op students with high academic standing together with demonstrated leadership at work, UBC, and in their community.
- Develop a series of ongoing workshops for students after completion of their initial work placement.

CO-OP PROGRAMS

Undergraduate Students

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RECRUITMENT

Undergraduate Students

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Undergraduate Promotions
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E-mail: sandymc@interchg.ubc.ca

■ Overview

The recruitment of students into the Faculty of Forestry’s undergraduate programs has, in the past, depended on a rather passive and informal strategy. Recognizing a current need to actively recruit across all of our undergraduate programs, a core recruitment team has been created within the Dean’s Office to develop and implement an undergraduate recruitment strategy for the Faculty of Forestry. In June, 2002, Dr. Simon Ellis was appointed as director, Recruitment and Co-op. At the same time, Sandy McKellar, Undergraduate Promotions for the Wood Products Processing program, changed her focus towards all of the Faculty’s undergraduate programs. In August, 2002, Stephen Baumber was hired as an additional forestry recruitment officer.

In October, 2002, a draft Recruitment Strategy was distributed for comment. This document included a Marketing Plan presenting the rationale for many of the activities outlined. The draft strategy was met with generally positive responses, including those from the Forestry Advisory Council Recruitment Subcommittee, and generated many suggestions and comments relating to undergraduate student recruitment opportunities.

ACHIEVEMENTS 2002-03

• Several new tools were created to assist in the promotion of programs to target audiences, including an interactive power point presentation for recruiters, a complete set of full-colour undergraduate program brochures, coffee mugs for teachers, detailed undergraduate program booklets, and a Web site for prospective students.

• Recruitment staff presented in twenty-nine communities in B.C. and four communities outside of the province.

• Eleven workshops were facilitated for high school teachers and counsellors. Over 300 schools were contacted through a mail-out of promotional material.

• A variety of approaches were used to promote our programs to first year students currently at UBC. These approaches included a mass information email, presentations in first year chemistry classes, presentations at campus residence and presentations at campus education fairs. Over 2,400 students were contacted through these means.

• Presentations were made at fourteen industry/general public focused events.

■ Synergistic Activities

In recognising the importance of partnerships with outside groups to our recruitment initiatives, we have created synergistic alliances with individuals, companies, associations and non-profit organizations. Some of the groups that we worked with this past year included, Tensec Forest Products, the Truck Loggers Association, the Association of BC Professional Foresters and the Council of Forest Industries. Also, members of the core recruitment team sat on eight boards of a variety of forest education and promotional groups.

PLANS FOR 2003-2004

• Complete a detailed Recruitment and Retention Action Plan outlining the activities to be undertaken and the resources required.

• Increase the focus on post-secondary and international prospective students. This will include a targeted program to communicate with first year students at UBC, as well as university transfer students in community colleges.

• Implement our “Recruit the Recruiter” initiative. Building on a pilot program, this program will create satellite recruiters in various parts of B.C. and Canada. We will select alumni and train them to work in their local schools. This will assist the recruitment team in reaching a greater number of prospective students.

• Develop a database that will assist in tracking prospective students and schools participating in recruitment activities.

Recruitment activities
April 2002 – March 2003

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<th># visits</th>
<th># presentations made</th>
<th># student participants</th>
<th># teacher participants</th>
<th># BC communities</th>
<th># out of province communities</th>
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<td>125</td>
<td>21</td>
<td>4</td>
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<td>15</td>
<td>3</td>
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New Student Enrolment

New student enrolment dropped slightly over the previous year, with a total of 170 new or
returning students admitted to the Faculty. New
students entering into different program years
are tabulated below.

New students entering the Faculty – 2002/03

<table>
<thead>
<tr>
<th>Year of study</th>
<th>Number of new students entering</th>
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<tr>
<td>1</td>
<td>142</td>
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<tr>
<td>2</td>
<td>26</td>
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<tr>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>170</td>
</tr>
</tbody>
</table>

The B.Sc (Forestry) program continues to
attract the largest number of new students, with
72 new students admitted in 2002/03. Each of
the other three degree programs share approxi-
mately similar numbers of new students.

Degree programs entered by new students
2002/03

B.Sc. (Forestry) 42.4%
B.Sc. (Natural Resources Conservation) 20.6%
B.Sc. (Wood Products Processing) 15.3%

Total Enrolment

Total undergraduate enrolment showed little
change this past year. However, undergraduate
enrolment is well below capacity in all years of
each program. We will continue to work hard
to increase the rate of retention amongst under-
graduate students, particularly first year
students. The number of visiting and exchange
students dropped to 22, almost half of last
year’s figure.

Distribution of students by program – 2002/03

<table>
<thead>
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<th>Program</th>
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<tbody>
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<td>112</td>
<td>25.2</td>
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<tr>
<td>Forest Operations</td>
<td>32</td>
<td>7.2</td>
</tr>
<tr>
<td>Forest Science</td>
<td>100</td>
<td>22.5</td>
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<tr>
<td>Wood Products Processing</td>
<td>93</td>
<td>20.9</td>
</tr>
<tr>
<td>Natural Resources Conservation</td>
<td>94</td>
<td>21.3</td>
</tr>
<tr>
<td>Undeclared (first year students)</td>
<td>13</td>
<td>2.9</td>
</tr>
<tr>
<td>Total</td>
<td>444</td>
<td>100</td>
</tr>
</tbody>
</table>

After several years of steady increase, the
percentage of female students in undergraduate
programs dropped slightly to 33.1 per cent of
enrolment. All programs saw a decline in female
registrants. The Forest Operations program
continues to have the lowest proportion of women
in a program with 9.3 per cent, B.Sc. (Natural
Resources Conservation) has the highest with
54.2 per cent.
First Year Students

Bosch, R.A. DEAN, WOOD, MAC
Broekhuizen, N.A. ABCPF, TRUCK, WEST, MAC
Chau, O-K. J. WOOD
Dick, G. SODERMAN, BANKS
Gerbrandt, A.J. WOOD
Lourenco, P.D.M. TRUCK, WOOD
Loveman, J.M. TRUCK
Otsu, K. WEST
Rocksborough-Smith, M. WOOD
Scott, S. WOOD
Sinayov, L.S. TRUCK
Singbell, B.R. WOOD
Young, B.W. WELDWOOD, WEST

Second Year Students

Barrett, F.J.S. DEAN
Campbell, B. SODERMAN
Chung, P.C. SIDDOO
Culos, A.P. DEAN
Eigard, T.A. BANKS, WELDWOOD
Gerbrandt, A.J. WOOD, SODERMAN
Kennah, M.F. ELKINGTON, WELDWOOD, MAC
Osbourne, K.C. SPLAN, DEAN
Rietman, A.B. TRUCK
Schulte, M.J. DEAN
Swayne, W. DEAN
Titessen, Z.E. SPLAN
Topp, S.M. LITTLE, MAC, SPLAN
Woolley, M.L. BINKLEY

Third Year Students

Alway, D.M. SPLAN
Anastas, H. BEAUTY
Ashari, N. WOOD
Barta, R.J. TRUCK, MACHINERY
Bintner, E.G. SPLAN
Bottrell, K.A. J.R. MILLS, SPLAN
Brett, B.M. SPLAN
Bruce, D. BANKS
Burke, M.W. DEAN
Cavil, J.I. WELDWOOD
Coseo, K.E. BANKS

Fourth Year Students

Cranmer, B. KETCHAM, BANKS, SPLAN
Gough, A.D. SPLAN
Hofcer, N.D. SPLAN
Hong, A.H.M. WOOD
Huddart, J.D. SPLAN
Kleindienst, E.J. DEAN
Lansdowne, M. DEAN
LeBoldus, J.M. SPLAN
Mak, J.Y. SODERMAN, WOOD
Maliwat, E. E. BACKMAN, BANKS, CHISHOLM
Maloney, V.J. BANKS, DEAN, SPLAN
Malysh, I.R. SPLAN
Miller, T.W. BANKS
Morgan, C.L. SODERMAN
Murray, K. STEINER
Nuttall, R.I. ALUMNI, BACKMAN, CHISHOLM, ENGLISH, SPLAN
Phillips, L.G. BANKS
Plamer, G.J. NORTHWOOD
Polleken, S.L. SPLAN
Reyes, M.K. BANKS
Stewart, M. NEI, SODERMAN, WOOD
Strocl, C.M. BANKS, DEAN, SPLAN
Swaska, N.D. HOBSON, NORTHWOOD
Wagstaff, A.G. WOOD
Whits, N.J. COAST, WEST
Zapadka, T. SODERMAN, WOOD

Full Name of Award

UBC Forestry ALUMNI Division.
ABCDF Scholarship in Forestry1/Graduating Prize in Forestry2.
BACKMAN Scholarship in Forest Resource Management.
Elizabeth BACKMAN Scholarship in Natural Resources Conservation.
Charles and Jane BANKS Scholarship.
John D. BEAUTY Memorial Scholarship.
Emily and Francis BINKLEY Scholarship.
Canadian Institute of Forestry Medal.
Hugh R.D. CHISHOLM Scholarship in Forestry.
COAST Fire Prevention and Control Group Ken Haley Memorial Prize.
Robert J. CRAIG Memorial Scholarship.
DEAN of Forestry Scholarship.
Gilt ELKINGTON Memorial Scholarship.
Barry ENGLISH Memorial Award.
Harry HOBSON Memorial Prize.
Ted JOHNSON Scholarship in Forestry.
Ivan KETCHAM Scholarship.
Malcolm KNAPP Spring Camp Prize.

David Bell LITTLE Memorial Scholarship.
MACHINERY and Supply Companies Group Forestry Scholarship.
H.R. MACMillan Prizes in Forestry1/Forestry Harvesting2 Scholarship in Forestry3.
James Russell MILLS Memorial Award.
Robert E. MILLS Memorial Award.
NEI Gerhard Kron Memorial Scholarship.
NORTHWOOD Pulp and Timber Limited Scholarship.
Kapoor Singh SIDDOO Scholarships in Forestry1/Forest Ecology2.
Oscar SODERMAN Memorial Scholarship.
William John SPLAN Scholarship in Forestry.
Paul Robert STEINER Memorial Scholarship in Wood.
TIMBERLINE Scholarship.
TRUCK Loggers Association Scholarship1/In Harvesting2.
WELDWOOD of Canada Limited Scholarship in Forestry.
Mary and Robert WELDWOOD Memorial Scholarship in Wood Science and Industry.
WEST Fraser Timber Co. Ltd. Scholarship in Forestry.
UBC WOOD Products Processing Awards.
Degrees Conferred, May 2002 and November 2002 Congregations

■ B.S.F. Forest Resources Management

Alexander, B.
Boyd, J.
Calof, J.
Campbell, A.
Coleman, H.
Copeland, Duncan.
Draude, Linda.
Enrich, A.
Fettes, Lesley.
Hantelmann, L.
Harrison, K.
Jakeway, P.
Janesik, S.
Kneeland, E.
Mulholland, S.
Niischke, C.
Panicc, K.
Peschke, J.
Purves, B.
Ray, K.
Rostek, B.
Saprunoff, M.
Scott, J.
Slater, D.
Smith, J.
Thompson, D.
Vaugh, W.
West, R.
Winter, A.

■ B.S.F. Forest Operations

Campbell, M.
Holland, D.
Infanti, A.
MacDonald, K.
Ramsey, J.
Seabourne, S.
Shelford, J.
Steeves, P.
Unwin, L.
Van Beelen, J.

■ B.Sc. (Natural Resources Conservation)

Andrushko, D.
Brown, K.
Buchanan, R.
Caldwell, J.
Dennis, Q.
Evans, M.
Forde, C.
Kissick, C.
Kroeker, L.
Lasmanis, L.
Ledezeja, J.
Martin, C.
Peers, J.
Pierce, E.
Rowlett, C.
Rudolph, T.
Schebel, W.
Seagel, T.
Stanger, N.
Uitto, T.
Werner, J.

■ B.Sc. (Wood Products Processing)

Bains, S.
Burrell, G.
Chau, W.
Derkach, A.
Draper, D.
Grant, B.
Jenya, D.
Litman, I.
Mak, D.
White, S.

■ Diploma in Forestry (Advanced Silviculture)

Barber, F.
Cochrane, R.
Farquharson, D.
Girard, J.
Kaplun, B.
LeSergent, G.
Morrice, E.
Neill, E.
Regimbald, D.
Rowe, F.
Slizak, A.
Thomas, J.

GRADUATION
STATISTICS

Undergraduate
Students

![Graph showing number of graduates from undergraduate degree programs (1986-2002)](image-url)
■ Graduate Programs

The Faculty of Forestry offers four graduate degrees:
- Doctor of Philosophy – Ph.D.
- Master of Forestry – M.F.
- Master of Science – M.Sc. (in Forestry)
- Master of Applied Science – M.A.Sc. (in Forestry)

■ Enrolment and Graduation Trends

Enrolment in the Forestry graduate program has grown by 8 per cent over the past decade. Today there are 173 graduate students registered in the Faculty. The graphs below illustrate the distribution of these students between the different degree programs as well as the number of graduates over the past decade.

Women comprise 52 per cent of our Masters and 39 per cent of our Doctoral students, for an overall average of 46 per cent. The following table shows enrolment data for 2002/03.

<table>
<thead>
<tr>
<th>Degree</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ph.D.</td>
<td>46</td>
<td>29</td>
<td>75</td>
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<tr>
<td>M.F.</td>
<td>5</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>M.Sc.</td>
<td>35</td>
<td>46</td>
<td>81</td>
</tr>
<tr>
<td>M.A.Sc.</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Non-thesis</td>
<td>3</td>
<td>2</td>
<td>5</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>93</strong></td>
<td><strong>80</strong></td>
<td><strong>173</strong></td>
</tr>
</tbody>
</table>

As of October, 2002.

The proportion of graduate students from outside of Canada has increased this past year and presently stands at 49 per cent of Doctoral and 37 per cent of Masters students. A total of 30 countries are represented in the graduate student body.

■ Graduate Student Funding

In the 2002/03 academic year, Forestry graduate students were awarded support totalling $2,340,842, a one per cent decrease over 2001/02 funding levels. Graduate support consisted of $723,194 in scholarship funding, $214,655 in graduate teaching assistantships and $1,402,993 in graduate research assistantships (provided by research supervisors from their research grants).

<table>
<thead>
<tr>
<th>Department</th>
<th>No. graduate students</th>
<th>Total funding</th>
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<tr>
<td>Forest Resources</td>
<td>46</td>
<td>$679,725</td>
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<tr>
<td>Management</td>
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<tr>
<td>Forest Sciences</td>
<td>79</td>
<td>$1,108,838</td>
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<td>Wood Science</td>
<td>48</td>
<td>$552,279</td>
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<td><strong>Total</strong></td>
<td><strong>173</strong></td>
<td><strong>$2,340,842</strong></td>
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Graduates 1992 – 2002
### Masters Students

<table>
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<tr>
<th>Name</th>
<th>Institution</th>
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<tbody>
<tr>
<td>Alexidis, Pavlos</td>
<td>FORINTEK</td>
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<tr>
<td>Berube, Yanik</td>
<td>MCPHEE</td>
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<tr>
<td>Boldor, Marius</td>
<td>GRIBITH, MCPHEE</td>
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<tr>
<td>Catton, Bruce</td>
<td>GREAT</td>
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<tr>
<td>Cleary, Michelle</td>
<td>NSERC</td>
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<tr>
<td>Coleman, Heather</td>
<td>HELLER, UGF GES</td>
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<td>Cotton, Laura</td>
<td>COMMONWEALTH</td>
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<td>Ding, Mineral</td>
<td>FORINTEK</td>
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<td>Er, Kenneth</td>
<td>COMMONWEALTH</td>
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<td>Froese, Katrina</td>
<td>ALLEN</td>
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<tr>
<td>Gemmell, Amy</td>
<td>NSERC</td>
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<td>Huntley, Shannon</td>
<td>VANDUSEN</td>
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<td>Ide, Rafael</td>
<td>WELDWOOD²</td>
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<tr>
<td>Kopra, Kristin</td>
<td>UGF</td>
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<tr>
<td>Leckie, Sara</td>
<td>BASSETT</td>
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<td>Lindh, Hilary</td>
<td>UGF Paetzold</td>
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<td>MacKenzie, Kirsten</td>
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<td>Peter, Brian</td>
<td>SOPRON</td>
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<td>Rasmussen, Helen</td>
<td>LUMBER</td>
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<td>Runyan, Simona</td>
<td>HOFFMEISTER</td>
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<td>Salter, Jonathan</td>
<td>CANFOR</td>
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<td>Schnorbus, Markus</td>
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<td>Schwab, Olaf</td>
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<td>Sipos-Randor, Yona</td>
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<td>Spiro, Holly</td>
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<td>Walia, Ankit</td>
<td>CHISOLM</td>
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<td>Welstead, Kym</td>
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<td>Wilkin, Jennifer</td>
<td>BUCKLAND, MCPHEE</td>
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<td>Wilson, Scott</td>
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<td>Wong, Ann</td>
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<td>Woo, Kathy</td>
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### Doctoral Students

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<tr>
<td>Aitken, Kathryn</td>
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<td>Anderson, Axel</td>
<td>JOHAL</td>
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<td>Bondar, Carin</td>
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<td>Bower, Andrew</td>
<td>MACAREE</td>
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<td>Bura, Renata</td>
<td>GREAT</td>
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<td>Crowe, Kevin</td>
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<td>Fediy, Bradley</td>
<td>UGF GES</td>
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<td>Gandy, Ryan</td>
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<td>Gapare, Washington</td>
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<td>Gonzales, Emily</td>
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<td>Harkin, Zoe</td>
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<td>Hickey, Gordon</td>
<td>HANSON, MCPHEE</td>
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<td>Iddrisu, Mohammed</td>
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<td>Jerabkova, Lucie</td>
<td>COCHRAN, VANDUSEN</td>
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<td>Keating, Jeff</td>
<td>GREAT</td>
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<td>Klenk, Nicole</td>
<td>MCPHEE</td>
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<td>Lewis, John</td>
<td>SSIRC</td>
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<td>Mahon, Lisa</td>
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<td>Marr, Amy</td>
<td>NAMKOONG</td>
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<td>Mathey, Anne-Helén</td>
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<td>McIntire, Eliot</td>
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<td>Morford, Shawn</td>
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<td>Neggrave, Rod</td>
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<tr>
<td>Philip, Leanne</td>
<td>TIMBERWEST¹</td>
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<tr>
<td>Robinson, Andrew</td>
<td>BRIGHT FUTURE</td>
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<tr>
<td>Sharma, Rajeev</td>
<td>GREAT</td>
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<td>Sleeman, Jonathan</td>
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<td>Staudhammer, Christina</td>
<td>GREAT, KILAM</td>
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<tr>
<td>Stirling, Rod</td>
<td>GREAT</td>
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<td>Suratman, Nazip</td>
<td>COMMONWEALTH</td>
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<tr>
<td>Tikina, Anna</td>
<td>UGF GES, WELDWOOD¹</td>
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<td>Wilford, David</td>
<td>VANDUSEN</td>
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</tbody>
</table>

### SCHOLARSHIPS AND FELLOWSHIPS

#### Graduate Students

- **Full Name of Award**
  - George S. ALLEN Memorial Scholarship.
  - Edward W. BASSETT Memorial Scholarship in Reforestation.
  - BRIGHT FUTURE Scholarship.
  - Don BUCKEAND Memorial Scholarship in Forest Pathology.
  - CANFOR Corporation Fellowship in Forest Ecosystem Management.
  - Hugh Robert Duncan CHISOLM Scholarship in Forestry.
  - Ralph and Elizabeth E. COCHRAN Scholarship.
  - COMMONWEALTH Scholarship.
  - FORINTEK Canada Corp. Fellowship in Wood Science and Wood Products.
  - Graduate Research Engineering and Technology Award.
  - Graham G. GRIBITH Memorial Scholarship.
  - Brenda HANSON Memorial Scholarship in Forestry.
  - Paul HELLER Fellowship.
  - Bent HOFFMEISTER Scholarship in Forest Wildlife.
  - NSERC INDUSTRIAL Postgraduate Scholarship.
  - Ass JOHAL Graduate Fellowship in Forestry.
  - Izaak KILAM NSERC.
  - LUMBER Inspectors’ Benevolent Society Scholarship.

- Mary and David MACAREE Fellowship.
- Donald S. MCPHEE Fellowship.
- NAMKOONG Family Fellowship in Forest Sciences.
- Natural Sciences and Engineering Research Council of Canada Scholarship.
- SFM Network Partner Fellowship.
- SOPRON Alumni Fellowship.
- Social Sciences and Humanities Research Council of Canada.

- **TIMBERWEST¹** Forest Limited Fellowship in Forest Resource Management and Planning.
- **TIMBERWEST²** Forest Limited Fellowship in Forest Sciences.
- University of B.C. Graduate Fellowship.
- University of B.C. Graduate Fellowship – Partial.
- University of B.C. Graduate Fellowship – Paetzold.
- University of B.C. Graduate Fellowship – Graduate Entrance Scholarship.
- VANDUSEN Graduate Fellowship in Forestry.
- WELDWOOD¹ of Canada Ltd. H. Richard Whittall Scholarship.
- WELDWOOD² of Canada Ltd. Scholarship in Forestry – Advanced Wood Processing.
Degrees Conferred, May 2002 and November 2002 Congregations

M.A.Sc

CHEN, Guangqi  
Dr. F. Lam  
A model to predict the tensile mechanical properties of wood flake board formed by robot.

M.F.

CERDA, Juan P.  
Dr. S.J. Mitchell  
Addressing uncertainty in forest planning.

LENCAR, Cornel Calin  
Dr. P.L. Marshall  
Effects of regeneration dynamics on predicted development of interior Douglas-fir stands.

M.Sc.

AITKEN, Kathryn  
Dr. K. Martin  
Nest-site availability, selection and reuse in a cavity-nesting community in forests of interior British Columbia.

ER, Kenneth Boon Hwee  
Dr. J. Innes  
Effects of forest loss and fragmentation with urbanization on bird communities in Vancouver.

FARRELL, Ross Raymone  
Dr. T.C. Maness  
A relational database approach to a linear programming based decision support system for production planning in secondary wood product manufacturing.

FLEET, Carlos  
Dr. C. Breuil  
Growth, nutrition and genetic factors that affect pigmentation of wood sapstain fungi.

GYAMFI, Charles  
Dr. F. Lam  
Effect of proof-loading on the strength of lumber.

HAAG, Devon Adaire  
Dr. C.E. Prescott  
Effects of riparian buffer width on songbirds and forest structure in the southern interior of British Columbia.

HANNAM, Kirsten  
Dr. C.E. Prescott  
Does clear cutting affect the quantity of soluble organic N in forest soil?

HARKIN, Zoe Elizabeth  
Dr. G.Q. Bull  
Policy processes, institutional participants, and management programs: foundations for establishing a market for forest carbon in Canada.

HASSANI, Badre Tameme  
Dr. P.L. Marshall  
Regeneration imputation models for the ICHmiv2 subzone in the vicinity of Nelson, B.C.

HERBERS, Jim  
Dr. M.C. Feller  
Red squirrel demography and behavior in a managed interior Douglas-fir forest of British Columbia.

KRAKOWSKI, Jodie  
Dr. S.N. Aitken  
Conservation genetics of whitebark pine (Pinus albicaulis Engelm.) in British Columbia.

LEUPIN, Ernest  
Dr. K.M. Martin  
Short-term responses of songbirds to alternate harvesting methods in a high elevation forest.

MATSUO, Ichiro  
Dr. G. Hoberg  
Russian model forest in local forest politics: Case study of the creation of a national park within the Gassinski Model Forest.

McKINNON, Leanne  
Dr. R.D. Guy  
Is the efficiency of sunfleck utilization an important determinant of shade tolerance? A case study with western red cedar and coastal Douglas-fir in the understory of red alder.

MUTO, Nobuyuki  
Dr. D.H. Cohen  
A recent historical perspective of increasing trade restrictions in wood products.

PACZEK, Susan  
Dr. K.M. Martin  
Effects of fine scale and landscape level habitat features on sagebrush breeding birds of the Southern Okanagan and Similkameen Valleys, British Columbia.
PERDUE, Mark  
Dr. S. Glenn
Species richness, abundance and distribution in experimentally fragmented landscapes.

PERREAULT, Pamela  
Dr. G.Q. Bull
Culturally Modified Tree (CMT) management in Nisga’a territory: Shaping First Nations participation through consultation.

PICARD, Paul  
Dr. S. Sheppard
Do visual quality objectives necessarily constrain timber harvesting levels? Exploring the potential of partial cutting.

SOONG, George  
Dr. J.N. Saddler
Assessment of various physiochemical treatments for the removal of dissolved and colloidal substances present in TMP/Newsprint white waters and fungal enzymatic treatment white water.

STEBBING, Derrick  
Dr. J.N. Saddler
Fungal and enzyme treatment and mechanical pulp and paper mill white water – Impact on white water, fiber and paper properties.

VAN AKKER, Lara  
Dr. J.A. McLean
The effects of fertilizer treatments on the resin canal defenses of spruce and incidence of attack by the white pine weevil (Pissodes strobi).

WONG, Ann Yone  
Dr. G.Q. Bull
Relationships between coastal Douglas-fir stand biomass and stand characteristics.

CALDECOTT, Tim  
Dr. T.C. Manness
Lumber shortages for British Columbia’s Secondary wood manufacture: Evidence of supply impediments and potentials for synergy with primary producers.

GARCIA, Pablo  
Dr. S. Avramidis
Three-dimensional heat and mass transfer during oriented strandboard hot pressing.

GOMI, Takashi  
Drs. R. Siddle/J. Richardson
Dynamics of sediment and woody debris in headwater streams, southeast Alaska.

HAO, Bingye  
Dr. S. Avramidis
Fractal geometry of wood internal surfaces in the hygroscopic range.

HE, Ming (Henry)  
Dr. F. Lam
Numerical modeling of three-dimensional light wood-frame buildings.

HEINZELMANN, Frank  
Dr. J.D. Nelson
A modeling framework to predict relative effects of forest management strategies on coastal stream channel morphology and fish habitat.

MELLINA, Eric  
Dr. S.G. Hinch
Stream habitat and rainbow trout behavioral, physiological, and population responses to streamside timber harvesting in the central interior of British Columbia.

RAMSFIELD, Tod Donald  
Dr. B. van der Kamp
Investigations into a biological control strategy for lodgepole pine dwarf mistletoe.

SPELECHTNA, Bernhard  
Dr. K. Klinka
The growth of Abies amabilis (Douglas ex Forbes) in relation to climate and soils in southwestern British Columbia.

WANG, Honglong  
Dr. C. Breuil
Characterization of scytalone dehydratase and reductase genes and expression of melanin biosynthesis genes in Ophiostoma floccosum.

Ph.D.

BRASHERS, Justin  
Dr. P. Arcese
The ecology and evolution of behavioral variation in the African antelope and relevance of behavior for conservation.

CRAIG, Vanessa  
Dr. M.C. Feller
Population and habitat use characteristics of forest-dwelling small mammals in relation to downed wood.
SADDLER, J. (Jack) N.
B.Sc. (Hons.) (Edin.), Ph.D. (Glas.)
Dean
Phone: 604-822-2467
E-mail: saddler@interchg.ubc.ca

MARSHALL, Peter L.
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.
Phone: 604-822-4918
E-mail: marshall@interchg.ubc.ca

McLEAN, John A.
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.
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School of Economics and both Masters and Doctoral degrees in agricultural economics from the University of Maryland. Sumeet’s teaching responsibilities include an undergraduate course “Land and Resource Economics” and a graduate level class “Advanced Economics of Natural Resources with Applications to Forestry”. His current research topics include the impact of international trade on the environment, and the optimal management of natural resources during economic development.

ACHIEVEMENTS IN 2002–03

- The Department successfully hosted, in partnership with Forest Trends, a major international conference “Global Perspectives on Indigenous Peoples’ Forestry: Linking Communities, Commerce and Conservation,” bringing together indigenous delegates from around the world.

- Drs. Younes Alila and Dan Moore received an Exploratory Workshop grant from Peter Wall Institute to host a workshop, June 2-6, 2002, “Scaling and Non-Linearities in Hydrology”.

- Implemented third year of new B.S.F. program.

- Dr. Kevin Lyons received a new NSERC project research grant. Drs. Alila, LeMay, Meitner, Nelson, and Sheppard received ongoing NSERC project funding.

- Drs. Hoberg and Hines received new NCE SFM project research grants. Drs. Hoberg and Marshall also received ongoing SFM project funding.

- Dr. Paul Wood has been awarded a large SSHRC project research grant to examine the extent to which intergenerational justice is being implemented world-wide by way of biodiversity and related conservation policies.

ACHIEVEMENTS AND PLANS

Forest Resources Management Department

PLANS FOR 2003–04

- Currently recruiting for a new assistant professor in remote sensing to replace Peter Murtha who is retiring in June.

- Will continue to recruit for Chair in forest hydrology.

- Plan to introduce a new “Forests and Society” stream in our graduate program.

- Will implement the fourth year of the new B.S.F. program, including the new integrated course FRST 424, Sustainable Forest Management.

- Plan to raise funds for a First Nations Initiative, including a Chair in First Nations’ Forestry.
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Retirements

Dr. John Barker retired on June 30, 2002, after many years of service to the forestry community in B.C., Canada and world-wide, and after three years as the incumbent of the Forest Renewal BC Chair of Silviculture at UBC.

Dr. Karel Klinka retired on June 30, 2002, after 25 years of exemplary service to UBC. Dr. Klinka is an inspirational teacher and scientist not only at UBC but also to the whole forestry community.

New Faculty Appointments

Dr. Bruce Larson has joined the Forest Sciences Department as a professor and Forest Renewal BC Chair in Silviculture. Bruce received his bachelor’s degree in biology from Harvard University before going to Yale University for an M.F.S. followed by a Ph.D. from the University of Washington. After a short post-doctoral appointment at Duke University, he joined Yale's School of Forestry and Environment where he taught for 17 years. For 10 of those years he was also Director of School Forests. For the past two years he has served as an acting professor of Forest Resources at the University of Washington and was an associate dean for part of that time. Bruce has worked in forest types throughout the United States, boreal Saskatchewan, and Germany. He is probably best known for co-authoring the major forest textbooks The Practice of Silviculture and Stand Dynamics. As well as more standard research projects in silviculture, Bruce has also been active in the areas of forest certification and carbon sequestration. His teaching responsibilities are in the area of silviculture.

Dr. Suzanne Simard has joined the Department as an associate professor. Suzanne received her B.S.F. in forest resources management from the University of British Columbia, and her M.Sc. and Ph.D. in forest ecology from Oregon State University. For the past 12 years, she has been a research silviculturist with the B.C. Ministry of Forests, where her research program has focused on vegetation management, broadleaf and mixed stand silviculture, and soil biology. Some goals of her future research are to examine the reciprocal interactions between plants, soil organisms, and soils, and the linkages between ecosystem level responses to disturbance/management and plant/soil functional processes. Suzanne’s teaching responsibilities include silvics, biogeoclimatic ecosystem classification, forest ecology, and spring and fall camp.

Achievements in 2002–03

- Dr. Sarah Gergel, a recent graduate of the University of Wisconsin–Madison, and currently at the National Center for Ecological Analysis and Synthesis at the University of California–Santa Barbara, has accepted our offer of assistant professor in forest landscape ecology, starting June 1, 2003.

- Dr. Susan Grayston, currently at the Macaulay Land Use Research Institute in Scotland, has been awarded a Canada Research Chair in soil microbial ecology, and will start her appointment as associate professor on August 1, 2003.

- The Integrated Year III program in Forest Resources Management and Forest Operations was offered for the first time. By all accounts the new program, and particularly the field component, was a success, although adjustments (mainly in workload) will be implemented in the coming year.

- Drs. Aitken, Guy and Hinch received new NSERC strategic grants. Dr. Kimmins received a new NSERC collaborative grant and Drs. Martin and Prescott received new NSERC equipment grants. Drs. Aitken, Arcese, Bunnell, Chanway, Guy, Kimmins, Klinka, Martin, Prescott, Richardson and Ritaland received ongoing NSERC project funding.


Planning and Budgeting

- Maintain high level of proposals to NSERC, FII and other funding agencies.

- Complete the establishment of a belowground ecosystem group comprised of Drs. Chanway, Prescott, Grayston, and Simard. The group will develop a common set of research labs and be part of a renewed Soils Science Graduate Program jointly with the Faculty of Agricultural Sciences.

- Establish two NSERC/CFS/Industry Chairs in Forest Health.

- Concentrate on undergraduate recruitment and a revitalization of the Forest Science undergraduate program.
WOOD SCIENCE DEPARTMENT

Paul McFarlane, Head
Stavros Avramidis
David Barrett
Colette Breuil

David Cohen
Patrick Cramond
Simon Ellis
Philip Evans

Robert Fürst
Robert Kozak
Frank Lam
Thomas Maness

Shawn Mansfield
Helmut Prion
John Ruddick
Jack Saddler

Gregory Smith
Taraneh Sowlati
**McFARLANE, Paul N.**
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  Assessment
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■ Research Associates

KIM, Seong-Hwan
B.Sc., M.Sc. (Korea), Ph.D. (Brit. Col.)
- Forest Products Biotechnology

MABEE, Warren
B.Sc. (Hons.), M.Sc., Ph.D. (Tor.)
- Forest Products Biotechnology

■ Post-doctoral Fellows

BERLIN, Alejandro G.
M.Sc. (Hons.), Ph.D. (Moscow State Univ., Russia)
- Forest Products Biotechnology

HAO, Bingye
B.Eng., M.Eng. (Beijing Forest Univ., China), Ph.D.
(Brit. Col.)
- Wood Drying

CHOWDHURY, Jahangir
B.Sc. (Hons.), M.Sc. (Chit.), M.Sc. (Wales),
Ph.D. (Oregon State)
- Wood-based composites

ELUSTONDO, Diego
Ph.D. (National Univ. of the South, Argentina)
- Wood Drying

KANG, Kyu-Young
B.S., M.S., Ph.D. (Dongguk Univ., Korea)
- Biotechnology and Chemistry of Wood Fibre

KIM, Jae-Jin
B.S., M.S., Ph.D. (Korea U.)
- Forest Products Biotechnology

LIM, Young-Woon
B.S., M.S. (Korea Univ.),
Ph.D. (Seoul Nat. Univ., Korea)
- Forest Products Biotechnology

PARK, Ji-Young
Ph.D. (Seoul Nat. Univ., Korea)
- Biotechnology and Chemistry of Wood Fibre

PAN, Xuenjun
B.Sc., M.Sc., Ph.D. (Tianjin Univ., China)
Ph.D. (Hokkaido Univ., Japan)
- Forest Products Biotechnology

XIAO, Zhizhuang
B.S. (Shandong Univ., China), M.S. (Beijing Univ.,
China), Ph.D. (Shandong Univ., China)
- Forest Products Biotechnology

ZHANG, Xiao
B.Sc., M.Sc. (Nanjing Forestry Univ., China),
Ph.D. (Brit. Col.)
- Forest Products Biotechnology, Wood
  Chemistry

■ Adjunct Professors

BEATSON, Roger
(British Columbia Institute of Technology)
B.Sc., Ph.D., Ph.D.
- Pulp and Paper Chemistry

CHOW, Suezone
(Canadian Forest Products)
B.Sc., M.Sc., Ph.D., O.B.C.
- Forest Products Chemistry

DAI, Chunping
(Forintek Canada Corp.)
B.Sc., M.Sc., Ph.D.
- Wood Composite Products and Processing,
  Computer Modeling

GASTON, Chris
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B.Sc., M.Sc., Ph.D.
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MORRIS, PAUL
(Forintek Canada Corp.)
B.Sc., Ph.D.
- Preservation and Protection

PROCTER, Alan R.
(Consultant)
B.Sc., Ph.D.
- Research and Technology Management
**Staff**

BORTHWICK, Barbara  
Administrative Assistant

FARRELL, ROSS  
B.Sc. (Hons.), (Aberd.), M.Sc. (Brit. Col.)  
Project Co-ordinator

FOLEY, Duane  
Dipl. Computer Info. Syst. (Douglas Coll.)  
Computer Developer

GREGG, David  
B.Sc. (Calg.), M.A.Sc. (Brit. Col.)  
Forest Products Biotechnology Research Scientist

HASTINGS, Diana  
B.Sc. (Brit. Col.)  
Research Assistant/Technician

JOHANSSON, Carl  
B.Sc., Ph.D. (S. Fraser), MCSE  
Computer Support Specialist

LEE, George  
B.Sc. (China), M.Sc. (Oregon State)  
Wood Engineer Scientist

McKELLAR, Sandy  
B.Sc. (Brit. Col.)  
Student Affairs and Public Relations

MYRONUK, Robert  
Dipl. Tech. (BCIT)  
Research Support Services Supervisor

RISTEA, Catalin  
B.Sc. (Transylvania Univ.), M.Sc. (Brit. Col.)  
Project Manager

SCHUETZ, Andre  
Computer Developer

WONG, Debbie  
B.Comm. (Brit. Col.)  
Accounting Clerk

YAN, Hui Jun  
B.S. (Shandong Inst., China), M.A.S. (Harbin Univ., China)  
Research Engineer

**Promotion**

Dr. Robert Kozak promoted to associate professor with tenure effective July 1, 2003.

**ACHIEVEMENTS AND PLANS**

**Wood Science Department**

**ACHIEVEMENTS IN 2002–03**

- We maintained our 100 per cent record for the placement of students in the Wood Products Processing Co-operative Education option. Forty-five students were placed with wood processing companies across Canada and internationally.

- Departmental undergraduate recruiting activities were incorporated into the Faculty-wide recruiting initiative.

- Dr. Philip Evans was elected as a Fellow of the International Academy of Wood Science.

- Dr. Simon Ellis has continued as the Department’s undergraduate program director. His demonstrated abilities have been a key factor in him being assigned to the position of the Director of Recruitment and Co-op for the Faculty of Forestry.

- Faculty members from the Fachhochschule Rosenheim and industry representatives continued to provide significant contributions to the delivery of the Wood Products Processing program.

- Drs. Barret, Breuil, Dai, Kozak, Lam, Maness, Mansfield and Ruddick received new NSERC project research grants. Drs. Avramidis, Beaton, Breuil, Maness, Mansfield, Paszner, Saddler, and Smith received ongoing NSERC project funding. Total NSERC funding exceeded $1 million.

- The Department organized a Jubilee Lecture by Dr. Leena Paavilainen promoting the competitiveness of forestry and forest-based industries in Finland.

- The Department hosted the Burgess-Lane Lecture. Dr. Robert Evans, CSIRO, Australia and recent recipient of the Marcus Wallenberg Prize gave a presentation on “Art, Science and Informatics – Visualisation of Large, Complex Data Sets in High-Speed Measurement of the Microstructure of Wood”.

- Significant progress was made in establishing the Bioprocessing Centre for Sustainable Fuels and Chemicals.

**PLANS FOR 2003–04**

- The Department and Centre for Advanced Wood Processing will be working together to improve student recruitment and retention in the Wood Products Processing program.

- Dr. John Kadla will start his new appointment as Canada Research Chair in Advanced Biomaterials.

- The Department will seek funding for a B.C. Leadership Chair in Wood Building Design.
THE Centre for Advanced Wood Processing (CAWP) is Canada’s national centre for education, extension and research for the advanced wood products industries. These industries, which are generally small to medium scale enterprises (SMEs), manufacture a diverse range of products whose value greatly exceeds their raw material content. The success of such SMEs depends, in part, on their ability to effectively adapt and utilise new concepts and manufacturing technology in order to produce the products and services that an increasingly discerning and unforgiving global marketplace requires. CAWP’s role in this bigger picture is to provide industry with access to highly educated and trained students with the capacity to lead and drive change in the industry; offer a continuing education program aimed at enhancing the skills of existing industry employees and an extension service designed to improve the manufacturing efficiency of SMEs; finally an interdisciplinary research program. In fulfilling this mandate CAWP is playing an important role in the development of Canada’s forest industries and providing a model for educational-industry partnerships that institutions in many countries are seeking to emulate. CAWP is funded through an endowment and cost recovery on services.

The year that has just passed saw important progress in a number of areas that are critical to CAWP’s ability to deliver benefit to our stakeholders on a sustainable basis. Most importantly, the funds that support the Centre have finally been established as a University endowment, providing a greater level of security for our operating funds and a guaranteed level of income on which to plan ahead. My sincere thanks are extended to the Office of the Dean of the Faculty of Forestry for helping to resolve this critical issue. The Centre’s reliance on external consultants to teach in key areas in the Wood Products Processing program declined significantly in the last year as newly appointed faculty in the Department of Wood Science and CAWP developed courses in a number of key areas of secondary wood processing including Job Costing and Engineering Economics (Sowlat), Environmental Facilities Design (McFarlane) and Wood Finishing (Evans). Finally, a partnership program to obtain industry support for CAWP’s activities has been developed and reviewed by our advisory board and we look forward in the coming year to working with industry to obtain their support for our programs. Activities in each of CAWP’s mandated areas of responsibility during the last year, and plans for the future are described below.

Educational Programs

The Wood Products Processing program received the prestigious Yves Landry Award in November of 2002 as the most innovative university-level course in manufacturing. This external recognition of the quality of the program reflects well on Faculty members in the Departments of Wood Science, Mechanical and Electrical Engineering and Commerce that provide the majority of the courses that constitute the Wood Products Processing program. Faculty funded directly from CAWP’s endowment deliver twelve courses, mainly concentrated in the later (4th and 5th) years of the program. A significant contribution was also made in 2002-03 by Heinz Köster of Fachhochschule Rosenheim. Dr. Simon Ellis of the Wood Science Department continued in his role of directing and managing the program. The number of co-op student placements in industry decreased for the second consecutive year, reflecting lower numbers of students in the 3rd and 4th years of the Wood Products Processing program. Co-op fees rose by 100 per cent in 2002 as part of a university-wide tuition fee increase. In spite of the higher fees, the number of undergraduate students applying to co-op increased by 82 per cent and the number of students admitted into the co-op program was up by 45 per cent. For the seventh consecutive year, 100 per cent of students enrolled in the co-op program were placed in industry. Industry placements were located in B.C., Manitoba, Ontario, and Quebec, as well as in Australia and the USA. Job opportunities for graduates of the program are excellent, a point which CAWP strongly emphasizes in its student recruitment activities. Despite our efforts in this area there is room for improvement as numbers of students in the program have been static for the past three years. An initiative with the Wood Manufacturing Council of Canada to develop a national recruiting project for the secondary wood processing industries is still being pursued, although progress has been slower than anticipated and alternative avenues for strengthening student recruitment activities are currently being investigated. CAWP is committed to providing its students with access to the best, state-of-the-art, wood processing and computing facilities and as part of this commitment during 2002-03 we upgraded the compressed air delivery system in our wood finishing laboratory, added sophisticated new audio-visual equipment in the main lecture theatre in CAWP, and replaced the high speed moulding machine, twin head sander and edge bander in our machinery laboratory with the latest models. SCM Group Spa and Eurotech Services B.C. Ltd, loaned these pieces of equipment to CAWP and I would like to extend my sincere thanks to them.
Continuing Education, Communication and Extension

In the past year CAWP has seen its continuing education program grow in exciting new ways. Guest lectures and seminars have brought industry and the external research community closer to our faculty, staff and students. Some of these presentations have been offered through the newly-formed Canadian branch of the Institute of Wood Science, which is based at CAWP. Seminar presenters are now able to utilise a high-tech “smart classroom” which has been installed at CAWP, enabling web conferencing, video streaming, and instant access to online and multi-media applications from our main seminar room. CAWP has also made successful inroads into web-based distance education in the past twelve months. An introductory web-based course in wood products processing was designed in-house and delivered online to students, and CAWP also began development of an interactive course on wood finishing. This involved the creation of a complete, online course management system.

CAWP’s existing workshop program continued, with wood finishing skills courses being offered for the first time in Ontario. The seven-module, 150-hour kiln drying workshop series, was officially ratified as a UBC Certificate Program in December, 2002. CAWP has seen increased demand for custom in-plant training sessions as well as the extension services provided by Woodmark. In response to the former, new agreements with external instructors are being finalised in the areas of CNC machining and finger jointing. Two high profile events took place during 2002-03, the first being CAWP’s third major conference on industrial wood finishing in Atlanta. The conference attracted 125 participants from across North America. In March, 2003, CAWP brought a major exhibition on Italian furniture design to Vancouver. Entitled “iMade – Ways of Producing: Rigour and Invention in the Italian Furniture Industry”, the exhibition drew several thousand visitors over the three weeks that it was on display at UBC’s Robson Square campus. Educational seminars held during the event attracted several hundred more people, and plans are afoot to follow up on the interest generated.

CAWP produced its first comprehensive annual report in 2002-03 and our bimonthly newsletter is reaching steadily larger audiences. Website resources have continued to grow, offering greater services to industry at large.

Visiting and Post-doctoral Fellows

Cabangon, Rico (Forest Products Research and Development Institute, The Philippines).
Chowdhury, Jahan Gir (CAWP, UBC).
Semple, Kate (The Australian National University).
Williamsen, Chris (University of Canterbury, New Zealand).

PLANS FOR 2003–04

Major initiatives are planned for all of the aforementioned areas, most significantly:

- Increase industry support for CAWP by implementing an industry partnership program.
- Continue to seek closer ties with industry in Canada and educational institutes in Europe.
- Continue to develop in-house expertise in distance education to facilitate Canada-wide delivery of continuing education programs.
- Establish development of the certificate program in timber drying, and obtain funding for and start developing an Internet-based certificate program in wood finishing.
- Establish an advanced wood processing research laboratory employing state-of-the-art equipment for modifying and characterizing wood surfaces.
- Develop a range of fee-for-service activities to be offered to industry.
- Expand the range of research activities focusing on secondary (value added) wood processing.
THE Centre for Applied Conservation Research (CACR) concerns itself with finding science-based solutions to complex conservation problems within managed and natural landscapes. It was founded in 1991, and members of the Centre continue to bring strong disciplinary expertise together to conduct research on and seek solutions to complex environmental problems in a cooperative setting. The Centre has four broad goals. These are to:

- conduct research on applied conservation issues within both managed and natural landscapes. Research interests include issues specific to British Columbia, as well as issues of national and international significance;
- further sustainable forest management through the application of research to complex land management issues. The research assists with both planning and determining the effectiveness of improved management practices;
- provide opportunities for high-calibre graduate students to work on issues that are both complex and immediately relevant. The program produces graduates who understand the many different facets of conservation problems; and
- encourage effective dialogue with people working outside the university, to ensure the continued relevance of its research and to provide people with access to the most current research information.

The CACR went through an eventful year in 2002-03. In November, Dr. Fred Bunnell, the founding director of the Centre stepped down as co-director because of ill-health. Dr. Bunnell can make claim to building the Centre to its current status, and it was his long-term vision and persistence that has ensured the current success of the Centre. Dr. John Innes, who has been working as co-director of the Centre with Dr. Bunnell for the past 18 months, will now assume the directorship.

Links to other centres and institutes on campus are being explored. The relationships between the many different groups within UBC are complex and potentially confusing, and we have initiated discussions to determine the benefits of more collaborative work. This has proved challenging.

A business plan for the Centre was developed and discussions were held with a number of potential sponsors. Unfortunately, these have not been very fruitful, and the acquisition of some basic funding will be a key issue in the future. Various avenues are being explored, complicated by the important requirement to maintain the independence and scientific credibility of the researchers working with the Centre.

- Research

The Centre has pursued a number of activities related to its mandate. Some of the projects in which the Centre has recently been involved include:

- studying species interactions and community composition on the southern Gulf Islands of B.C.;
- investigating how aquatic-breeding amphibians might be utilized as indicators of the effects of forest management on wetland habitats;
- developing effectiveness monitoring frameworks for sustainable forest management practices;
- testing the impacts of selection harvesting systems on forest wildlife;
- investigating the ecology and conservation of alpine and forest birds in relation to recreational and forestry activities;
- studying the impacts of forest management practices on the ecology of stream and riparian ecosystems;
- synthesizing the available information in impacts of forest practices on the biological diversity of boreal forests;
- designing natural area networks on the central coast of British Columbia;
- studying the ecology and population genetics of endangered amphibians;
- developing and testing an ecosystem concept of stream restoration;
- studying the grasslands of the South Okanagan and their management needs; and
- examining Kermode bear population genetics.

- Encouraging Dialogue

The Centre has been active in this area throughout the year. The website has been reviewed, revised and updated, and continues to be developed. It can be accessed at www.forestry.ubc.ca/conservation.

Within the University, the Centre, in cooperation with the Centre for Biodiversity Research, organized a series of seminars with speakers from Canada, Europe and the USA. Topics
reflected the diverse interests of the two Centres, and included seminars on the conservation of marbled murrelets, forest certification, ecosystem restoration at Mt. St. Helens and cultural keystone species. The Centre was particularly fortunate to be able to attract Dr. Paul Ehrlich of the Department of Biological Sciences at Stanford University as a speaker. The very high attendance at this seminar illustrated the interest which our seminar series is generating.

A new activity for the Centre was the organization of a public forum on the relationships between salmon farming and the conservation of wild salmon. This forum was organized in cooperation with the Forest Research Extension Partnership (FORREX) in a relationship that is providing increasing dividends. Three expert speakers presented the science associated with sea lice problems, escapes and the maintenance of wild salmon populations. One of the speakers came from Scotland and was able to reflect on the experience there. The speakers were followed by a panel session in which speakers from the industry (Marine Harvest Canada), from conservation groups (the David Suzuki Foundation, government (Fisheries and Oceans Canada) and First Nations (the Musgamagw Tsawatinauk Tribal Council and the Kitasoos-Xai'xais First Nation) were able to present their views. The forum, held in the Vancouver Public Library, was attended by over 160 people, and many of those present requested that more such forums be organized.

At an international level, the Centre continues to be the coordinator of the BorNet project. BorNet is an international network of scientists, policymakers, industry representatives and environmentalists focussed on biodiversity conservation in boreal forests. The gradient of forestry impacts within the boreal forests, from forests with a long history of industrial forest management in Finland, Sweden, and Norway to natural intact forests in parts of Canada and Russia, gives us a unique opportunity to synthesize existing information, identify knowledge gaps and create research projects across a range of forest management conditions. Following a series of Canadian workshops in 2001, an international workshop, funded by the NSERC International Opportunities Fund and in cooperation with FORREX, was held in Uppsala, Sweden. The proceedings of this conference and the other workshops are available at the BorNet website (www.bornet.org).

**ACHIEVEMENTS IN 2002–03**

- Increased visibility of the Centre through participation of Centre Faculty in Species Recovery Teams working in British Columbia.
- Development of the working relationship with the Forest Research Extension Partnership (FORREX).
- Development of a memorandum of understanding with the B.C. Ministry of Water, Land, and Air Protection that will greatly assist the financing of small research projects.
- Increased cooperation with the B.C. Ministry of Sustainable Resource Management.
- Development of a working relationship with the West Moberly and Saulteau First Nations of northeast B.C. in preparation of a large project on the cumulative impacts of development on the boreal forests of British Columbia.
- Organization of the international BorNet symposium in Uppsala, Sweden.
- Organization of a public forum on salmon aquaculture and the risks that this industry poses to wild salmon stocks.
- Organized a symposium, Ecological and Earth Sciences in Mountain Areas, for the International Year of the Mountain, Banff Centre for Mountain Culture, Banff, Alberta.

**CENTRE FOR APPLIED CONSERVATION RESEARCH**

**PLANS FOR 2003–04**

The success of the public forum has provided an indication of the need to make scientific information available to the general public in a neutral format. Funding is being sought to develop further forums on issues of conservation concern. Research will continue to focus on conservation problems, with the emphasis being the development of ecologically, economically and socially acceptable solutions. Coordination and development of the Centre will remain a challenge, especially in the absence of any funding or other forms of financial support.
The Faculty of Forestry operates three Research Forests: the Malcolm Knapp Research Forest (Knapp Forest) near Maple Ridge on the coast, the Alex Fraser Research Forest (Fraser Forest) near Williams Lake in the central interior of B.C., and the newly-inaugurated Aleza Lake Research Forest (Aleza 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 in serving the people of B.C. 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 2002–03

**MALCOLM KNAPP FOREST**

Paul Lawson  
B.S.F., M.B.A., R.P.F.  
Manager  
E-mail: plawson@interchg.ubc.ca

- Initiated fifteen new research projects.
- Employed three recent graduates in internship positions ranging from 4-8 months each.
- Hosted two international interns from Germany and the Netherlands. One completed a master’s thesis on the feasibility of non-timber forest products at the Forest.
- Welcomed Jennifer Turner as FORREX extension specialist based at the Knapp Forest.
- Increased Loon Lake facility use to 9,800 visitor days in 2002.
- Hosted courses in the Faculty’s Spring Field School, Conservation Field School, and the new Year III Integrated term.
- Continued redevelopment of Loon Lake Research and Education Centre with the move and renovation of the Marion Lake Cabin to Loon Lake, reconstruction of Loon Lake interpretive trails, installation of a 12-station computer lab and improvements to existing buildings.

**ALEX FRASER FOREST**

Ken Day  
B.Sc.F. (Hons.), M.F., R.P.F.  
Manager  
E-mail: kenday@interchg.ubc.ca

- Initiated twenty new research projects.
- Recorded over 600 contact days of extension activities, including field schools (UBC and UNBC), primary and secondary school students and teachers, and practitioners.
- Participated with FORREX to develop and host three extension events.
- Hosted four international interns, from Germany, the Netherlands, Korea, and Germany as well as three volunteer interns from Canada.
- Employed three recent graduates in positions ranging from three months to one year.
- Led a FII-funded project to develop and extend a series of modules for managers of small woodlots.
- Maintained silviculture operations with planting of 13.8 ha, post-harvest spacing/slashing of 44.2 ha, site preparation of 3.2 ha, and collection of 3 hectolitres of Douglas-fir cones.
- Conducted surveys on 28.5 ha declared as free growing.
- Monitored a spruce budworm outbreak (population levels much reduced) at Knife Creek in conjunction with the B.C. Ministry of Forests.
ALEZA LAKE FOREST

Michael Jull
B.S.F., M.Sc., R.P.F.
Manager
E-mail: jullm@unbc.ca

- Initiated six new research projects.
- Employed two students for 4-month internships.
- Hosted field courses in UNBC’s Spring Field Camp, and field portions of courses in forest soils, silviculture, and forest health as well as continuing education courses in forest soils and wildlife trees.
- Hosted a group of 45 UNBC and UBC Faculty members, staff, and guests in May, 2002, for a full-day field trip around the Forest.
- Recorded low or endemic levels of spruce and balsam bark beetles in 2002. Some budworm defoliation was noted on subalpine fir trees in 2002.
- Initiated project to examine a potential site for a field station facility (office, classroom and accommodation) adjacent to the Forest. License of Occupation application submitted.

Research Forests harvesting 2002-03

<table>
<thead>
<tr>
<th></th>
<th>Knapp Forest</th>
<th>Fraser Forest</th>
<th>Aleza Forest</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logging</td>
<td>18317 m³</td>
<td>5200 m³</td>
<td>13050 m³</td>
<td>36567 m³</td>
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<tr>
<td></td>
<td>27.9 ha</td>
<td>10.7 ha</td>
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<td>Commercial Thinning/Partial Salvage Cutting</td>
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<td>10755 m³</td>
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<td>18479 m³</td>
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<tr>
<td></td>
<td>28.3 ha</td>
<td>66.1 ha</td>
<td></td>
<td>94.4 ha</td>
</tr>
<tr>
<td>Salvage</td>
<td>4985 m³</td>
<td></td>
<td></td>
<td>4985 m³</td>
</tr>
</tbody>
</table>

Malcolm Knapp Forest utilized a variety of harvest methods in 2003 including mechanized feller/processor, multi-span skyline, and helicopter. Silvicultural systems ranged from clearcut with reserves to patch cuts and variable retention. Commercial thinning continued to be the major proportion of operational area.

Bark beetles continued to drive Alex Fraser Forest harvest programs with mountain pine beetle in epidemic conditions, and spruce beetle and Douglas-fir beetle damage increasing. Silvicultural systems included group selection, single-tree selection, and clearcut with reserves.

Aleza Lake Forest used current harvest areas to demonstrate retention of advanced regeneration, wildlife tree retention, and improved methods for incorporating feller-buncher “stubbing” techniques into operational wildlife tree management on harvested areas. Winter logging included a new harvest entry in an area previously harvested through alternate-strip cutting in 1958.

PLANS FOR 2003–04

Malcolm Knapp Forest
- Complete infrastructure work at the Loon Lake facility to include expansion of wireless internet and sewer and firefighting systems upgrades.
- Host a grand opening of the Liquid Mirror Observatory.
- Hold the first of a series of design-build courses with the School of Architecture. (The first project will be an outdoor deck for the Loon Lake dining hall to be manufactured by students at the Forest’s sawmill using logs recovered at the forest.)
- Set up of a demonstration and extension project to illustrate the linkage between silviculture and wood quality.
- Continue investigation and trials of non-timber forest products and hydro-electric generation as alternative revenue sources.

Alex Fraser Forest
- Host student volunteers during reading week for work experience.
- Work with B.C. Ministry of Forests to devise a new tenure arrangement for the Forest.
- Complete FII-funded project on modules for managers of small woodlots.
- Complete FII-funded integrated research project in logging for mule deer habitat in small-diameter dry-belt Douglas-fir forests.
- Secure funding for re-measurement of permanent sample plots at Knife Creek.
- Commence five-year forest development planning with the goal of incorporating a variety of silvicultural systems into forest management.

Aleza Lake Forest
- Hire new project support staff member.
- Continue fish and stream inventory activities.
- Continue improvements on about 10 km of roads.
- Complete retrofit and upgrade of main weather station.

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Alongside 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, S.N.
- Member, Forest Genetics Council (FGC).
- Chair, Coastal Technical Advisory Committee, FGC.
- Member, Gene Conservation Technical Advisory Committee, FGC.
- Chair, Proposal Evaluation Subcommittee, Operational Tree Improvement Program, FGC.
- Member, IUFRO Timber Engineering Committee.

Bendickson, D.F.
- Treasurer, Canadian Institute of Forestry.
- Member, Board of Examiners, ABCPF.
- Member, Academic Standards Committee, ABCPF.

Bohman, J.
- UBC Faculty of Science Achievement Award for Leadership.
- Member, Genome BC President's Science Advisory Committee.

Bull, G.Q.
- Member, Society for Teaching and Learning in Higher Education.
- Member, Canadian Advisory Committee on Climate Change, Canadian Standards Association, Working Group #5.
- Member, Canadian Council of Forest Ministers, Criteria and Indicators Technical Working Group #5.
- Member, Public Participation Research Group, NCE Sustainable Forest Network.
- Member, Renewable Resources Cluster Group, National Round Table on Environment and Economy.
- Fellow, Forest Trends.
- Member, Sustainable Development Indicators Steering Committee, National Round Table on Environment and Economy, Ottawa.

Breuil, C.
- Member, Fonds pour la formation de chercheurs et l'aide à la recherche Committee, Quebec.

Cramond, P.
- Member, Continuing Development Program Committee, APEGBC.

Ellis, S.C.
- Member, Education Subcommittee, Society of Wood Science and Technology.
EVANS, P.D.
- Elected Fellow of the International Academy of Wood Science.
- Member, Wood Manufacturing Council of Canada.
- Member, Advisory Committee, Forintek Technology Transfer Program.
- Member, Organising Committee, 6th Pacific Rim Bio-Based Composites Symposium.
- Adjunct Professor, The Australian National University.
- Member, NRCan/CFS Value-Added Partnership, R&D Working Group.

FANNIN, R.J.
- Senior Scientist Award, Ministry of Research, Government of France.
- Associate Editor, Canadian Geotechnical Journal.
- Vice-President, North American Geosynthetics Society.
- Member, Board of Directors, Forest Management Institute of British Columbia.

FELLER, M.C.
- Member, B.C. Medical Association Environmental Health Committee.
- Member, Sicamous Silvicultural Systems Research Project Management Committee.

GUY, R.D.
- Managing Editor for the Americas, TREET Structure and Function.
- Member, College of Reviewers, Canada Research Chairs Program.
- Associate Editor, Canadian Journal of Botany.
- Member, Forest Biology Advisory Committee, University of Victoria.
- Member, Canadian Society of Plant Physiologists Meeting Site Committee.
- Member, ABCPF Dendrology Subcommittee.

HALEY, D.
- Appointed Member, Community Forest Advisory Committee, BCMoF.

HINCH, S.
- Chair and Local Organizer for Canadian Conference for Fisheries Research.
- Member, Canadian Aquatic Resource Section of the American Fisheries Society.

HOBERG, G.
- Director, Results-Based Code Consultation, Government of British Columbia.

INNES, J.L.
- Member, Editorial Board, BC Journal of Ecosystem Management.
- Chair, Board of Directors, Forest Research and Extension Partnership.
- Member, International Review Panel, Biodiversity and Forest Health Program, CFS.
- Member, Technical Working Group, Conservation of Biological Diversity, Canadian Council of Forest Ministers.
- Board Member, Canadian Intermountain Joint Venture.
- Member, Technical Committee, Canadian Intermountain Joint Venture.
- Member, BC Environmental Sciences Network.
- Director, Aleza Lake Research Forest Society.
- Member, Interdisciplinary Committee, World Cultural Council.
- Coordinator, IUFRO Task Force on Environmental Change.
- Member, IUFRO Executive Board; Publications Committee; 2005 Congress Scientific Committee (Chair); Science Committee; Congress Bidding Rules Ad Hoc Committee; Policy Committee.
- Member, IUFRO Task Force on the Role of Forests in Carbon Cycles, Sequestration and Storage.
- Member, Organising Committee, North American Air Pollution Workshop.
- Chair, Ecological Committee EE2, Air and Waste Management Association.
- Member, Editorial Advisory Board, Encyclopedia of Forest Sciences (Academic Press).
- Chair, Environment Panel, Research Council for Biosciences and Environment of the Academy of Finland.
- Member, Review Group for High Conservation Value Forests Policy of the Forest Stewardship Council.
- Reviewer, Grant Review Committee, Italian Ministry for Education, University and Research.
• Member, Steering Group, Global Forest Information System.
• Member, Organizing Committee, 2004, International Conference on Applied Forest Ecological Experiments, Portland, OR.

KIMMINS, J.P.
• Recipient, Queen’s Jubilee Medal for Contributions to Forestry.
• Chair, UNESCO World Subcommittee on the Ethics of Energy.
• Member, UNESCO World Commission COMEST: Commission on the Ethics of Science and Technology.
• Chair, Saskatchewan Forest Impacts Monitoring Science Advisory Panel.
• Member, Scientific Advisory Board, Interfor.
• Member, Mistik Scientific Advisory Board.
• Member, International Scientific Advisory Board, Weyerhaeuser.
• Member, MoF/Industry Code Pilot Scientific and Technical Advisory Board, Fort St. John.

Kozak, R.A.
• UBC Wood Science Top Teacher Award.
• Chair, Biometry Academic Standards Subcommittee, ABCPF.
• Member, Forest Products Society Pacific Northwest Section.
• Member, Wood Products Quality Council of Canada.
• Associate Researcher, Forest to Customer Research Consortium (FOR@C), Université Laval.
• Member, Editorial Board, Journal of Forest Products Business Research.
• Fellow, Institute of Wood Science.

LARSON, B.
• Member, Planning Committee, FERIC Workshops on Partial Cutting.
• Member, Planning Committee, FORREX/UBC Conference on Planting Density Effects on Wood Quality.

LeMAY, V.M.
• Deputy Chair and Co-Chair, IUFRO 4.02 Working Group.
• Associate Editor, Forestry Chronicle.
• Associate Editor, Canadian Journal of Forest Research.
• Member, CIF Ring Allocation Committee.
• Member, Stand Management Cooperative Policy Committee (western U.S. and B.C.).
• Member, Canadian Forest Inventory Committee, Mensuration Subcommittee.
• Member, CSA Sealing Committee.
• Member, Technical Review Panel, Washington Department of Natural Resources, State Trust Lands, Sustainability Calculations.

MANESS, T.C.
• Senior Member, American Society for Quality.
• Member, Society of American Foresters.
• Member, Forest Products Society.
• Chair, IUFRO Working Party 5.04.13 Industrial Engineering and Operations.
• Member, International Editorial Committee, Maderas: Ciencia Y Tecnologia.
• Executive Director, Wood Products Quality Council of Canada.

LAM, F.
• Member, CSA 086 Subcommittee on Sawn Lumber.
• Member, CSA 086 Subcommittee on General Design.
• Member, CSA Technical Committee on Solid and Engineered Wood Products.
• Member, ASTM Committee D-7 on Wood.
• Member, CAC ISO TC 165 Timber Structures.
• Member, Canadian Wood Council Committee on Objective Based Code for Wood Frame Construction.

MANSFIELD, S.D.
• Nominated for Forestry Killam Teaching Prize, 2003.
• Nominated to MIT’s Technology Review TR100 List.
• Member, Executive Committee, American Chemical Society, Cellulose and Renewable Material Division.
• Chair, Wood Products and Utilization Committee, Poplar Council of Canada.
• Member, Planning Committee/Publicity Chair, American Chemical Society, Cellulose and Renewable Material Division.
MARSHALL, P.L.
• President, ABCPF.
• Member, Academic Appeals Committee, ABCPF.
• Member, Executive Committee, ABCPF.
• Member, ABCPF/ASTTBC Merger Task Force.
• Member, B.C. Science Council Review Committee.
• Member, Canadian Forestry Accreditation Board.
• Member, Canadian Federation of Professional Forestry Organizations.
• Associate Editor, Forestry Chronicle.
• Co-Editor of a special issue, Canadian Journal of Forest Research.
• Member, University-College Forestry Articulation Committee.

McFARLANE, P.N.
• Member, Sustainable Forest Management NCE, Management Team.
• Member, Sustainable Forest Management NCE, Research Team.
• Member, BC Forest Science Innovation Cluster Development Group.

McLEAN, J.A.
• Member, Canada-EU Consortium Meeting, Fredericton, N.B.
• Director, Forestry Continuing Studies Network.

MITCHELL, S.J.
• Chair, ABCPF Academic Standards Silviculture Subcommittee.
• Member, Technical Committee, IUFRO S.8.03 Wind and Trees.

MOORE, R.D.
• President and Executive Member, Canadian Geophysical Union, Hydrology Section.
• Past President, Canadian Parks and Wilderness Society, B.C.
• Executive Member, Canadian National Committee, International Association for Hydrological Science.
• Executive Member, Canadian Geophysical Union.
• Member, Steering Committee, Forest Research and Extension Partnership Watershed Management Program.
• Guest Editor for Canadian Journal of Forest Research and Hydrological Processes.

MURTHA, P.A.
• Member, Fellow Awards Committee, American Society Photogrammetry and Remote Sensing.

NELSON, J.D.
• Member, FERIC Forest Engineering Advisory Committee.
• Chair, ABCPF Forest Harvesting Academic Standards Committee.
• Member, Scientific and Technical Advisory Committee, Fort St. John Enhanced Forest Management Pilot Project.
• Co-Chair, IUFRO 2004 International Mountain Logging Symposium Planning Committee.
• Member, Advisory Committee, Ph.D. Program in Operations Management, Department of Industrial Engineering, University of Chile.

SADDLER, J.N.
• Editor, World Journal Mircobiology and Biotechnology.
• Associate Editor, International Microbiology and Biotechnology (MIRCEN) Journal.
• Member, Bioenergy Advisory Board, Natural Resources Canada.
• Member, BCMoELP Wood Ethanol Technology Committee.
• Activity Leader, IEA Biotechnology Network.
• Member, NREL Biofuels Program (US DoE).

PRION, H.G.L.
• UBC Teaching Prize, Civil Engineering Department.
• Appointed NSERC Associate Chair in Engineering Design.
• Associate Editor, Canadian Journal of Civil Engineering.
• Member, Woodworks Provincial Steering Committee.
• Director, Board of Division of Structural Engineering, APEGBC.

SHEPPARD, S.R.J.
• Member, Editorial Advisory Board, Encyclopedia of Forest Sciences (Academic Press).
• Member, Editorial Advisory Board, Landscape and Urban Planning.

RICHARDSON, J.S.
• Associate Editor, Journal of the North American Bentholological Society.
• Guest Associate Editor, Canadian Journal of Forest Research.
• Member, Freshwater Fish Recovery Team.
• Member, Rocky Mountain Tailed Frog Recovery Team.
• Member, Organising Committee, American Society of Limnology and Oceanography Annual Meeting.
• Chair, Organizer for 2004 North American Bentholological Society Meeting.
• Co-Chair, Oregon Spotted Frog Recovery Team (COSEWIC – endangered).

SIMARD, S.
• Member, Organizing Committee, Mountain Forests: Conservation and Management IUFRO Conference, Silver Star, B.C.

SOWLATI, T.
• Member, Institute of Wood Science.
• Member, Canadian Operational Research Society.
• Member, Forest Products Society.

VAN DER KAMP, B.J.
• Chair, Western International Forest Disease Work Conference.

WATTS, S.B.
• Member, ABCPF Biometry Academic Standards Committee.

WOOD, P.M.
• 2003 Forestry Killam Teaching Prize.
• Nominated for Lynton Keith Caldwell Award, American Political Science Association.
• Nominated for C.B. MacPherson Prize, Canadian Political Science Association.
• Member, National Recovery Team for Freshwater Fish of British Columbia.

RITLAND, K.M.
• Associate Editor, Forest Genetics.

RUDDICK, J.N.R.
• Vice Chair, Canadian Standards Association Technical Committee.
• Vice President, American Wood Preservers Association.
• Past President, International Research Group on Wood Preservation.
• Head, Canadian Delegation, ISO TC165 Task Force.
Our extramural funding has increased markedly this year (up 36%) as the funds from the Canadian Foundation for Innovation (CFI) and the BC Knowledge Development Fund are matched with other funding sources to support Drs. Kimmins and Mansfield, two of our Canada Research Chairs. In addition, Dean Saddler received a substantial CFI major installation grant. The private match for Dean Saddler’s grant was provided through the UBC Blusson Fund. Funding from NSERC and SSHRC increased by 28.7%. Several federally-supported research enterprises such as the Sustainable Forest Management (SFM) NCE, the CFS/NSERC/SSHRC/Industry partnership program and BIOCAP Canada Foundation support our researchers. We continue to work closely with the B.C. Ministry of Forests (BCMoF) (for example, through the Centre for Forest Gene Conservation) and the Forestry Innovation Investment (FII). Our research is also supported by the B.C. Ministry of Sustainable Resource Management (BCMoSRM) and the B.C. Ministry of Water, Land, and Air Protection (BCMoWL&AP). Direct provincial grants have increased by more than 15%. Our industrial support has increased by 44%. In addition to direct research support, especially in the Department of Wood Science and the Centre for Advanced Wood Processing, industrial funding is leveraged to provincial and federal granting agencies.

Operating budget, extramural funding and research activity 1982/83 – 2002/03

Details of individual faculty research funding are listed on the following pages. In addition, the Forest Sciences Centre hosts complementary research activities of the MAGIC group from the Faculty of Graduate Studies, the IMAGER group from Computer Science and the Forestry Genomics Group of Genome British Columbia.

Multidisciplinary teams are collectively studying areas such as watershed hydrology, riparian zone ecosystem management, wildlife habitat needs, tree growth and yield and silvicultural issues such as windthrow. Social Sciences are identifying forest-based community needs as well as sustainable forest management from both an industrial and society viewpoint. Enhanced visualization techniques support scenario assessments as landscape level management is modelled and evaluated.

In addition to extensive research in British Columbia, international connections are being made with timber engineering research and education agencies in China.

We also received endowment income of $2,031,438 in 2002/03, a slight increase from the previous year. This funding is provided from endowments originally set up by Forest Renewal BC in support of five Chairs in the Faculty and the following additional sources:

- Forest Renewal BC and Human Resources Canada
- Imajo Cedar Management Fund
- Kathleen and Sheldon Rothwell Fund
- Charlie and Sue Johnson Family Forest Biotechnology Fund
- H.R. MacMillan Conservation Endowment Fund
- Namkoong Family Teaching Exchange and Research Endowment
- Burgess-Lane and Schaffer Lectureship endowments.

**Extramural funding sources 2002/03**
(excluding endowments)

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<th>Source</th>
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<td><strong>Federal</strong></td>
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<td>Other</td>
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<td>BCMoF</td>
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<td>Other</td>
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<td>Industry</td>
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<td>Other</td>
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<td><strong>Subtotal</strong></td>
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<td><strong>International</strong></td>
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<td><strong>Total</strong></td>
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</tr>
</tbody>
</table>

McLEAN, John A.
B.Sc., M.Sc., Ph.D.
Associate Dean
Graduate Studies and Research
Phone: 604-822-3360
Fax: 604-822-8645
E-mail: mclean@interchg.ubc.ca
The following list reflects research funding obtained between April 1, 2002 and March 31, 2003.

S.N. Aitken
- Junior Industrial Research Chair in population genetics (NSERC/Operational Tree Improvement Program/Industry $63,069)
- Adapting forest genetic resource management to climate change (BIOCAP/NSERC $128,790)
- Adaption and gene flow in conifers (NSERC $16,000)
- Proposal to establish a Centre for Forest Gene Conservation at the University of British Columbia (BCMoF $215,000)

J. Barker
- Long-term effects of silvicultural treatments (Forestry Innovation Investment $34,650)

J.D. Barrett
- A comparison of long span flat-wise MOE and static MOE for 2x4 machine graded dimension lumber (Weyerhaeuser Canada $3,432)
- Reliability of wood products (NSERC $22,000)
- Lumber fakewood study – strength of finger joined hem-fir lumber (Coast Forest Lumber Assoc. $8,663)
- Douglas-fir design stresses (Coast Forest Lumber Assoc. $15,000)
- Engineering properties of yellow cedar and Sitka spruce (Coast Forest Lumber Assoc. $80,000)
- Comparing perpendicular to grain strength of Japanese post and beam building components (Coast Forest Lumber Assoc. $80,000)
- Engineering properties manual (Coast Forest Lumber Assoc. $50,000)
- Engineering properties of BC coastal species properties manual (Coast Forest Lumber Assoc. $20,000)

R. Beatson
- Plant fibre network (NSERC $31,000)

J. Bohlmann
- Terpenoid defenses in spruce (Picea spp.) (NSERC $48,000)
- Strategies to improve genetic resistance to white pine weevil attack in spruce (co-investigator) (NSERC $67,150)
- Comparative biochemical and molecular studies of isoprenoid biosynthesis in pines and pine bark beetles (co-investigator) (HFSP $196,875)
- Forestry genomics project (co-investigator) Genome BC $1,034,100)
- Investigation of ecological and host-pathogen interactions of Phellinus weirii – a forest health and natural disturbance agent in second-growth forests (co-investigator) (Forestry Innovation Investment $69,968)
- Characterizing wood and fibre properties by metabolic profiling (co-investigator) (NSERC $146,775)
C. Breuil
- Role of extractives depletion and fungal colonization in the failure of old and second-growth western red cedar wood products (NSERC $81,325)
- Molecular diagnostics of Ophiostoma and related fungi affecting international trade and causing tree diseases (NSERC $147,500)
- Fungi degrade wood quality in green, red and gray lodgepole pine attacked by the Mountain Pine Beetle (Forestry Innovation Investment $39,824)
- Role of the proteinases in fungal growth and pigmentation on wood (NSERC $18,000)
- Genomics of Ophiostomatoid fungi (NSERC/CIHR $75,000)
- Microorganism and enzyme treatments for reducing extractives present in wood chips or pulps (Noranda Inc. $12,925)
- Cartaphip: A potential control agent at harvest sites for the sapstaining fungi that infect Canadian softwood (AgraSoL $838)

G.Q. Bull
- Satellite image change detection methods development and application to rubber plantations (NRC $3,000)
- Assessing the impacts of forest certification on Canadian value-added wood products businesses (co-investigator) (NCE/SFMN $38,500)
- An analysis of log home builders log information needs in British Columbia (co-investigator) (Forestry Innovation Investment $16,885)
- Global forest and trade research partnership (Canadian Forest Products Ltd./Lignum/Norske/Weyerhaeuser Canada $20,000)
- Wood and worship (International Environmental Institute $25,000)
- Forest management to promote environmental services (Iisaak Forest Resource Inc. $30,000)

F.L. Bunnell
- Vertebrate distribution maps for conservation and management (Wildlife Habitat Canada $7,500)
- Evaluating ecosystem representation in the East Kootenays (Tembec Industries/Slocan Forest Products $48,825)

- Development of common approaches, indicators, protocols and standards for monitoring effectiveness of habitat structure consistent with a results-based Forest Practices Code (BCMoWL&SAP $95,000)
- Evaluating biological and economic implications of structure-based management in coastal forests (CFS/Weyerhaeuser Canada $190,830)
- Sustaining vertebrate richness in mixed wood forests (Canadian Forest Products Ltd. $2,000)
- Legacy 2: Landscape issues in sustainable forest management: Statistical methods and tools for projecting consequences of management actions (NCE $40,000)
- Refining sustainable forest management (BCMoSRM $800,000)
- Exploring, forecasting and visualizing the sustainability of alternative ecosystem management scenarios (co-investigator) (NSERC/CFS/SSHRC $384,252)

A. Chan-McLeod
- Effects of variable retention logging on movement patterns and use by red-legged frogs (Weyerhaeuser Canada $40,000)

C.P. Chanway
- Do plant growth-promoting or nitrogen fixing bacterial endophytes live in lodgepole pine? (Global Forest $1,800)
- Nitrogen balance in pine forests: evaluation of two possible missing links (NSERC $38,000)

D.H. Cohen
- Segmentation of Japanese consumers based on nine performance indicators (co-investigator) (CMHC $25,000)
- Assessing the impacts of forest certification on Canadian value-added wood products businesses (co-investigator) (NCE/SFMN $38,500)
- Technology for full exploitation of wood (International Environmental Institute $89,944)
- Market research in forest products (Assoc. Investment Management & Research $3,065)

C. Dai
- Fundamentals of low-density wood composite (NSERC $30,375)
K. Day
- Tools, not rules: Development and extension of management tools for small-scale forestry
  (Forestry Innovation Investment $56,890)
- Commercial thinning in mule deer winter range: improving habitat through forest management
  (Forestry Innovation Investment $63,248)

S. Ellis
- Forestry Student Career Centre
  (TLEF $66,980)

P.D. Evans
- Impact of improved joint designs on production costs and performance of wooden windows
  (Forestry Innovation Investment $41,659)
- Development of software to quantify defects at wood surfaces (Norcon Forestry Ltd./Chemical Specialties Inc. $1,570)
- Surface modification to improve weathering resistance (FORINTEK $54,600)

R.J. Fannin
- An integrated decision support tool for landslide risk analysis
  (Western Forest Products $2,500)
- Enhanced tools for including landslide risk
  (Forestry Innovation Investment $94,290)

M.C. Feller
- Soil water and streamwater chemistry at Roberts Creek, Sechelt Peninsula
  (BCMoF $20,088)
- Ecology and management of riparian – stream ecosystems (co-investigator)
  (Forestry Innovation Investment $36,445)

R.D. Guy
- A novel method for assessing the nutritional status of western hemlock
  (Forestry Innovation Investment $27,171)
- British Columbia Flux Station of Fluxnet-Canada: Influence of climate and disturbance on carbon cycling in forest and peatland ecosystems (co-investigator)
  (CFCAS/NSERC $25,964)
- Carbon isotope discrimination in Tsuga heterophylla and its relationship to mineral nutrition and growth (NSERC $54,651)
- Physiological basis of resource-use efficiency trade-offs in trees (NSERC $44,000)
- Partial canopy retention regeneration and establishment Project 6 in IDFsh in Opax Mountain, Kamloops Forest Region Study (co-investigator)
  (Forestry Innovation Investment $36,700)

S.G. Hinch
- Abnormal migration and premature mortality in Pacific salmon (NSERC $236,750)
- Ecology and management of riparian – stream ecosystems (co-investigator)
  (Forestry Innovation Investment $42,740)
- Juvenile sturgeon habitat use (Department of Fisheries & Oceans $17,000)
- Energetics of Fraser salmon (Department of Fisheries & Oceans $39,000)
- Fish communities as ecosystem indicators for a changing system: The lower Fraser River (co-investigator) (Fraser River Estuary Management Program $15,000)
- Temperature and invertebrate responses to logging
  (Forestry Innovation Investment $93,270)

G. Hoberg
- Development and evaluation of First Nations Forest Policy: The Nisga’a Case (NCE/SFMN $28,500)
- Shifting boundaries in forest policy: Canada and the emerging international forest regime (SSHRC $20,000)
- Report on the public and stakeholder response to the results-based code discussion paper (BCMoF $42,800)

J.L. Innes
- Legacy 1: BORNET (NCE/SFMN $2,500)
- Equitability of standards of forest management
  (Forestry Innovation Investment $23,134)
- Preparation of grant proposal to look at cumulative impacts of development on the forests and forest-dependent communities of northeast BC (NCE/SFMN $15,000)
- International conference on applied science in monitoring of biodiversity (BCMoWL&AP $25,000)

J.P. Kimmins
- Canada Research Chair (NSERC $200,000)
- Modelling succession, and its application in the design of sustainable forestry and agro-forestry systems (NSERC $35,000)
• Modelling stand level response of montane spruce forests on TFL49 to intensification of management (NCE/SFMN $54,900)

• Development of an ecologically-based decision-support tool for assessing the implications of variable retention management for selected indicators of SFM (co-investigator) (International Forest Products Ltd./NSERC $158,688)

• The ecosystem management simulation laboratory for research on forest stewardship and sustainability (BCAE/CFI $200,000)

• Role of hybrid poplar plantations for wood, farm diversification and carbon sequestration in Saskatchewan (NSERC $30,000)

• Exploring, forecasting and visualizing the sustainability of alternative ecosystem management scenarios (co-investigator) (NSERC/CFS/SSHRC $384,252)

W. Kurz

• Linear feature and access management modeling and scenario analysis (NCE/SFMN $28,393)

F. Lam

• Seismic performance of timber structural systems (NSERC $33,000)

• Innovative connections for high performance P&B walls (Coast Forest & Lumber Assoc. $35,000)

• CAF/Forintek/UBC China-Canada ingrade testing collaboration project (FORINTEK $38,000)

• Timber engineering education in China – faculty exchange with Tongji University (COFI $34,997)

• Performance of floor panel (Ainsworth Lumber Co. Ltd. $36,477)

• Structural performance of Japanese post and beam shear wall systems (Coast Forest & Lumber Assoc. $240,000)

B. Larson

• Variability of juvenile growth of aspen and white spruce across mixed wood regions in Western boreal Canada (Alberta Research Council $5,000)

V.M. LeMay

• Natural regeneration for complex stands (co-investigator) (Forestry Innovation Investment $79,380)

• Structural diversity measures and relationships with remotely sensed data (NSERC $15,000)

• Comparing stand origin with forest inventory ages and boreal mixedwood landscape (co-investigator) (NCE/SFMN $35,000)

K. Klinka

• Productivity of mixed, stratified and non-stratified forest stands (NSERC $14,000)

• Boreal select: A boreal mixedwood decision support system (BCMof $47,781)

R.A. Kozak

• An analysis of log home builders log information needs in British Columbia (co-investigator) (Forestry Innovation Investment $16,865)

• Segmentation of Japanese consumers based on nine performance indicators (co-investigator) (CMHC $25,000)

• Real-time statistical process control system for wood products manufacturing (co-investigator) (NSERC $269,000)

• Characterizing wood and fibre properties by metabolic profiling (co-investigator) (NSERC $146,775)

• Statistical process control of colour for wood products (NSERC $16,200)

• Developing a model for the healthy house (International Environmental Institute $30,000)

• Assessing the impacts of forest certification on Canadian value-added wood products businesses (co-investigator) (NCE/SFMN $38,500)

M. Krzic

• Soil conditions and tree growth on degraded and rehabilitated sites (co-investigator) (Forestry Innovation Investment $23,730)
K. Lyons
- Guidance for rigging backspars in cable logging
  (Forestry Innovation Investment $18,035)

T.C. Maness
- Model of multi-period, hierarchical planning of wood product manufacturing from forest stands to value-added lumber (Woodflow Systems Inc. $50,000)
- Real-time statistical process control system for wood products manufacturing (co-investigator) (NSERC $289,000)
- Forest-to-product production planning model (CFS/NSERC/SSHRC $47,000)
- Saw mark recognition system using neural networks (NSERC $15,000)

S.D. Mansfield
- Canada Research Chair in wood and fibre quality (NSERC $100,000)
- Elucidating the variations in fibre chemistry and morphology of aspen clones to improve pulp processing and quality (NSERC $18,000)
- Increasing yield and cellulose by modification of carbohydrate (CFS/NSERC/SSHRC $42,000)
- Wood and fibre quality – predicting and establishing the fibre resource for Canada’s future (CFI/BCAE $312,500)
- Identification and performance of Ethanologenic saccharomyces strain for fermentation of galactose from lignocellulosic hydrolysates (USDA $70,000)
- Characterizing wood and fibre properties by metabolic profiling (co-investigator) (NSERC $146,775)
- Influence on chemical pulp processibility of genetically modified lignin subunits (Cellfor Inc. $15,000)
- Study of the effects of the over-expression (ectopic) and vascular-specific expression of UGPase, SUSY, invertase and SPS on cellulose synthesis (Cellfor Inc. $30,000)

P.L. Marshall
- Comparing stand origin with forest inventory ages and boreal mixedwood landscape (co-investigator) (NCE/SFMN $35,000)
- Natural regeneration for complex stands (co-investigator)
  (Forestry Innovation Investment $79,380)

K.M. Martin
- Using cavity nester biodiversity to develop indicators of forest ecosystem function and resilience (NCE/SFMN $64,141)
- Ecology of alpine and forest birds (NSERC $29,000)

P.N. McFarlane
- Fellowship grant for post doc fellow/research associate (NCE/SFMN $22,500)

M. Meitner
- Interactivity and usability of environmental visualization systems (NSERC $17,200)
- Exploring, forecasting and visualizing the sustainability of alternative ecosystem management scenarios (co-investigator) (NSERC/CFS/SSHRC $384,252)
- Towards best practices for public processes in sustainable forest management (co-investigator)
  (Forestry Innovation Investment $71,925)
- Visual acceptability guidelines for variable retention harvesting: Providing the scientific basis and practical planning guidance (co-investigator)
  (Weyerhaeuser Canada $10,000)

S.J. Mitchell
- Analysis and publication of report related to the research studies conducted in root disease and partially cut stands, at Ice Road, Arrow Forest District, and Mount Seven, Golden Forest District (BCMoF $25,000)
- Development of an ecologically-based decision-support tool for assessing the implications of variable retention management for selected indicators of SFM (co-investigator) (International Forest Products Ltd./NSERC $158,688)
- Ecology and management of riparian – stream ecosystems (co-investigator)
  (Forestry Innovation Investment $5,000)
- Windthrow risk modelling (NCE/SFMN $50,000)
- Windthrow hazard mapping using geographic information systems (Weyerhaeuser Canada $35,843)

R.D. Moore
- Forest hydrology (Donation $25,000)
- Catchment hydrology and the stream environment (NSERC $23,840)
• Ecology and management of riparian—stream ecosystems (co-investigator) (Forestry Innovation Investment $20,000)

P.A. Murtha
• Remote sensing mountain pine beetle monitoring (Lignum Ltd. $31,091)
• Remote sensing of windthrow (Forestry Innovation Investment $16,958)
• Remote sensing mountain beetle monitoring (Lignum Ltd. $44,174)

J.D. Nelson
• Exploring, forecasting and visualizing the sustainability of alternative ecosystem management scenarios (co-investigator) (NSERC/CFS/SSHRC $384,252)
• Implications of forest management practices on carbon dynamics in TFL 48 (Canadian Forest Products Ltd. $22,250)

L. Paszner
• Distribution and chemical association of residual cell wall lignin in high yield organosolv and kraft pulps (NSERC $16,500)

C.E. Prescott
• The effects of climate on organic matter decomposition in forests of British Columbia (Forestry Innovation Investment $29,086)
• British Columbia Flux Station of Fluxnet-Canada: Influence of climate and disturbance on carbon cycling in forest and peatland ecosystems (co-investigator) (CFCAS/NSERC $10,740)
• Long-term effects of silvicultural treatments on productivity, biodiversity and ecosystem function in ericaceous-dominated sites in coastal B.C. (co-investigator) (Forestry Innovation Investment $155,745)
• Nutritional indicators for the maintenance of boreal forest productivity (NCE/SFIMN $40,700)
• The roles of C and N in humus decomposition (NSERC $18,000)
• Spatial distribution and function of ectomycorrhizal mycelial networks in British Columbia forests (NSERC $14,500)

H.G.L. Prion
• Timber connections for seismic applications (NSERC $22,000)

J.S. Richardson
• Fish communities as ecosystem indicators for a changing system: The lower Fraser River (co-investigator) (Fraser River Estuary Management Program $15,000)
• Influence of reserve strip width on riparian and stream ecosystems: Invertebrate responses to management (U.S. Dept. of Commerce $12,466)
• Influence of different forest practices (Forestry Innovation Investment $96,339)
• Data correction, trend analysis and forecasting with high frequency water quality time series (BCMoSRM $55,000)
• Methods in automated water quality time series analysis and interpretation (BCMoWL&AP $18,000)
• Conservation status of freshwater crayfish in the Lower Fraser (BCMoWL&AP $5,000)
• Workshop on aquatic monitoring and index of biological integrity (BCMoWL&AP $10,000)
• Ecology and management of riparian—stream ecosystems (co-investigator) (Forestry Innovation Investment $106,492)
• Trophic flows across habitats (Forestry Innovation Investment $53,451)
• Cooperative research on the effects of endocrine-disrupting chemicals on amphibians in the Fraser Valley (Environment Canada $4,000)
• Amphibian populations as indicators of forest ecosystem integrity and recovery from forest harvesting of riparian areas in a coastal forest (Forestry Innovation Investment $25,008)
• Various retention and the conservation of small streams and their riparian areas (Weyerhaeuser Canada $54,479)
• Resource limitation in streams and the role of organic matter sources (NSERC $12,600)

K.M. Ritland
• Senior Industrial Research Chair in population genetics (Industry/Operational Tree Improvement Program/NSERC $66,064)
• Evolutionary genomics of plants (NSERC $96,075)
• Markers and theory for measuring diversity (BCMoF $35,000)
• Forestry genomics project (co-investigator) (Genome BC $1,034,100)
• Controlling and monitoring of selfing rates in seed orchard populations of western red cedars (Forestry Innovation Investment $46,620)

J.N.R. Ruddick
• The role of nitrogen compounds in the fixation of copper in wood (NSERC $31,900)
• Wood preservation – factors impacting on the performance of wood preserving chemicals (BASF/Chemical Specialties Inc./FortinTek/Teal Cedar Products $42,117)

J.N. Saddler
• Bioprocessing Centre for Sustainable Fuels (FortinTek/CFI/CCAE/UBC Blusson Fund/Donation $2,825,301)
• Evaluation of technologies to convert softwood residues to ethanol (FortinTek $50,147)
• Substrate and enzyme factors that limit the efficient hydrolysis of lignocellulosics (NSERC $15,960)
• Softwood residues-to-ethanol (NRCan $168,561)
• IEA bioconversion task (International Energy Agency $97,500)
• Saccharifying organosolv pre-treated and de-lignified biomass residues and wastes and fermenting the resultant sugar stream to ethanol (Lignol Innovations Corp. $104,250)

S.R.J. Sheppard
• Development of an ecologically-based decision-support tool for assessing the implications of variable retention management for selected indicators of SFM (co-investigator) (International Forest Products Ltd./NSERC $158,888)
• Enhanced visualization of forest landscape dynamics (NSERC $20,000)
• Towards best practices for public processes in sustainable forest management (co-investigator) (Forestry Innovation Investment $71,925)
• Social studies in sustainable forest management – Phase 1 (Slocan Forest Products $75,000)
• Social studies in sustainable forest management – Phase 2 (Slocan Forest Products $96,000)
• Phase III – Social studies in sustainable forest management (Slocan Forest Products $58,000)
• Phase IV – Social studies in sustainable forest management (Slocan Forest Products $25,000)
• Phase V – Social studies in sustainable forest management (Slocan Forest Products $12,000)
• Visual acceptability guidelines for variable retention harvesting: Providing the scientific basis and practical planning guidance (co-investigator) (Weyerhaeuser Canada $10,000)
• Exploring, forecasting and visualizing the sustainability of alternative ecosystem management scenarios (co-investigator) (NSERC/CF/SSHRC $384,252)

S. Simard
• Partial canopy retention regeneration and establishment Project 6 in IDfxh in Opax Mountain, Kamloops Forest Region Study (co-investigator) (Forestry Innovation Investment $36,700)

G. Smith
• Investigation of the bonding process for steam injection pressing (NSERC $21,500)

T. Sullivan
• Legacy 2: Old-growth attributes in intensively managed forests: integration of stand productivity with mammal diversity (NCE/SFMN $40,000)

B.J. van der Kamp
• Forest pathology (Donation $250)
• Biological control of western hemlock and lodgepole pine dwarf mistletoe (Forestry Innovation Investment $29,547)

S.B. Watts
• Updating of the Forestry Handbook for British Columbia to produce a fifth edition for 2003 (Forestry Innovation Investment $54,970)

P. Wood
• Evaluation of species at risk policies: constraints on forest planning and opportunities for policy reform (Forestry Innovation Investment $88,595)


steep watersheds in British Columbia. EOS, Transaction, American Geophysical Union 83:F538.


uptake and swimming performance with Pacific salmon species. J. Fish Biology 62: 64-84.


Innes, J.L. 2002. If you had funding to spend on forest conservation, where would you spend it? UBC Faculty of Forestry Branch Lines 13(3):3.


Challenges and Opportunities. Kuching, Sarawak, Malaysia.


Martin, D., D. Tholl, J. Gershenzon, and J. Bohlmann. 2002. Methyl jasmonate induces traumatic resin ducts, terpenoid resin biosyn-


THE goal of the Forest Management Institute of British Columbia (FMIBC) is to improve forest management planning and practices in B.C. through advanced continuing education. To meet this goal, the Institute offers the following programs to operational forest resource practitioners:

- **UBC Diploma in Forestry (Advanced Silviculture)** – for professional foresters and foresters-in-training – co-sponsored by the Faculty of Forestry.

- **UBC Diploma in Forest Engineering** – for professional foresters, engineers and geoscientists (and professionals-in-training) – co-sponsored by the Faculties of Forestry and Applied Science (Civil Engineering).

- **Silviculture Technical Program** – for forest technologists and technicians.

Both professional diploma programs consist of six intense 7-10 day modules of advanced continuing education delivered to practising professionals employed by industry, government and consulting from all parts of the province. Instructors, many of whom volunteer their time to the Institute, are drawn from academia, government, industry and consulting and are chosen for their extraordinary knowledge and expertise in a particular subject area. We are grateful to the following individuals from the UBC Faculty of Forestry for their involvement and support in 2002: G. Baskerville (professor emeritus), K. Day, S. Mitchell, H. Samson and G.F. Weetman (professor emeritus).

Thanks to all our many volunteers and other supporters from UBC, the Ministry of Forests, the forest industry, UNBC, the Canadian Forest Service, the Association of BC Professional Foresters and the Association of Professional Engineers and Geoscientists of BC for helping us to achieve our 17th year of excellence.

**ACHIEVEMENTS IN 2002–03**

<table>
<thead>
<tr>
<th>Program</th>
<th>Participants</th>
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</thead>
<tbody>
<tr>
<td>Silviculture Technical Program (1 module)</td>
<td>21</td>
</tr>
<tr>
<td>Forest Engineering Diploma Program (2 modules)</td>
<td>39</td>
</tr>
<tr>
<td>Silviculture Diploma Program (2 modules)</td>
<td>39</td>
</tr>
</tbody>
</table>

*FMIBC participants by program 2002–2003*

We were pleased to welcome the following alumni to our ranks of graduates:
- 16 new silviculture diploma graduates join 254 other alumni
- 36 forest engineering alumni (no new graduates this year)
- 48 silviculture technical alumni (no new graduates this year)
- 354 total FMIBC alumni to date.

Declining enrolments in all three programs are a big concern to the Board of Directors. A draft curriculum was prepared for a new program in Sustainable Forest Management to be offered in flexible delivery formats to a broad audience of natural resource practitioners. An advocacy initiative was undertaken to build support and attract funding for this new program.

**PLANS FOR 2003-04**

The Institute will remain focused on advocacy for, and development of, the new curriculum in 2003. Additional goals include conversion of the existing three programs into flexible, distance education delivery formats.

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**FMIBC Board of Directors**

<table>
<thead>
<tr>
<th>Directors</th>
<th>Representing</th>
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</thead>
<tbody>
<tr>
<td>D.A. Dobson, Chair</td>
<td>Association of Professional Engineers and Geoscientists of BC and Consulting Engineers/Geoscientists</td>
</tr>
<tr>
<td>*J.N. MacFarlane, Chair</td>
<td>Consulting Foresters</td>
</tr>
<tr>
<td>G. Baskerville, Vice Chair</td>
<td>University Forestry Education</td>
</tr>
<tr>
<td>R.E. Carter</td>
<td>BC Forest Industry</td>
</tr>
<tr>
<td>R.J. Fannin</td>
<td>University Civil Engineering Education</td>
</tr>
<tr>
<td>W.K. Mitchell</td>
<td>Ministry of Sustainable Resource Management</td>
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<tr>
<td>A.W.J. Sinclair</td>
<td>Forest Engineering Research</td>
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<tr>
<td>J.D. Sutherland</td>
<td>Ministry of Forests</td>
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<tr>
<td>G.F. Weetman</td>
<td>University Forestry Education</td>
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</tbody>
</table>

**FMIBC Staff**

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denise M. Doccett</td>
<td>Program Assistant</td>
<td>E-mail: <a href="mailto:fd@fmibc.org">fd@fmibc.org</a></td>
</tr>
<tr>
<td>Joanne D. Pickford</td>
<td>Program Manager</td>
<td>E-mail: <a href="mailto:si@fmibc.org">si@fmibc.org</a></td>
</tr>
</tbody>
</table>

(*deceased October 2002)*

Candace E.B. Parsons  
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Executive Director  
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E-mail: execdir@fmibc.org

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Fax: 604-224-7010  
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THE International Forestry programs (IP) office is committed to enabling and facilitating international linkages for the Faculty of Forestry, to providing students with opportunities to experience and learn about international forest issues, and to preparing them for an increasingly more global job market. IP's role is to support a broad range of international initiatives and ensure that the Faculty of Forestry continues to be recognized as an international leader of forest management, forest science, natural resources conservation and wood products processing education.

ACHIEVEMENTS IN 2002-03

International Students Programs

• Some of our students undertook their third year at the University of Wales (Bangor) and the University of Canterbury.
• Six new degree-seeking international students started this year.
• We welcomed over twenty students from Australia, Austria, Costa Rica, Denmark, Finland, Germany, New Zealand, Norway, Sweden, and the United Kingdom.
• International students from Korea, Germany and the Netherlands took advantage of the international internships offered by the Research Forests.

Faculty Research and Projects

• Global Perspectives on Indigenous Peoples' Forestry: Linking Communities, Commerce and Conservation, June 4-6, 2002. The conference brought together members of indigenous forest enterprises and communities, research, educational and government institutions from the Americas and eleven other countries around the world.
• The 41st IUFRO Executive Board Meeting, June 14-16, 2002, followed by a tour to Vancouver Island and Washington State.
• Tim Symnott, Forest Stewardship Council Executive Director (1994-2001), was invited by IP to present a Jubilee Lecture, on October 7-8, 2002. (For full text and other details: http://www.forestry.ubc.ca/portal/50th-anniv-fall-lectures-symnott.html)
• On November 1, 2002, delegates from the Chinese Academy of Forestry and the Beijing Forestry University enjoyed a presentation on current research activities at UBC Forestry.
• On November 15, 2002, Dr. Kimmins highlighted the breadth of our programs and showcased our state-of-the-art facilities to the Ambassador of Guatemala in Canada.

• i-Made Ways of producing: rigour and invention in the Italian furniture industry (March 2003). Over two thousand people attended the Vancouver i-Made exhibition, organised by CAWP and held in March at UBC Robson Square. As CAWP director, Dr. Evans noted: "The Italian exhibition has offered many lessons that our own students and industry will benefit from."

PLANS FOR 2003-04

International Students Programs

• Increase the number of international students studying forestry at UBC.
• Increase the number of UBC forestry students undertaking exchanges by compiling a database with all of the course equivalencies and their transferability toward the students' study plan.
• Investigate the possibilities for short term diplomas to be offered to international students coming to UBC.
• Participate in a new Canada-European Union collaboration: TRANSFOR, Transatlantic Education for Global Sustainable Forest Sector Development.
• Strengthen the international forestry specialization by restructuring it and making it more visible to our current students.

Research and Training Programs

• Encourage Faculty members from research and educational institutions outside Canada to visit UBC Forestry.
• Increase the research activities by UBC Faculty members being undertaken outside Canada.
• Promote collaboration between UBC researchers and those in other countries.
• Increase the number of seminars and guest lectures given by international scholars.

Faculty Research and Projects

• 35th Air Pollution Workshop will be hosted by UBC Faculty of Forestry on April 8-10, 2003. The workshop will provide an informal setting for presentations and discussion of current research topics and issues on various aspects of air pollution effects on agricultural crops, forests, and natural ecosystems.
• Designing the Next Phase of Research on Wood Products Key Supply and Demand Trends in China, organized by UBC Forestry, Forest Trends, CIFOR and the Chinese Center for Agricultural Policy Research, will be held on April 9-11, 2003, at UBC Forestry.
The forestry landscape in British Columbia is facing a period of intense change as a result of the new forestry legislation being introduced and also to recent court rulings that confirm the provincial government must formally and meaningfully consult and accommodate the interests of First Nations for any activities on Crown Lands. Also the move towards building treaties incrementally has set into motion a variety of creative paths to restart the stalled BC Treaty Process. These changes will result in greater First Nations involvement at all levels in the forest sector.

Through its First Nations Strategy and mandate of post-secondary forestry education and research, the UBC Faculty of Forestry intends to take a leadership role to assist the forest sector, government and First Nations through this difficult transition period.

In 1994, the Faculty of Forestry launched its First Nations initiative by hiring a First Nations Coordinator to increase the participation and success of aboriginal students in faculty programs and to incorporate relevant First Nations content into the curricula for the benefit of all its students. Since 1994, the number of self-identified First Nations students to graduate with B.S.F. degrees from the Faculty has grown from three to an accumulative total of twenty.

The Faculty wishes to increase its focus on First Nations issues and perspectives by securing funding to support an endowed Chair in aboriginal forestry. The creation of this Chair will build on the achievements of the First Nations initiative, and will expand the Faculty’s capacity to address, relevant research and post-secondary education needs in aboriginal forestry in much more depth. The Chair will also provide academic leadership to role model and mentor students studying aboriginal forestry both at the undergraduate and graduate levels.

The establishment of a Chair in aboriginal forestry is deemed a top priority for the Faculty of Forestry.

ACHIEVEMENTS IN 2002–03

- Completed an initial (gap analysis) curriculum review of all faculty courses with First Nations content as follows: 16 courses with First Nations content with approximately 100 contact hours in the undergraduate forestry and conservation programs.
- Completed the protocol and affiliation agreement with Malaspina University College to offer the first two years of the forestry program for block credit transfer to UBC.
- Secured funding from the Ministry of Community, Aboriginal and Women’s Services; Council of Forest Industries and the Vancouver Foundation to sponsor a Summer Forestry Camp for First Nations youth to take place between August 4 and 10, 2003, both at the Forest Sciences Centre and Malcolm Knapp Research Forest. The camp will accommodate 25 aboriginal high school students in grade 8 and 9 from around the province. The goal of the camp is to encourage First Nations youth to continue their studies in high school math and science courses, necessary for entering into science-based fields of study such as forestry.
- In co-operation with the Forest Resources Management Department, we hosted an international conference entitled, “Global Perspectives on Indigenous Peoples’ Forestry: Linking Communities, Commerce and Conservation”. The conference provided a forum for the exchange of experiences of indigenous forest communities with Canada, USA, Mexico, Central and South America and innovators from Nepal, India, Russia, Papua New Guinea, and the Philippines. It was stated at this conference that indigenous peoples forest communities now legally own or administer ten per cent of the global forest estate and this figure is expected to double in the next 15 years.

PLANS FOR 2003–04

- Secure endowed funding to hire a tenure track faculty position in aboriginal forestry.
- Secure endowed funding for two aboriginal scholarships and bursaries.
- Secure endowed funding for ongoing Summer Forestry Camps for First Nations youth both at Malcolm Knapp Research Forest at Maple Ridge and Alex Fraser Research Forest at Williams Lake.
- Secure funding to complete an in-depth First Nations curriculum plan or DACUM for the Faculty of Forestry.
- Formalize an affiliation agreement with Northwest Community College to offer the first two years of the four year undergraduate UBC B.S.F. degree.

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Coordinator
First Nations Forestry
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E-mail: prest@interchg.ubc.ca
Web site: www.forestry.ubc.ca/firstfor/index.html

FIRST NATIONS COUNCIL OF ADVISORS
Garry Merkel, Chair (First Nations)
Marli Beets, COFI
Ross Hunt, First Nations
Gordon Reid, First Nations
Glen Ricketts, BCOMF, Aboriginal Affairs
Peggy Smith, Lakehead Univ. (First Nations)
Ron Trooper, North. Arizona Univ. (First Nations)
Richard Vedan, First Nations
Rod Willis, Industry
Dwight Yochim, ABCPF
THE sustainable management of our forests is critical to our future well-being. Our forests provide a place of inspiration and recreation, a haven in which plants and wildlife can thrive, and a renewable resource to support our day-to-day needs for lumber, paper and many other forest-related products. Through education and research, we can ensure that our forests will continue to be managed to provide the multiple values we so much enjoy. Thanks to the ongoing support of our alumni and friends, industry and the broader community, the Faculty of Forestry remains one of the world leaders in forestry and natural resource sciences education and research.

During the period of April, 2002 – March, 2003 the Faculty of Forestry received over seven hundred gifts from donors for a total of $589,945 as indicated in the table below.

<table>
<thead>
<tr>
<th>Donor gifts to the Faculty of Forestry 2002/03</th>
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<tbody>
<tr>
<td>Area of designation</td>
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<tr>
<td>Scholarships and Bursaries</td>
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<tr>
<td>John Worrall Bursary</td>
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<tr>
<td>Tony Kozak Scholarship</td>
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<td>Research</td>
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<td>Property, Building and Equipment</td>
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<td>Loon Lake</td>
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<td>CAWP</td>
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<td>Academic Programs</td>
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<tr>
<td>Endowments</td>
</tr>
<tr>
<td>Other</td>
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<tr>
<td><strong>Total donations</strong></td>
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</tbody>
</table>

to especially thank the following Forestry alumni who wrote personal letters to their year classes: Gerry Burch, Michael Meagher, Andreas Szalkai, Jack Toovey, Mike Asey, Paul Lawson, Tim Shannon, Stirling Angus and Joanne Pickford.

■ Class Act

Our graduating class for 2003 raised over $400 for the Class Act Program. Funds raised will go toward purchasing equipment for the undergraduate computer lab. We extend our thanks to Patricia Osterberg and the Forestry Undergraduate Society Committee for their wonderful efforts in organizing Class Act this year.

■ New Staff

You may have noticed that we have a new development officer. Sheila Biggers moved from the Faculty in April, 2002, to the UBC Central Development Office, and in her place we are pleased to introduce our new Senior Development Officer, Katrina Evans, who started with the Faculty in August, 2003. Katrina has recently moved to Canada from Australia, and has a degree in forestry from the Australian National University.

Thank you Sheila for a great job, and welcome Katrina.

■ Events

We had many wonderful and well-attended alumni events during the year. In April, 2002, we were blessed with fine weather for an alumni get together in the Malcolm Knapp Research Forest in conjunction with the student Spring Camp. We are planning to have another similar event in 2003. In October, the reunion weekend on UBC campus saw both Drs. Worrall and Kimmens escort alumni on guided walks of the campus and Pacific Spirit Park respectively. The final event of the year was the barbeque party at the end of March, 2003, to mark the retirement of John Worrall after 34 years at the Faculty of Forestry. Over 250 people came to celebrate John’s career and to have him flip burgers just one last time. In his honour the “John Worrall ‘Tree Enthusiast’ Prize” will be established through the kind donations of alumni and friends.
# Highlights

Also in October, 2002, we were pleased to be able to escort Dr. Martha Piper, President, UBC, along with a number of other special guests, on a visit to Loon Lake Research and Education Centre, at the Malcolm Knapp Research Forest. The redevelopment of Loon Lake Centre into a first class learning facility is one of the top priorities for UBC and Faculty. Dr. Piper was impressed with the Centre, the plans for the future, and its potential as a key resource for UBC and the wider community of British Columbia.

### PLANS FOR 2003–04

Some of the key areas we will focus on in the coming year are:

- Continuing to strengthen relations with our alumni and supporters.
- Increasing the financial support available to our students through scholarships, bursaries and prizes.
- Securing funding for the redevelopment of Loon Lake Research and Education Centre.
- Obtaining support for the First Nations Initiative within the Faculty. First Nations communities will play an important role in the future management and stewardship of our forests. By way of our First Nations Initiative the Faculty is committed to increasing the number of First Nations students and content in our programs, and through the creation of a First Nations Chair in Forestry, conduct research and outreach activities that have direct relevance to the future development of First Nations communities.
- Establishment of an Industry Partnership Program for the Centre for Advanced Wood Processing (CAWP). CAWP provides a state-of-the-art facility for the education of our undergraduate wood products processing students. Students undertaking this innovative program are highly sought after for their combination of technical expertise and practical knowledge. Funds raised through the Partnership Program will be invested in student scholarships, recruitment and co-op activities, purchase of equipment, and hiring of industry experts to provide training.

The students, faculty and staff at UBC Faculty of Forestry wish to thank all those who contributed their time and resources to enable us to remain a world leader in forestry education and research.
Jubilee Lecture Series

Our Jubilee Lecture Series continued for a second year with six public lectures between September, 2002 and March, 2003 as listed below. The lectures, which attracted from 50 to 225 people each, were held in the Forest Sciences Centre on campus or at UBC's downtown Robson Square campus. The lectures were made possible, in part, by support received from Forestry Innovation Investment, Forintek and gifts made to the Faculty of Forestry in Harry Smith’s memory. The text of most of these lectures can be downloaded from our website at www.forestry.ubc.ca/publications/lecture_series.html.

George Hoberg
Professor and Head, Forest Resources Management Department, UBC
• Finding the right balance: Designing policies for sustainable forestry in the new era.

Tim Synnott
Forester and former Executive Director, Forest Stewardship Council
• The end of forestry?

Scott Hinch
Associate Professor, Forest Sciences Department, UBC
• Salmon at their southern edge: Current challenges to survival and prognosis for long-term sustainability.

Leena Paavilainen
Program Director, Finnish Forest Cluster Research Program, WOOD WISDOM, Helsinki, Finland
• Promoting the competitiveness of forestry and forest-based industries in Finland.

Barry R. Noon
Professor, Department of Fishery and Wildlife Biology, Colorado State University
Fort Collins, CO
• New pathways for conservation science.

Larry Pedersen
Chief Forester, Ministry of Forests
Victoria, B.C.
• Allowable annual cuts in British Columbia – The agony and the ecstasy.

Burgess-Lane Memorial Lecture Series

The Burgess-Lane Memorial Lectureship in Forestry was established in 1974 to honour Thomas E. Burgess and David E. Lane, Vice-Presidents of long-standing with British Columbia Forest Products Ltd. A fund was established by Mrs. Dorothy Burgess and Mrs. Evelyn Lane and British Columbia Forest Products Ltd. For the presentation and publication of lectures in forestry by outstanding authorities in forestry or the forest industry.

On September 20, 2002, Dr. Robert Evans, CSIRO Forestry and Forest Products, Australia, gave the 18th Burgess-Lane Memorial Lecture. Robert's talk was entitled "Art, science and informatics – visualisation of large, complex data sets in high speed measurement of the microstructure of wood". This lecture, as well as previous Burgess-Lane lectures, is available in pdf format from our website www.forestry.ubc.ca/publications/lecture_series.html.

Leslie L. Schaffer Lecture Series

The Leslie L. Schaffer Lectureship was established in 1981 by Mrs. Kato Schaffer for the purpose of disseminating scientific information and achievement among forestry students, professional foresters, scientists and the public.

The late Dr. Schaffer, in whose honour the lectureship is named, played an important role in the development of industrial forestry in Hungary, his native country, and after 1940 in Canada. Initially he worked for Pacific Veneer Ltd. of New Westminster and in 1944 he was instrumental in founding Western Plywood Co. Ltd., where he was executive vice president.

Dr. Schaffer felt strongly about the importance of scientific research in forestry, which he considered the basis of sound forestry practice, and this lecture series is a fitting memorial to him.

On February 24, 2003, Dr. Barry Noon from the Department of Fishery and Wildlife Biology, Colorado State University, Fort Collins, CO, gave the 14th Leslie L. Schaffer Lecture. Barry's talk, entitled "New pathways for conservation science" was co-sponsored as one of our Jubilee Lectures. This lecture, as well as previous Leslie L. Schaffer lectures, is available in pdf format from our web site www.forestry.ubc.ca/publications/lecture_series.html.
Conservation Lecture Series

We invited internationally-known members of the scientific community to UBC to participate in Conservation 500, a graduate seminar course in conservation biology. Dr. John Richardson organized the lecture series and taught the course. The lecture series is made possible from the support of the H.R. MacMillan Family Fund, Charles Krebs, the Faculty of Forestry, the Centre for Forest Gene Conservation and the Forest Renewal BC Chairs in Forest Management and Applied Conservation Biology. The following scientists gave public lectures:

Karen Harper  
Groupe de recherché en écologie forestière, Université du Québec à Montréal  
- **Boundaries in the boreal forest: Effects of landscape-level patterns on plant communities.**

James Smith  
Zoology Department, UBC  
- **Brown-headed cowbirds as conservation villains.**

Scott Hinch  
Forest Sciences Department, UBC  
- **Energetics, behaviour and survival of upriver migrating adult Pacific salmon.**

Samuel Wasser  
Center for Conservation Biology, University of Washington  
- **Monitoring impacts of human disturbance in grizzly and black bears.**

Geoffrey Scudder  
Zoology Department, UBC  
- **Richness and rarity hotspots: The importance of knowing your taxonomy and systematics.**

Steve Cumming  
Boreal Ecosystems Research Inc.  
- **Modelling disturbance regimes and plant community dynamics: Lessons from the boreal mixedwood.**

John and Mary Theberge  
Faculty of Environmental Studies, University of Waterloo (retired)  
- **Wolves and their ecology in Ontario's Algonquin Park.**

Richard T. Holmes  
Dartmouth University  
- **Year-round ecology of migratory songbirds: where is the crunch?**

Fangliang He  
Pacific Forestry Centre, Natural Resources Canada  
- **The distribution and abundance of species and climate.**

Phil Roni  
US National Marine Fisheries Service  
- **Responses of fish and aquatic biota to restoration and enhancement of small Pacific Northwest streams.**

Ellen Macdonald  
Renewable Resources, University of Alberta  
- **Ecology and management of forested riparian areas in the boreal mixedwood: Lessons from the TROLS research project.**