COVER PHOTOGRAPH  Lake O’Hara, Yoho National Park, BC. John E. Marriott, JEM Phototgraphy and Consulting, Canmore, Alberta.

John is an alumnus of the UBC Faculty of Forestry (B.S.F. 1994) and generously agreed to donate the cover photograph for our 2004 Annual Report. You can view more of John’s photographs at www.wildernessprints.com
## Contents

Dean's Message  

**STUDENTS AND TEACHING PROGRAMS**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate Students</td>
<td></td>
</tr>
<tr>
<td>Programs of Study</td>
<td>4</td>
</tr>
<tr>
<td>Co-op Programs</td>
<td>5</td>
</tr>
<tr>
<td>Recruitment</td>
<td>6</td>
</tr>
<tr>
<td>Enrolment Statistics</td>
<td>7</td>
</tr>
<tr>
<td>Awards</td>
<td>8</td>
</tr>
<tr>
<td>Graduation Statistics</td>
<td>9</td>
</tr>
<tr>
<td>Graduate Students</td>
<td></td>
</tr>
<tr>
<td>Enrolment Statistics</td>
<td>10</td>
</tr>
<tr>
<td>Scholarships and Fellowships</td>
<td>11</td>
</tr>
<tr>
<td>Degrees Granted</td>
<td>12</td>
</tr>
<tr>
<td>International Forestry Programs</td>
<td>14</td>
</tr>
<tr>
<td>First Nations Forestry</td>
<td>16</td>
</tr>
</tbody>
</table>

**FACULTY, RESEARCH, DEVELOPMENT AND ALUMNI**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office of the Dean</td>
<td>18</td>
</tr>
<tr>
<td>Faculty and Staff</td>
<td>19</td>
</tr>
<tr>
<td>Forest Resources Management</td>
<td>20</td>
</tr>
<tr>
<td>Faculty and Staff</td>
<td>21</td>
</tr>
<tr>
<td>Achievements and Plans</td>
<td>24</td>
</tr>
<tr>
<td>Forest Sciences</td>
<td>26</td>
</tr>
<tr>
<td>Faculty and Staff</td>
<td>27</td>
</tr>
<tr>
<td>Achievements and Plans</td>
<td>31</td>
</tr>
<tr>
<td>Wood Science</td>
<td>32</td>
</tr>
<tr>
<td>Faculty and Staff</td>
<td>33</td>
</tr>
<tr>
<td>Achievements and Plans</td>
<td>35</td>
</tr>
<tr>
<td>Centre for Advanced Wood Processing</td>
<td>38</td>
</tr>
<tr>
<td>Centre for Applied Conservation Research</td>
<td>40</td>
</tr>
<tr>
<td>University Research Forests</td>
<td>42</td>
</tr>
<tr>
<td>Offices, Awards and Distinctions</td>
<td>44</td>
</tr>
<tr>
<td>Extramural Funding and Sponsored Research</td>
<td>48</td>
</tr>
<tr>
<td>Faculty Publications</td>
<td>56</td>
</tr>
<tr>
<td>Faculty Development and Alumni</td>
<td>68</td>
</tr>
</tbody>
</table>
Through the past year we have been actively engaged in creating a new strategic vision to position UBC Forestry as a “world leader in education and research for the conservation and sustainable management of forests and forest products that will contribute to preserving the environment and improving the welfare of society.” This vision, combined with specific goals and strategies has become our “Road Map” and was created through the combined effort and input from faculty members, staff, students, our Forest Advisory Council and the forest community at large.

The process of moving the Faculty forward during times of challenge and change in forest education, while often a complex and time-consuming task, has been extremely productive. The university’s recently completed Trek 2010 document “A Global Journey” lays out clear goals and aspirations for UBC. Our Road Map uses Trek 2010 as the “master document” and shows how the Faculty will respond to the five pillars of People, Learning, Research, Community and Internationalization. We are clearly very strong in some areas such as people, research and community, while we have a solid foundation to grow in areas such as internationalization. We will use the Road Map to communicate to others what we hope to accomplish as an organization by 2010. The complete Road Map is available on our website at http://www.forestry.ubc.ca/docs/roadmap.doc

Increasing the quantity and quality of students entering our undergraduate programs remained the focus for much of our efforts during the past year. With an updated Recruitment and Retention Action Plan and the addition of two new associate recruiters for most of 2004, we were able to greatly expand our recruitment activities. High school visits were up by 32%, we doubled our number of recruitment presentations and reached 30% more BC communities than last year. Despite this extra effort, our new student enrolment numbers were down by 15% for 2004. However, we attribute most of this decrease to the raising of our secondary school entrance GPA by 6 percentage points. This is something that we feel will pay off in the long run and we anticipate a higher rate of success for students completing their first year of studies and more students able to continue their studies with us than in previous years. During the year, our term appointed associate recruiters left to continue graduate education and in February we hired a recent graduate, Neil Davis, as our new associate recruiter. Our overall undergraduate student count was up slightly for the year, maintaining the steady state trend of the past four years. Enrolment in our B.Sc. program in Natural Resources Conservation represented over 30% of our total undergraduate enrolment and surpassed the B.S.F. program for the first time ever. The Wood Products Processing

### Faculty of Forestry Activities, 1994/95 – 2004/05

<table>
<thead>
<tr>
<th></th>
<th>94/95</th>
<th>95/96</th>
<th>96/97</th>
<th>97/98</th>
<th>98/99</th>
<th>99/00</th>
<th>00/01</th>
<th>01/02</th>
<th>02/03</th>
<th>03/04</th>
<th>04/05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate enrolment¹</td>
<td>452</td>
<td>522</td>
<td>591</td>
<td>621</td>
<td>627</td>
<td>553</td>
<td>508</td>
<td>447</td>
<td>441</td>
<td>448</td>
<td>453</td>
</tr>
<tr>
<td>Distance education (fte)</td>
<td>22</td>
<td>29</td>
<td>36</td>
<td>37</td>
<td>29</td>
<td>21</td>
<td>22</td>
<td>19</td>
<td>14</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Graduate enrolment</td>
<td>180</td>
<td>189</td>
<td>201</td>
<td>209</td>
<td>206</td>
<td>217</td>
<td>231</td>
<td>202</td>
<td>163</td>
<td>170</td>
<td>197</td>
</tr>
<tr>
<td>Diploma in Forestry</td>
<td>0</td>
<td>73</td>
<td>47</td>
<td>48</td>
<td>53</td>
<td>45</td>
<td>29</td>
<td>40</td>
<td>23</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Diploma in engineering</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>45</td>
<td>63</td>
<td>43</td>
<td>39</td>
<td>26</td>
<td>25</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>Teaching Evaluation Index²</td>
<td>2.28</td>
<td>2.25</td>
<td>2.24</td>
<td>2.31</td>
<td>2.31</td>
<td>2.27</td>
<td>2.15</td>
<td>2.19</td>
<td>2.05</td>
<td>1.88</td>
<td>1.90</td>
</tr>
<tr>
<td>GPOB ($’000)³</td>
<td>4,939</td>
<td>4,808</td>
<td>4,798</td>
<td>4,741</td>
<td>4,865</td>
<td>4,919</td>
<td>5,491</td>
<td>5,884</td>
<td>6,124</td>
<td>6,219</td>
<td>6,332</td>
</tr>
<tr>
<td>GPOB/WFTE⁴</td>
<td>2,714</td>
<td>2,340</td>
<td>2,129</td>
<td>1,989</td>
<td>2,048</td>
<td>2,195</td>
<td>2,479</td>
<td>3,024</td>
<td>3,487</td>
<td>3,508</td>
<td>3,315</td>
</tr>
<tr>
<td>Extramural funding ($’000)⁵</td>
<td>5,079</td>
<td>7,141</td>
<td>10,409</td>
<td>9,089</td>
<td>9,829</td>
<td>8,168</td>
<td>8,635</td>
<td>8,357</td>
<td>11,370</td>
<td>11,379</td>
<td>10,427</td>
</tr>
<tr>
<td>Endowment income ($’000)⁶</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>975</td>
<td>1,011</td>
<td>1,063</td>
<td>1,192</td>
<td>1,330</td>
<td>1,342</td>
<td>2,031</td>
<td>1,981</td>
</tr>
<tr>
<td>Extramural funding/GPOB faculty member ($’000)⁷</td>
<td>120</td>
<td>188</td>
<td>289</td>
<td>265</td>
<td>255</td>
<td>233</td>
<td>225</td>
<td>214</td>
<td>274</td>
<td>314</td>
<td>262</td>
</tr>
</tbody>
</table>

¹ Headcount unless otherwise noted.

² Average numerical score of several criteria used by students to assess teaching performance of Faculty members.

³ 1 = Excellent; 2 = Very Good; 3 = Good; 4 = Fair; 5 = Poor; 6 = Very Poor.

⁴ GPOB = base recurring budget.

⁵ WFT = calculated as 2 x (undergraduate + extrasessional + diploma/3) + 4 x masters + 6 X Ph.D. students.

⁶ Research + special purpose + endowment (until 1996/97, shown separately after this).

⁷ Endowment income separated from extramural income from 1996/97 onwards.
Our cooperative education options, which are now available to students in all programs, continued as an integral and highly successful component of undergraduate education. New co-op student enrolment in forestry programs increased by 20% over the past year and the number of job postings for wood processing students was increased by 26% to meet student demand.

Our graduate student enrolment for 2004/05 was up by 16% from the previous year with a total of 197 students. During the year we introduced 14 new graduate courses, including a suite of courses offered as part of our new Forests and Society masters program. In an attempt to overhaul our calendar listing of courses available to students, we now list only those courses that are taught at a minimum of every other year. During the year, thirty-four students completed their graduate studies, 21 at the masters level and 13 at the doctoral level.

Both graduate and undergraduate students have shown a strong interest in our international student exchange program whereby students can select from exchange opportunities in 13 countries and 22 institutions. In the past year, five students traveled abroad and 27 students visited us from eight countries and 14 different universities. We plan to continue to grow such opportunities and to establish international work co-op programs for our undergraduates in the coming year.

During the past year, our First Nations initiatives, now officially 12 years old, saw the retirement of Gordon Prest, our inaugural coordinator, and the hiring of Pamela Perreault as the new coordinator and Dr. Ron Trosper as our first faculty member in the area of Aboriginal forestry. Ron was founder of the Native American Forestry Program at the Northern Arizona University before joining the department of Forest Resources Management in the summer of 2004. He will be offering two new graduate courses this fall as well as purusing an active program of research. Four new First Nations students entered into forestry programs in the past year for a total of 13 undergraduate and 3 graduate Aboriginal students enrolled in the Faculty.

Alongside Ron Trosper, we also welcomed Dr. Nicholas Coops as a new faculty member in the department of Forest Resources Management and Dr. Tom Sullivan as a returning faculty member to the department of Forest Sciences. Nicholas Coops joined the Faculty in 2004 as a Canada Research Chair in remote sensing. Prior to joining UBC, he worked at the Australian Commonwealth Industrial and Scientific Research Organization (CSIRO) as well as in the USA on NASA funded projects. Tom Sullivan returned to UBC in 2004 as a joint appointment between Forest Sciences and the Faculty of Land and Food Systems. Tom is teaching courses in research methods, agroforestry, agroecology and biodiversity as well as pursuing his research interests in forest-wildlife interactions.

While on the topic of faculty renewal, the year saw the retirement of Dr. David Haley who had taught forest policy and forest economics to forestry students for the past 38 years. David has retired to Galliano Island but plans to remain active in his professional interests.

Dr. Thomas Maness, in his role as director of the BC Forum on Forest Economic and Policy, transferred from the Wood Science department to Forest Resources Management in the fall of 2004. This newly created forum, based in the Faculty of Forestry, is a research and education institute that was formed to stimulate international research and dialogue and to promote a highly competitive, sustainable and respected forest sector. The Forum held its first symposium (Besieged by global change: Defining the future role of BC’s forest sector) in January and over 250 key sector representatives gathered in Vancouver to discuss changing market dynamics and future decision making. Keynote presentations from this highly successful event can be downloaded from the Forum’s web site at www.bc-forum.org.

The Centre for Applied Conservation Research, established by Dr. Fred Bunnell and former Dean Clark Binkley almost fifteen years ago, continues to grow its reputation as a centre of excellence in research and contributions to biodiversity conservation internationally. The Centre now draws on more than seventy faculty members, research scientists and graduate students from Forestry, Animal Science, Geography, Zoology, Botany and other universities. In 2004, John Innes, director for the past three years, passed on his duties to Peter Arcese and Sarah Gergel, who have shared directorship since November 2004.

In the area of development, we raised over $1.9 million in gifts, contributions and pledges to support scholarships, awards, research, upgrading of our facilities and special activities. We were also able to begin construction of the extension to the Loon Lake Student Centre at the Malcolm Knapp Research
Forest with funding from the Canadian Cancer Society and Cadillac Fairview. Further gifts have allowed us to build a new dock and swimming area at the Student Centre.

Although our overall research support has shown a decline over the past year (down by 8% to $10.4 million), we have maintained the same number (just over 200) of research projects. Interestingly, the proportions of support from our different sources have changed quite considerably. More than 54% of our total research funding was secured from federal government sources and the total federal funding was up by 16% from the previous year. During the past year we were successful in receiving more than twice as much support, for almost three times as many projects, from Natural Resources Canada. Our tri-council funding (NSERC and SSHRC) was up by 7%, Canada Foundation for Innovation funding was up by 10% and Canada Research Chair funding was up by almost 42%. In contrast to these increases, our industry support was down by a massive 35%.

Much of our research involves cooperation with other faculties on campus, research institutes, government and non-government agencies and industry. This cooperation has led to the establishment of several Faculty research groups including the Below Ground Ecology Group, the Collaboration For Business and Operations Management, the Centre for Advanced Wood Processing, the Centre for Applied Conservation Research, the Collaborative for Advanced Landscape Planning and several others. Our research groups are also contributing to the “forest innovation cluster” which is in its nascent stages of development in BC. As will be discussed in our future plans, BC has many world class “research provider” groups that, with increased coordination and cooperation, could have an even greater impact in maximizing desirable societal values from our forests. The Faculty of Forestry is well positioned to be a key component of this cluster.

**Plans for 2005/2006**

Our Road Map will help guide both our short and long term plans for the Faculty. As well as numerous ongoing activities, there are several major actions on which we will focus our collective efforts in 2005/06. For example, we will continue in our endeavors to increase the number of undergraduate students the faculty is teaching. We will do this by redesigning existing courses to have broader appeal to the university community, by developing proposals for new programs and by having more of our faculty members teach general science and arts courses. By the end of 2005 we will have a graduate student recruitment strategy in place that will continue to attract the very best graduate students into our Faculty. We also plan to develop a range of course-based/professional masters programs such as the newly launched “Forests and Society” program being offered to students with a range of undergraduate backgrounds. We will grow our international student numbers and activities aggressively and continue to find ways for our faculty members to work collaboratively with leading international researchers.

We will also look for new opportunities to help lead and participate in the range of environmental/sustainability research and learning strategies that are being discussed at UBC and elsewhere in the province.

We will continue to be an advocate for the development of the BC Forest Innovation Cluster (with Dr. Alan Potter recently hired on as the Executive Director of BC Forest Opportunities). The good synergy that already exists between BC’s research providers such as the universities, the research institutes (Feric, Forintek, Paprican) and provincial and federal research departments, could become truly great and globally significant with enhanced cooperation and the development of a common vision of where the world’s forest-based sector will be in the coming decades. We plan to continue to be an active participant in the “Cluster” and grow our capability by developing research chairs in the areas of wood building design, wood quality and resource economics.

Our work will take on an increasingly global reach with the successful “virtual university” web-linked weekly seminar series between UBC’s and the University of Toronto’s Faculties of Forestry as the prelude to our plans to form similar links with our colleagues in Hungary, Chile and China. Although, by many measures, we are considered a world class Faculty, we recognize the need to be more accessible to organizations, colleagues and students from around the world if we are to continue to play a leadership role in providing the world with knowledge about forests, and their products, whether they be social, spiritual or economic.
THE FACULTY of Forestry offers four-year degree programs in the following five areas:

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. The majority of students choose to take the cooperative education option in this program. Qualified fourth year students may opt for a minor in commerce.

Contact: Simon Ellis  
604–822–3551  
simon.ellis@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 field school offered in the fourth year which features integrated field and classroom instruction throughout the fall term.

Contact: Scott Hinch  
604–822–9377  
scott.hinch@ubc.ca

Forest Resources Management – B.S.F.  
This major focuses on the multidisciplinary aspects of forest resources and the management of forested ecosystems for such products as timber, grazing, wildlife, recreation, aesthetics, 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 ecological, social and economic objectives. The program prepares graduates for responsible careers as professional foresters. This program is also offered as a four-year International Forestry Specialization.

Contact: John Nelson  
604–822-3902  
john.nelson@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.

Contact: Dennis Bendickson  
604-822-5932  
dennis.bendickson@ubc.ca

Forest Science – B.Sc. (Forestry)  
This challenging yet flexible program is designed to develop professionals who understand the dynamics of and can conduct research in forested ecosystems. Students in the Forest Science program gain a strong foundation in the basic biological and environmental sciences, with emphasis on the interacting components and functions of forests. Core topics include genetics, soil science, weather and climate, tree form and function, ecology, silviculture, biodiversity and research methods. In the third and fourth years of study, students specialize in an area of particular interest to them. This program is also offered as a four-year International Forestry Specialization.

Contact: Sally Aitken  
604-822-6020  
sally.aitken@ubc.ca

PLANS FOR 2005 – 06  
• Review Wood Products Processing program and curriculum.  
• Reduce course loads in the BSF program.  
• Complete revisions of the undergraduate students web page.  
• Maintain focus on increasing undergraduate enrolment and expanding undergraduate recruitment and retention.  
• Expand international and First Nations student recruitment efforts.  
• Implement proposed changes to the Forest Science program.
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 careers.

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.

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 our cooperative education coordinators.

ACHIEVEMENTS IN 2004 – 05

Forestry Programs
- New co-op student enrolment increased by 20% over 2003 – 04.
- The number of co-op postings increased by approximately 20% over 2003 – 04. Employment opportunities were located in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario and California.
- Co-op students successfully completed their placements at a variety of employer hosts including consultants, crown corporations, government (federal and provincial) industry and non-governmental organizations.
- The third Annual Forestry Careers Day was held in November 2004 bringing students together with 14 organizations representing industry, conservation groups and professional associations.
- The first co-op placement outside of British Columbia was secured by a Natural Resources Conservation student in an eight-month work term with the First Nations Forestry Program of the Canadian Forest Service in Ottawa.

Wood Products Processing Program
- The co-op program continues to be an integral part of the Wood Products Processing degree with work term placements located in British Columbia, Alberta, Manitoba, New Brunswick, Ontario, Quebec and Saskatchewan, as well as in Guatemala.

- Forty-seven four-month co-op work term placements were completed successfully.
- Fifty-two per cent of companies that hired co-op students in 2004 – 05 were first time employers.
- The number of job postings in the secondary sector was increased by 26% to meet student demand.
- Company information and networking sessions were hosted by Interforest Ltd. and Viceroy Homes Limited.

Joint Achievements
- Introduced co-op student participation in informational interviews and had co-op students share the results of their interview as part of the co-op employability skills workshops.
- Expanded the diversity of the employability skills workshops offered to co-op students to further enhance their skill development.

PLANS FOR 2005 – 06
- Improve the existing on-line job posting system through a partnership with workopolisCampus.com.
- Continue to increase employer participation in co-op students’ career development activities.
- Expand on-line diary project to include diaries written by co-op students in all forestry undergraduate disciplines and increase the diversity of work term experiences being shared.

ACHIEVEMENTS IN 2004 – 05

Forestry Programs
- New co-op student enrolment increased by 20% over 2003 – 04.
- The number of co-op postings increased by approximately 20% over 2003 – 04. Employment opportunities were located in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario and California.
- Co-op students successfully completed their placements at a variety of employer hosts including consultants, crown corporations, government (federal and provincial) industry and non-governmental organizations.
- The third Annual Forestry Careers Day was held in November 2004 bringing students together with 14 organizations representing industry, conservation groups and professional associations.
- The first co-op placement outside of British Columbia was secured by a Natural Resources Conservation student in an eight-month work term with the First Nations Forestry Program of the Canadian Forest Service in Ottawa.

Wood Products Processing Program
- The co-op program continues to be an integral part of the Wood Products Processing degree with work term placements located in British Columbia, Alberta, Manitoba, New Brunswick, Ontario, Quebec and Saskatchewan, as well as in Guatemala.
- Forty-seven four-month co-op work term placements were completed successfully.
- Fifty-two per cent of companies that hired co-op students in 2004 – 05 were first time employers.
- The number of job postings in the secondary sector was increased by 26% to meet student demand.
- Company information and networking sessions were hosted by Interforest Ltd. and Viceroy Homes Limited.

Joint Achievements
- Introduced co-op student participation in informational interviews and had co-op students share the results of their interview as part of the co-op employability skills workshops.
- Expanded the diversity of the employability skills workshops offered to co-op students to further enhance their skill development.

PLANS FOR 2005 – 06
- Improve the existing on-line job posting system through a partnership with workopolisCampus.com.
- Continue to increase employer participation in co-op students’ career development activities.
- Expand on-line diary project to include diaries written by co-op students in all forestry undergraduate disciplines and increase the diversity of work term experiences being shared.
In January, direct supervision of recruitment activities was shifted to the student services group. Strategic direction of undergraduate recruitment remains the responsibility of the Recruitment and Retention Committee, currently chaired by Candace Parsons.

The Faculty Image Committee, chaired by Dr. George Hoberg, contracted the services of Ipsos-Reid Corporation to conduct focus group studies of first year UBC Science students, Grade 11 and 12 high school students, and parents of Grades 9 to 12 high school students from the Lower Mainland. A report from the consultants entitled UBC Faculty of Forestry Image and Branding Research was submitted to the committee in May 2004. Recommendations based on the findings of this report will be made in 2005.

After reviewing our progress in meeting the goals of the 2003–04 Recruitment and Retention Action Plan, an updated Action Plan was submitted to the Recruitment and Retention Committee in August 2004. Proposed activities were prioritized to better identify core activities, and to assist in budget planning.

In August 2004, Kate Bottriell completed her eight-month term as an associate recruiter and was accepted into Oxford on a masters program in environmental studies. Jacqueline Cavill’s term was extended to the end of December when she left to pursue a masters degree at UBC under Dr. Thomas Maness. We thank them both for their enthusiasm and invaluable contributions to our recruitment activities. Neil Davis (B.Sc., Natural Resources Conservation, Class of 2001) joined us in February 2005 as our new associate recruiter.

**Activities centred around meeting the objectives of the 2003–04 Action Plan, and developing new activities and materials for the promotion of the Faculty’s programs.** The energy and commitment provided by the two associate recruiters is evident in the increased level of core activities shown in the summary table, when compared to the previous year. With the additional staff, the goals for 2004–05 were surpassed, and included several additional activities and special projects.

Highlights of this past year include:

- Completed a redesign of the Faculty webspace, in August 2004. The result was a more streamlined and organized architecture of website information.
- Completed a survey of incoming students to supplement the previous year’s survey.
- Completed a summer employment survey of second to fourth year students to ascertain employability and earnings.

- Increased activity to attract technical and college transfer students included participation in drop-in sessions run by UBC Recruitment at lower mainland college campuses and presentations to students at the University College of the Cariboo, Malaspina University College, and BCIT.

- Maintained activities to attract first year science students at UBC including in-class presentations and poster advertising across campus.

- Purchased and installed a software package to assist in the tracking and servicing of prospective students. The transfer of prospective student information was begun.

- Participated in Geering Up!, a youth-oriented summer science program run through the UBC Faculty of Applied Science.

**Plans for 2005–06**

- Update the *Recruitment and Retention Action Plan* for 2005–06.
- Fully implement *Recruit the Recruiter* with the assistance of industry partners.
- Increase campus activity to attract current UBC students to Forestry programs.
- Continue the update of the Faculty website, and support the recommendations of the Image Committee.

### Achievements in 2004–05

**Activities centred around meeting the objectives of the 2003–04 Action Plan, and developing new activities and materials for the promotion of the Faculty’s programs.** The energy and commitment provided by the two associate recruiters is evident in the increased level of core activities shown in the summary table, when compared to the previous year. With the additional staff, the goals for 2004–05 were surpassed, and included several additional activities and special projects.

Highlights of this past year include:

- Completed a redesign of the Faculty webspace, in August 2004. The result was a more streamlined and organized architecture of website information.
- Completed a survey of incoming students to supplement the previous year’s survey.
- Completed a summer employment survey of second to fourth year students to ascertain employability and earnings.

- Increased activity to attract technical and college transfer students included participation in drop-in sessions run by UBC Recruitment at lower mainland college campuses and presentations to students at the University College of the Cariboo, Malaspina University College, and BCIT.

- Maintained activities to attract first year science students at UBC including in-class presentations and poster advertising across campus.

- Purchased and installed a software package to assist in the tracking and servicing of prospective students. The transfer of prospective student information was begun.

- Participated in Geering Up!, a youth-oriented summer science program run through the UBC Faculty of Applied Science.

**Plans for 2005–06**

- Update the *Recruitment and Retention Action Plan* for 2005–06.
- Fully implement *Recruit the Recruiter* with the assistance of industry partners.
- Increase campus activity to attract current UBC students to Forestry programs.
- Continue the update of the Faculty website, and support the recommendations of the Image Committee.

### Achievements in 2004–05

Activities centred around meeting the objectives of the 2003–04 Action Plan, and developing new activities and materials for the promotion of the Faculty’s programs. The energy and commitment provided by the two associate recruiters is evident in the increased level of core activities shown in the summary table, when compared to the previous year. With the additional staff, the goals for 2004–05 were surpassed, and included several additional activities and special projects.

Highlights of this past year include:

- Completed a redesign of the Faculty webspace, in August 2004. The result was a more streamlined and organized architecture of website information.
- Completed a survey of incoming students to supplement the previous year’s survey.
- Completed a summer employment survey of second to fourth year students to ascertain employability and earnings.

- Increased activity to attract technical and college transfer students included participation in drop-in sessions run by UBC Recruitment at lower mainland college campuses and presentations to students at the University College of the Cariboo, Malaspina University College, and BCIT.

- Maintained activities to attract first year science students at UBC including in-class presentations and poster advertising across campus.

- Purchased and installed a software package to assist in the tracking and servicing of prospective students. The transfer of prospective student information was begun.

- Participated in Geering Up!, a youth-oriented summer science program run through the UBC Faculty of Applied Science.

**Plans for 2005–06**

- Update the *Recruitment and Retention Action Plan* for 2005–06.
- Fully implement *Recruit the Recruiter* with the assistance of industry partners.
- Increase campus activity to attract current UBC students to Forestry programs.
- Continue the update of the Faculty website, and support the recommendations of the Image Committee.

### ACHIEVEMENTS IN 2004–05

Activities centred around meeting the objectives of the 2003–04 Action Plan, and developing new activities and materials for the promotion of the Faculty’s programs. The energy and commitment provided by the two associate recruiters is evident in the increased level of core activities shown in the summary table, when compared to the previous year. With the additional staff, the goals for 2004–05 were surpassed, and included several additional activities and special projects.

Highlights of this past year include:

- Completed a redesign of the Faculty webspace, in August 2004. The result was a more streamlined and organized architecture of website information.
- Completed a survey of incoming students to supplement the previous year’s survey.
- Completed a summer employment survey of second to fourth year students to ascertain employability and earnings.

- Increased activity to attract technical and college transfer students included participation in drop-in sessions run by UBC Recruitment at lower mainland college campuses and presentations to students at the University College of the Cariboo, Malaspina University College, and BCIT.

- Maintained activities to attract first year science students at UBC including in-class presentations and poster advertising across campus.

- Purchased and installed a software package to assist in the tracking and servicing of prospective students. The transfer of prospective student information was begun.

- Participated in Geering Up!, a youth-oriented summer science program run through the UBC Faculty of Applied Science.

**PLANS FOR 2005–06**

- Update the *Recruitment and Retention Action Plan* for 2005–06.
- Fully implement *Recruit the Recruiter* with the assistance of industry partners.
- Increase campus activity to attract current UBC students to Forestry programs.
- Continue the update of the Faculty website, and support the recommendations of the Image Committee.

### Achievements in 2004–05

Activities centred around meeting the objectives of the 2003–04 Action Plan, and developing new activities and materials for the promotion of the Faculty’s programs. The energy and commitment provided by the two associate recruiters is evident in the increased level of core activities shown in the summary table, when compared to the previous year. With the additional staff, the goals for 2004–05 were surpassed, and included several additional activities and special projects.

Highlights of this past year include:

- Completed a redesign of the Faculty webspace, in August 2004. The result was a more streamlined and organized architecture of website information.
- Completed a survey of incoming students to supplement the previous year’s survey.
- Completed a summer employment survey of second to fourth year students to ascertain employability and earnings.

- Increased activity to attract technical and college transfer students included participation in drop-in sessions run by UBC Recruitment at lower mainland college campuses and presentations to students at the University College of the Cariboo, Malaspina University College, and BCIT.

- Maintained activities to attract first year science students at UBC including in-class presentations and poster advertising across campus.

- Purchased and installed a software package to assist in the tracking and servicing of prospective students. The transfer of prospective student information was begun.

- Participated in Geering Up!, a youth-oriented summer science program run through the UBC Faculty of Applied Science.

**PLANS FOR 2005–06**

- Update the *Recruitment and Retention Action Plan* for 2005–06.
- Fully implement *Recruit the Recruiter* with the assistance of industry partners.
- Increase campus activity to attract current UBC students to Forestry programs.
- Continue the update of the Faculty website, and support the recommendations of the Image Committee.
New Student Enrolment

New student enrolment this year was 184, down about 15 percent from the previous year. This decrease was attributable mainly to the Faculty raising the secondary school entrance GPA by 6 percent to 73 percent. New students entering into different program years are tabulated below.

<table>
<thead>
<tr>
<th>Year of study</th>
<th>Number of new students entering</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>166</td>
</tr>
<tr>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>184</td>
</tr>
</tbody>
</table>

The B.Sc (Natural Resources Conservation) program attracted the largest number of new students, with 54 new students admitted in 2004 – 05. This was followed by the B.S.F. program with 50 new students, an increase of 4 from the previous year.

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

Total Enrolment

Total undergraduate enrolment showed a slight increase for the second year in a row, increasing to 453 from 448 in 2003 – 04. The increase in admission GPA from secondary school should correspond with a higher rate of student success in their first year and consequently more students able to continue their studies with us than in the past several years. We remain an attractive location for visiting and exchange students from elsewhere in Canada and the world. This year we hosted 27 of these students.

The percentage of female students in our undergraduate programs continues to increase, and is now about 38 percent, up from 35 percent last year.

The B.Sc. (Natural Resources Conservation) program has now surpassed the B.S.F. program as our largest program. The following table provides a breakdown of students by program:

<table>
<thead>
<tr>
<th>Number enrolled</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest Resources Management (B.S.F.)</td>
<td>107</td>
</tr>
<tr>
<td>Forest Operations (B.S.F.)</td>
<td>27</td>
</tr>
<tr>
<td>Forest Science (B.Sc.)</td>
<td>69</td>
</tr>
<tr>
<td>Wood Products Processing (B.Sc.)</td>
<td>113</td>
</tr>
<tr>
<td>Natural Resources Conservation (B.Sc.)</td>
<td>137</td>
</tr>
</tbody>
</table>
First Year Students

<table>
<thead>
<tr>
<th>Name</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bendickson, Chelan</td>
<td>TRUCK</td>
</tr>
<tr>
<td>Blaschuk, Robert</td>
<td>WOOD</td>
</tr>
<tr>
<td>Chandra, Timothy</td>
<td>WOOD</td>
</tr>
<tr>
<td>Chewer, Marley</td>
<td>ALUMNI2</td>
</tr>
<tr>
<td>Czapiewski, Christopher</td>
<td>WOOD</td>
</tr>
<tr>
<td>Ewen, Stephanie</td>
<td>TRUCK1</td>
</tr>
<tr>
<td>Hale, Cathryn</td>
<td>SODERMAN</td>
</tr>
<tr>
<td>Huang, Yi</td>
<td>WOOD</td>
</tr>
<tr>
<td>Opacic, Luke</td>
<td>WOOD</td>
</tr>
<tr>
<td>Pearson, Alexander</td>
<td>WOOD</td>
</tr>
<tr>
<td>Poon, Winston</td>
<td>WOOD</td>
</tr>
<tr>
<td>Prest, Dale</td>
<td>SODERMAN, TRUCK1</td>
</tr>
<tr>
<td>Scott, William</td>
<td>WOOD</td>
</tr>
<tr>
<td>Shaffer, Eva</td>
<td>WOOD</td>
</tr>
<tr>
<td>Zhang, Hang</td>
<td>WOOD</td>
</tr>
</tbody>
</table>

Second Year Students

<table>
<thead>
<tr>
<th>Name</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arnup, Will</td>
<td>BANKS, WEST</td>
</tr>
<tr>
<td>Bambrick, Elaine</td>
<td>ABCFP1, BANKS, WORRALL</td>
</tr>
<tr>
<td>Champion, John</td>
<td>CRUCIL, SODERMAN</td>
</tr>
<tr>
<td>Embleton, Dianna</td>
<td>SPLAN, WELDWOOD</td>
</tr>
<tr>
<td>Lim, Hyung-Suk</td>
<td>BANKS, MAC1, WELDWOOD</td>
</tr>
<tr>
<td>Lindsay, Scott</td>
<td>WOOD</td>
</tr>
<tr>
<td>Osorio, Federico</td>
<td>BANKS, CRUCIL</td>
</tr>
<tr>
<td>Power, Jacob</td>
<td>WOOD</td>
</tr>
<tr>
<td>Stein, Miriam</td>
<td>BANKS, WOOD</td>
</tr>
<tr>
<td>Walker, Katherine</td>
<td>WOOD</td>
</tr>
</tbody>
</table>

Third Year Students

<table>
<thead>
<tr>
<th>Name</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arison, Colleen</td>
<td>McINTOSH2, WEST</td>
</tr>
<tr>
<td>Beleznay, David</td>
<td>TRUCK2, BANKS, WOOD</td>
</tr>
<tr>
<td>Broschart, Jean-Michel</td>
<td>CARIBOO, SPLAN</td>
</tr>
<tr>
<td>Clason, Alana</td>
<td>CRUCIL, SODERMAN</td>
</tr>
<tr>
<td>Cowan, Darren</td>
<td>WOOD</td>
</tr>
<tr>
<td>Harnanishi, Erin</td>
<td>WOOD</td>
</tr>
<tr>
<td>Matson, Mona</td>
<td>SODERMAN, TRUCK2</td>
</tr>
<tr>
<td>Ngai, Edmund</td>
<td>BANKS, NATIONAL, WOOD</td>
</tr>
<tr>
<td>Newman, Megan</td>
<td>WELLWOOD, WOOD</td>
</tr>
<tr>
<td>Omran, Ahmed</td>
<td>MAC1, SPLAN, WELDWOOD</td>
</tr>
<tr>
<td>Ong, Sheldon</td>
<td>LITTLE, WHITTALL</td>
</tr>
<tr>
<td>Pershing, Andrew</td>
<td>MAC3, GROSVENOR, SODEMAN</td>
</tr>
<tr>
<td>Rasmussen, Kristin</td>
<td>BACO, TRUCK1</td>
</tr>
<tr>
<td>Sarasia, Maria</td>
<td>WOOD</td>
</tr>
<tr>
<td>Schoonmaker, Amanda</td>
<td>BANKS, SIDDOO2, MAC3</td>
</tr>
<tr>
<td>Scott, Stephen</td>
<td>WOOD</td>
</tr>
<tr>
<td>Semproni, Milena</td>
<td>WEST</td>
</tr>
<tr>
<td>Sloan, Mark</td>
<td>DEAN</td>
</tr>
<tr>
<td>Vandergriendt, Eric</td>
<td>WOOD</td>
</tr>
<tr>
<td>Zeron, Katherine</td>
<td>BANKS, MAC3, NORTHWOOD</td>
</tr>
</tbody>
</table>

Fourth Year Students

<table>
<thead>
<tr>
<th>Name</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anderson, Terri</td>
<td>WEST</td>
</tr>
<tr>
<td>Atherton, Andrew</td>
<td>CRAIG</td>
</tr>
<tr>
<td>Barlow, Jordan</td>
<td>CHISHOLM</td>
</tr>
<tr>
<td>Bosch, Roberto</td>
<td>DEAN, WOOD</td>
</tr>
<tr>
<td>Broekhuizen, Nicolas</td>
<td>BACKMAN, MILLS, SPLAN</td>
</tr>
<tr>
<td>Burks, Rene</td>
<td>R.E. MILLS, SPLAN</td>
</tr>
<tr>
<td>CHAU, Chi-Ki Jo</td>
<td>WOOD</td>
</tr>
<tr>
<td>Clark, Leah</td>
<td>CHISHOLM</td>
</tr>
<tr>
<td>Clark, Ryan</td>
<td>SMITH, SPLAN</td>
</tr>
<tr>
<td>Dick, Graeme</td>
<td>WELDWOOD, WOOD</td>
</tr>
<tr>
<td>Dodds, Travis</td>
<td>ABCFP2</td>
</tr>
<tr>
<td>Gairdner, Noel</td>
<td>KETCHAM, DEAN, WOOD</td>
</tr>
<tr>
<td>Gerbrandt, Alexander</td>
<td>BACKMAN, BINKLEY, DEAN, JOHNSON</td>
</tr>
<tr>
<td>Harrison, Megan</td>
<td>E. BACKMAN, BINKLEY, DEAN, JOHNSON</td>
</tr>
<tr>
<td>Hum, Andrew</td>
<td>DEAN, MAC2</td>
</tr>
<tr>
<td>Kuras, Piotr</td>
<td>ELKINGTON, SODERMAN</td>
</tr>
<tr>
<td>Iredale, Francis</td>
<td>SMITH, CRUCIL</td>
</tr>
<tr>
<td>Johnston, Christopher</td>
<td>SODERMAN, DEAN</td>
</tr>
<tr>
<td>Leung, Brian</td>
<td>DEAN, SPOON</td>
</tr>
<tr>
<td>Li, Angela</td>
<td>SPOON, MAC</td>
</tr>
<tr>
<td>Maruvgianga, Antonio</td>
<td>DEAN, SPLAN</td>
</tr>
<tr>
<td>McKay, Chipman</td>
<td>DEAN, BLUERIDGE</td>
</tr>
<tr>
<td>Pon, Lucas</td>
<td>DEAN, SPOON</td>
</tr>
<tr>
<td>Racher, Aaron</td>
<td>BIER, DEAN</td>
</tr>
<tr>
<td>Saddler, Sarah</td>
<td>DEAN, SPOON</td>
</tr>
<tr>
<td>Sherban, Daryl</td>
<td>DEAN, SPOON</td>
</tr>
<tr>
<td>Sinayov, Lori</td>
<td>DEAN, SPOON</td>
</tr>
<tr>
<td>Smith, Inga</td>
<td>DEAN, SPOON</td>
</tr>
<tr>
<td>Splugf, Daniel</td>
<td>DEAN, SPOON</td>
</tr>
<tr>
<td>Stange, Yulia</td>
<td>DEAN, SPOON</td>
</tr>
<tr>
<td>Stroel, Christy</td>
<td>DEAN, SPOON</td>
</tr>
<tr>
<td>Thomas, Georgina</td>
<td>DEAN, SPOON</td>
</tr>
<tr>
<td>Topp, Stephanie</td>
<td>DEAN, SPOON</td>
</tr>
<tr>
<td>Vorhies, Michael</td>
<td>DEAN, SPOON</td>
</tr>
<tr>
<td>Welsh, Marika</td>
<td>DEAN, SPOON</td>
</tr>
<tr>
<td>White, Norah</td>
<td>DEAN, SPOON</td>
</tr>
<tr>
<td>Zacharatos, Kathryn</td>
<td>DEAN, SPOON</td>
</tr>
<tr>
<td>J. Harry G. SMITH Award in Forest Resources Management.</td>
<td></td>
</tr>
<tr>
<td>Oscar SODERMAN Memorial Scholarship.</td>
<td></td>
</tr>
<tr>
<td>William John SPLAN Scholarship in Forestry.</td>
<td></td>
</tr>
<tr>
<td>Paul Robert STEINER Memorial Scholarship in Wood Science.</td>
<td></td>
</tr>
<tr>
<td>TIMBERLINE Scholarship.</td>
<td></td>
</tr>
<tr>
<td>TRUCK Loggers Association Scholarship and Scholarship in Harvesting.</td>
<td></td>
</tr>
<tr>
<td>UNIVERSITY of BC Scholarship.</td>
<td></td>
</tr>
<tr>
<td>WELDWOOD of Canada Ltd. Scholarship in Forestry.</td>
<td></td>
</tr>
<tr>
<td>Mary and Robert WELLWOOD Memorial Scholarship in Wood Science and Industry.</td>
<td></td>
</tr>
<tr>
<td>WEST Fraser Timber Co. Ltd. Scholarship in Forestry.</td>
<td></td>
</tr>
<tr>
<td>WEYERHAEUSER Memorial Scholarship in Forestry.</td>
<td></td>
</tr>
<tr>
<td>WELDWOOD of Canada Ltd. Scholarship in Forestry.</td>
<td></td>
</tr>
<tr>
<td>WHITALL Scholarship.</td>
<td></td>
</tr>
<tr>
<td>University of B.C. WOOD Products Processing Awards.</td>
<td></td>
</tr>
<tr>
<td>John WORRALL Tree Enthusiast Prize.</td>
<td></td>
</tr>
</tbody>
</table>

Full Name of Award

<table>
<thead>
<tr>
<th>Award</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABCFP Scholarship in Forestry1</td>
<td>Graduating Prize in Forestry2.</td>
</tr>
<tr>
<td>UBC Forestry ALUMNI Division Scholarship2</td>
<td>and Entrance Scholarship3.</td>
</tr>
<tr>
<td>BACKMAN Scholarship in Forest Resources Management</td>
<td>Charles and Jane BANKS Scholarship.</td>
</tr>
<tr>
<td>John E. BIER Memorial Prize in Forest Pathology.</td>
<td></td>
</tr>
<tr>
<td>Emily and Francis BINKLEY Scholarship.</td>
<td></td>
</tr>
<tr>
<td>CARIBOO Woodlot Education Society Scholarship in Forestry.</td>
<td></td>
</tr>
<tr>
<td>Hugh R.O. CHISHOLM Scholarship in Forestry.</td>
<td></td>
</tr>
<tr>
<td>Canadian Institute of Forestry (CIF) Medal.</td>
<td></td>
</tr>
<tr>
<td>COAST Fire Prevention and Control Group Ken Haley Memorial Prize.</td>
<td></td>
</tr>
<tr>
<td>Robert J. CRAIG Memorial Scholarship.</td>
<td></td>
</tr>
<tr>
<td>August and Cristina CRUCIL Scholarship in Forestry DEAN of Forestry Scholarship.</td>
<td></td>
</tr>
<tr>
<td>Elizabeth BACKMAN Scholarship in Natural Resources Conservation.</td>
<td></td>
</tr>
<tr>
<td>Galt ELKINGTON Memorial Scholarship.</td>
<td></td>
</tr>
<tr>
<td>Barry ENGLISH Memorial Prize.</td>
<td></td>
</tr>
<tr>
<td>Phil HADDOCK Prize in Silviculture.</td>
<td></td>
</tr>
<tr>
<td>Harry HOBSON Memorial Prize.</td>
<td></td>
</tr>
<tr>
<td>Ted JOHNSON Scholarship in Forestry.</td>
<td></td>
</tr>
<tr>
<td>Janet KETCHAM Scholarship.</td>
<td></td>
</tr>
<tr>
<td>Malcolm KNAPP Spring Carpe Prize.</td>
<td></td>
</tr>
<tr>
<td>Tony KOZAK Scholarship in Forest Measurement.</td>
<td></td>
</tr>
<tr>
<td>David Bell LITTLE Memorial Scholarship.</td>
<td></td>
</tr>
<tr>
<td>H. R. MACGILLIAN Prizes in Forestry1.</td>
<td></td>
</tr>
<tr>
<td>Forest Harvesting2.</td>
<td></td>
</tr>
<tr>
<td>Machinery and Supply Companies Group Forestry Scholarship.</td>
<td></td>
</tr>
<tr>
<td>Jim and Gerry McIntOSH Award in Forestry1.</td>
<td></td>
</tr>
<tr>
<td>and Scholarship in Forestry2.</td>
<td></td>
</tr>
<tr>
<td>University of BC MEMORIAL Scholarship.</td>
<td></td>
</tr>
<tr>
<td>James Russell MILLS Memorial Award.</td>
<td></td>
</tr>
<tr>
<td>NATIONAL Education Initiative Gerhard Kress Memorial Scholarship.</td>
<td></td>
</tr>
<tr>
<td>NORTHWOOD Pulp and Timber Limited Scholarship.</td>
<td></td>
</tr>
<tr>
<td>Robert E. MILLS Memorial Award.</td>
<td></td>
</tr>
<tr>
<td>Kapoor Singh SIDDOO Scholarships in Forestry1.</td>
<td></td>
</tr>
<tr>
<td>and Forest Ecology2.</td>
<td></td>
</tr>
<tr>
<td>J. Harry G. SMITH Award in Forest Resources Management.</td>
<td></td>
</tr>
<tr>
<td>Oscar SODERMAN Memorial Scholarship.</td>
<td></td>
</tr>
<tr>
<td>William John SPLAN Scholarship in Forestry.</td>
<td></td>
</tr>
<tr>
<td>Paul Robert STEINER Memorial Scholarship in Wood Science.</td>
<td></td>
</tr>
<tr>
<td>TIMBERLINE Scholarship.</td>
<td></td>
</tr>
<tr>
<td>TRUCK Loggers Association Scholarship1 and Scholarship in Harvesting2.</td>
<td></td>
</tr>
<tr>
<td>UNIVERSITY of BC Scholarship.</td>
<td></td>
</tr>
<tr>
<td>WELDWOOD of Canada Ltd. Scholarship in Forestry.</td>
<td></td>
</tr>
<tr>
<td>Mary and Robert WELLWOOD Memorial Scholarship in Wood Science and Industry.</td>
<td></td>
</tr>
<tr>
<td>WEST Fraser Timber Co. Ltd. Scholarship in Forestry.</td>
<td></td>
</tr>
<tr>
<td>WEYERHAEUSER Memorial Scholarship in Forestry.</td>
<td></td>
</tr>
<tr>
<td>WELDWOOD of Canada Ltd. Scholarship in Forestry.</td>
<td></td>
</tr>
<tr>
<td>WHITALL Scholarship.</td>
<td></td>
</tr>
<tr>
<td>University of B.C. WOOD Products Processing Awards.</td>
<td></td>
</tr>
<tr>
<td>John WORRALL Tree Enthusiast Prize.</td>
<td></td>
</tr>
</tbody>
</table>
Bursaries

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

Herschel H. BOYDSTON, Jr. Memorial Bursary in Forestry.
Gerry and Jack Burch Bursary.
Tommy Burgess Memorial Forestry Bursary.
Ian T. Cameron Memorial Bursary.
CANFOR Corporation Bursary.
COASTAL Silviculture Committee Bursary.
Doris M. Dowling Memorial Bursary.
EUROCAN Pulp & Paper Co. Bursary.
J. D. Hetherington Memorial Bursary.
British Columbia Kiln Association in Forestry.
Jeanette Lindsay Memorial Bursary.
Norris-Mebius Bursary.
P. L. Northcott Memorial Bursary.
Tudor Ommaney Memorial Bursary in Forestry.
Henri J. Pigeon Bursary in Wood Science and Industry.
Oscar Soderman Memorial Bursary.
Oscar Sziklai Memorial Bursary in Forestry.
E.G. & W.D. Touzel Bursary.
Vinten Fund Forestry Bursary.
John Worrall Alumni Bursary in Forestry.

DEGREES CONFERRED, MAY 2004 AND NOVEMBER 2004 CONGREGATIONS

B.S.F. Forest Resources Management
Barrett, F.
Card, A.B.
Gale, J.J.
Hart, D.A.
Knoll, G.
Litz, A.F.
Nuttall, R.L.
Osborne, K.
Osterberg, P.M.
Robert, J-F.
Saunders, R.
Stephenson, C.J.
Strocel, C.
White, N.J.

B.S.F. Forest Operations
Bernhardt, A.E.
Choi, Y.H.
Kuras, P.K.
Menninga, Y.A.
Mills, R.W.
Redfern, C.J.
Ziegler, B.

B.S.C. (Wood Products Processing)
Ashari, N.
Burke, M.W.
Cross, M.J.
Morgan, C.L.
Murray, K.
Robson, C.S.
Wookey, M.L.
Zapadka, T.

Diploma in Forestry (Advanced Silviculture)
Hendricks, P.
Majcher, D.
Nelson, A.B.
Nicholson, D.C.

Diploma in Forest Engineering
Bartle, H.H.
Bigelow, C.B.
Donnelly, R.D.
Egyir, P.K.
Eiden, C.
Johnson, R.L.
Johnston, C.R.
Kaempf, F.B.
Mallett, B.D.
Mowatt, G.E.
Norwell, R.N.
Raume, T.M.
Thiessen, L.D.
Van Arem, M.J.

B.Sc. (Forestry) Forest Science
Andrew, B.J.
Hurley, S.S.
Staven, W.

B.Sc. (Natural Resources Conservation)
Bonish, C.D.
Campbell, B.M.
Chung, C.P-Y.
Dodds, T.A.

Students graduating from degree programs 1987 – 04
Graduate Programs

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

Enrolment and Graduation Trends

Graduate program enrolment increased over the past year to 197 graduate students.

Distribution of students by program*

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ph.D.</td>
<td>61</td>
<td>38</td>
<td>99</td>
</tr>
<tr>
<td>M.Sc.</td>
<td>46</td>
<td>40</td>
<td>86</td>
</tr>
<tr>
<td>M.A.Sc.</td>
<td>6</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>M.F.</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Non-thesis</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>116</td>
<td>81</td>
<td>197</td>
</tr>
</tbody>
</table>


Graduate Student Funding

In the 2004 – 05 academic year, Forestry graduate students were awarded support totalling $2,713,431, a 2% increase over 2003 – 04 funding levels. Graduate support consisted of $777,462 in scholarship funding, $203,903 in graduate teaching assistantships and $1,732,066 in graduate research assistantships (provided by research supervisors from their research grants).

Graduate student funding 2004 – 05

<table>
<thead>
<tr>
<th>Department</th>
<th>No. graduate students</th>
<th>Total funding ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest Resources Management</td>
<td>55.5</td>
<td>617,578</td>
</tr>
<tr>
<td>Forest Sciences</td>
<td>80</td>
<td>1,189,971</td>
</tr>
<tr>
<td>Wood Science</td>
<td>61.5</td>
<td>905,882</td>
</tr>
<tr>
<td>Total</td>
<td>197</td>
<td>2,713,431</td>
</tr>
</tbody>
</table>

Activities

We overhauled our calendar listings in the past year so that students now have accurate information on Faculty of Forestry graduate course offerings. The web calendar now lists only those courses taught at least every other year. We also introduced 14 new courses, including a suite of courses offered as part of our new Forests and Society graduate program.

The Forestry Graduate Student Association (FGSA) organised a welcome back barbeque, wine and cheese social, Christmas party, and monthly lab-hosted socials. Students presented their research at the Faculty research poster night and awards for outstanding posters were presented to Russell Chedgy, Lucie Jerabkova and Robyn Scott. The FGSA executives were Heather Coleman, Scott Diguistini, Rachelle Lalonde, Hanah Shriner, Steve Thoews and Saba Vahid.

Robyn Scott (M.Sc. with S. Mitchell) and Gordon Hickey (Ph.D. with J. Innes) were awarded prizes for the best theses. Denise Allen received the Graduate Teaching Assistant Award.
Doctoral Students

Aitken, Kathryn
Alexiadis, Pavlos
Allen, Denise
Anderson, Axel
Asstrup, Rasmus
Barker, Jason
Bears, Heather
Bondar, Carin
Branton, Margaret
Bura, Renata
Campbell, Alaine
Campbell, Kirsten
Canam, Thomas
Cleary, Michelle
Coleman, Heather
Crossin, Glenn
Fedy, Brad
Gandy, Ryan
Gonzales, Emily
Gu, Jianzhong
Hegde, Ravi
Hruska, Kimberly
Jerabkova, Lucie
Keating, Jeffrey
Kirby, Kathryn
Klenk, Nicole
Lantz, Trevor
Leckie, Sara
Lencar, Cornel
Lewis, John
Lii, Minghao
Marr, Amy
Mathe, Anne-Helene
McDonnell, Lisa
Miller, Laurie
Nitschke, Craig
Northway, Steven
Ogden, Aynsley
Quilty, Edward
Rangel, Jose Luis
Robinson, Andrew
Runyan, Simone
Sadej, Tokham
Scherer, Robert

Association of BC Forest Professionals.
George S. ALLEN Memorial Scholarship.
Edward W. BASSETT Memorial Scholarship in Reforestation.
BRIGHT FUTURE Scholarship.
Don BUCKLAND Memorial Scholarship in Forest Pathology.
CANFOR Corporation Fellowship in Forest Ecosystem Management.
Canadian Forest Service.
CANNON AAS US National Parks Scholarship.
Hugh Robert Duncan CHISHOLM Scholarship in Forestry.
Ralph and Elizabeth COCHRAN Scholarship.
COMMONWEALTH Scholarship.
CONAYCT (Mexico Council of Science and Technology).
Deutscher Akademischer Austausch Dienst.
DU PONT Canada Fellowship in Pulp and Paper.
McLean FRASER Memorial Scholarship.
Canada – US FULLBRIGHT Scholarship.

Brahma G. GRIFFITH Memorial Scholarship in Forest Resources Management.
Graduate Teaching Assistant Teaching Award.
Brenda HANSON Memorial Scholarship in Forestry.
Paul HELLER Fellowship.
Bob HINDMARSH Award.
Bert HOFFMEISTER Scholarship in Forest Wildlife.
Asa JOHAL Graduate Fellowship in Forestry.
Izaak Walton KILLAM Memorial Pre-Doctoral Fellowship.
LUMBER Inspector’s Benevolent Society Scholarship.
Donald S. MCPHEE Fellowships.
NAMKOONG Family Fellowship in Forest Sciences.
Natural Sciences and Engineering Research Council of Canada.
NSERC Canada Graduate Scholarship.
NSERC Industrial Postgraduate Scholarship.
NSERC Killam.
NSERC Julie PAYETTE.
NSERC Top Up Supplements.
Forestry Research POSTER Winners (1st, 2nd, 3rd).

Masters Students

Abbey, Tyler
Ambus, Lisa
Askew, Sue
Best, Rebecca
Brooks, Denise
Chedgy, Russell
Coleman, Heather
DeLong, Deborah
DiGuistini, Scott
Dordel, Julia
Forsyth, Jason
Hilton, Alana
Holliday, Jason
Jewell, Kelly
Maloney, Victoria
McGuigan, Erin
Murray, Sonia
Nadeau, Patrick
Norris, Andrea
Oaten, Dustin
Sakals, Matthew
Schulz, Rueben
Scott, Robyn
Seebacher, Tanya
Sipos Randor, Yona
Storry, Kristen
Thompson, Derek
Tieg, Brendan
Ukrainetz, Nicholas
Urban, Kathrin
Young, Jeffrey
Zhao, Yihai

Abbey, Tyler
MCPHEE
Ambus, Lisa
NSERC TUS, MCPHEE, HELLER, SSHRC CGS
Askew, Sue
UGF
Best, Rebecca
UGF GES, NSERC TUS, NSERC KILLAM
Brooks, Denise
VANDUSEN
Chedgy, Russell
POSTER
Coleman, Heather
NSERC CGS
DeLong, Deborah
MCPHEE
DiGuistini, Scott
SOPRON
Dordel, Julia
VANDUSEN
Forsyth, Jason
MCPHEE
Hilton, Alana
VANDUSEN
Holliday, Jason
VANDUSEN
Jewell, Kelly
VANDUSEN
Maloney, Victoria
VANDUSEN
McGuigan, Erin
VANDUSEN
Murray, Sonia
NSERC TUS, NSERC CGS
Nadeau, Patrick
NSERC TUS
Norris, Andrea
NSERC IPS
Oaten, Dustin
NSERC
Sakals, Matthew
CANFOR
Schulz, Rueben
NSERC
Scott, Robyn
NSERC, POSTER
Seebacher, Tanya
NSERC TUS, NSERC
Sipos Randor, Yona
VANDUSEN
Storry, Kristen
ABC FP
Thompson, Derek
UGF
Tieg, Brendan
NSERC
Ukrainetz, Nicholas
DAAD
Urban, Kathrin
NSERC TUS, NSERC
Young, Jeffrey

J. Harry G. SMITH Scholarship in Forest Resources Management.
SOPRON Alumni Fellowship.
Social Sciences and Humanities Research Council of Canada.
SSHRC Canada Graduate Scholarship.
TIMBERWEST Forest Limited Fellowship in Forest Resources Management and Planning.
TIMBERWEST Forest Limited Fellowship in Forest Sciences.
University of B.C. Graduate Fellowship - Graduate Entrance Scholarship.
University of B.C. Graduate Fellowship - Cordula and Gunter PAETZOLD.
VANDUSEN Graduate Fellowships in Forestry.
Adrian WEBER Memorial Scholarship in Forest Ecology.
WELDWOOD of Canada Ltd. H. Richard Whittall Scholarship.
WELDWOOD of Canada Limited Scholarship in Forestry.
Degrees Conferred, May 2004 and November 2004 Congregations

**M.A.Sc.**

SALEHIRAD, Neda  
*Dr. T. Sowlati*

Efficiency analysis of primary wood producers in British Columbia using data envelopment analysis.

WANG, Youhai  
*Dr. D. Barrett*

Wood products test methods and stress class systems in the world.

**M.F.**

ARON, Andrei  
*Dr. M. Meitner*

Optimal path/neural network approaches to modeling of forest road design for use in automated G.I.S. systems.

THONY, Paul  
*Dr. G. Bull*

Fibre supply issues of the British Columbia log home manufacturing industry.

**M.Sc.**

ALEXIADIA, Pavlos  
*Dr. D. Cohen*

Kiln drying problems and issues in Canada: Benchmarks and comparison to Europe.

ANDERSON, Janice  
*Dr. C. Prescott*

The relationship between the production of hypogeous sporocarps and the density and diet of northern flying squirrels in western hemlock forests of coastal British Columbia.

BELAND, Jaclyn  
*Dr. Y. El-Kassabyy*

Genetic diversity, population structure, mating system and pollen flow in arbutus (*Arbutus menziesii* Pursh).

CHRESTIN, Hauke  
*Dr. T. Maness*

A survey on high-value recovery manufacturing in European sawmill industries.

De GROOT, Jennifer  
*Dr. S. Hinch*

Density, body condition and movement of coastal cutthroat trout (*Oncorhynchus clarki clarki*) in logged and forested headwater streams of southwestern British Columbia.

FANG, Zhijuan  
*Dr. J. Ruddick*

Providing termite and fungal protection to waferboard using novel termiticides and fungicides.

ORTLEPP, Stephanie  
*Drs. V. LeMay and P. Murtha*

Classification of windthrow on cutblock boundaries from Landsat 7 ETM.

PETER, Brian  
*Dr. J. Nelson*

Determining harvest schedules and profitability under the risk of fire disturbance.

RICE, Jennifer  
*Dr. R. Kozak*

An analysis of interior wood products and their psychological impact.

RIETMAN, Lea  
*Drs. B. van der Kamp and S. Shamoun*

Assessment of *Neonectria neomacrospora* as a potential biological control agent for hemlock dwarf mistletoe.

RUNYAN, Simone  
*Dr. P. Arcese*


SPETIC, Wellington  
*Dr. R. Kozak*

The indoor environmental quality (IEQ) survey of Canadian households: A focus on indoor air quality, lighting, and acoustics.

WILKIN, Jennifer  
*Drs. Y. El-Kassaby and S. Shamoun*

Genetic diversity and population structure of the potential biocontrol agent, *Valdensinia heterodoxa*, and its host *Gaultheria shallon* (salal).
WILSON, Amy

Dr. B. van der Kamp
Characterization of clonal structure and mating patterns in Maianthemum dilatatum.

WILSON, Scott

Dr. P. Arcese
Effects of climate on timing of breeding, reproductive output and population growth of song sparrows (Melospiza melodia) in the southern Gulf Islands, British Columbia.

YE, Lin

Dr. T. Maness
Adaptive optimization methods to improve the performance of chop saw systems.

ZHUANG, Xiao Jun

Drs. D. Barrett and F. Lam
Reliability study of North American dimension lumber in the Chinese timber structures design code.

Ph.D.

BLEVINS, David

Dr. C. Prescott
The influence of nutrition and density on repressed lodgepole pine.

CAO, Fuliang (Sam)

Dr. J.P. Kimmins
Ecological basis for ginkgo agroforestry systems.

CHOI, Sungmee

Dr. J. Ruddick
Understanding the durability of shell CCA-treated decking.

GAPARE, Washington

Dr. S. Aitken
Genetic diversity and spatial population structure of sitka spruce (Picea sitchensis (Bong.) Carr.): Implications for gene conservation of widespread species.

HICKEY, Gordon

Dr. J. Innes
Monitoring and information reporting for sustainable forest management in North America and Europe: Requirements, practices and perceptions.

KARAKATSOULIS, John

Dr. J.P. Kimmins
The growth and photosynthetic response of underplanted conifer seedlings to changes in understory light environment.

MARINESCU, Marian

Dr. T. Maness
Multi-criteria timber allocation models for the analysis of sustainable forest management decisions.

McCARTHY, John

Drs. G. Weetman and V. LeMay
Natural disturbance and structure in two primary boreal forests of western Newfoundland.

MORFORD, Shawn

Dr. J. Innes
Factors affecting program evaluation behaviors of natural resource extension practitioners in the United States.

MTIRAOUI, Ahmed

Dr. Y. Alila
Mixture distributions and spatial scale effects on flood hydrology.

NEGRA VE, Roderick

Dr. C. Prescott
Nutrient and establishment density effects on structural development and growth processes in juvenile western redcedar and western hemlock stands on northern Vancouver Island.

PAVEL, Mihai

Drs. J. Fannin and J. Nelson
Application of artificial neural networks for terrain stability mapping.
INTERNATIONAL PROGRAMS within the Faculty of Forestry continue to evolve. With international issues in forestry and forest products being repeatedly emphasized in the media and by the forest sector as a whole, this past year marked a number of changes in the range of activities we support and participate in.

Ms. Sandra Schinnerl (Associate Director of International Forestry Programs) continued to act as the secretariat for the International Partnership for Forest Education (IPFE) during its development phase.

Ms. Chiara Longhi remained responsible for managing the international student exchange program and facilitating our international student recruitment program. She has played an increasing role in the recruitment of international students to the University as a whole, and her enthusiasm and skills have been in much demand from the International Student Initiative.

ACHIEVEMENTS IN 2004 – 05

“Trek 2010: A global journey”, the strategic planning document of UBC, stresses the need to develop a greater international awareness in its students. It recommends doing this through increasing international learning opportunities, both at home and abroad. Such a strategy is particularly relevant to the Faculty of Forestry. Our future graduates will live and work in a society in which the need to understand and interact with people from other societies will be crucial in order to solve the global environmental issues that we face. Our students need to be capable of engaging successfully in international trade, working on global environmental issues and utilizing knowledge gained elsewhere to solve local problems. Internationalisation has been emphasized within the strategic plan for the Faculty of Forestry.

The Faculty of Forestry, in the context of UBC, is already culturally diverse, has significant numbers of international graduate students and a range of international research activities. We are currently documenting this activity, much of which is apparent throughout this annual report.

International Activities

A key aspect of our international activities has been the initiation of formal links with China. We have signed MoUs with Beijing and Nanjing Forestry Universities, and with the Beijing Forestry Management Staff College. We are exploring various ways in which this cooperation can be developed, ranging from exchange of students and faculty and the transfer of Chinese forestry undergraduates into our programs, to the provision of distance education. An MoU has also been signed with the Faculty of Forestry at the University of West Hungary in Sopron, Hungary. This agreement is particularly significant as it was the students and staff of this Hungarian university that came to UBC in 1956.

We continue to take an active role in the International Union of Forest Research Organizations, and we will be contributing to the forthcoming XXII IUFRO World Congress in August 2005.

We were the only Canadian academic institution to be represented at the Commonwealth Forestry Congress, held in Sri Lanka in February 2005. The Congress focused on the role of forestry in the reduction of poverty – a critical issue internationally but one which has not engaged many researchers within Canada. The Congress emphasized the rapidly changing nature of forestry in other parts of the world, something that will have influence on the nature and success of future undergraduate and graduate programs within the Faculty of Forestry.

Related to this theme, a major new activity was initiated by Dr. Phil Evans of the Centre for Advanced Wood Processing (CAWP) that will help the Faculty of Forestry meet some of its obligations as global citizens. With financial assistance from the Canadian International Development Agency, CAWP has developed links with Stellenbosch University and Port Elizabeth Technikon in South Africa. The agreement and funding will enable CAWP to deliver specialist scientific education and training in advanced wood processing on a sustainable basis.

Student Recruitment and Exchange

Our student exchange program continues to be a great option for students at both the undergraduate and graduate levels. Students can select from 22 institutions in 13 countries. In the 2004 – 05 academic year we had five students who went to Australia, New Zealand, the United Kingdom and Chile. Over 27 international exchange/visiting students visited us from 14 different universities in eight different countries including Australia, Costa Rica, Denmark, Germany, New Zealand, the Philippines, the United Kingdom and the United States.

The Go Global office, the former Exchange office, with the support of the individual faculties, is working on expanding our program to include international work placements and internships.
as another option for students who wish to gain more international experience.

We continued our concerted efforts to make international students more aware of programs within the Faculty of Forestry through participation in international recruitment activities, including recruitment fairs throughout the Pacific Northwest and New Mexico, with plans to expand to Europe and Asia. We look forward to the diversity and perspectives international students will bring to the Faculty. The effort appears to have been successful, and the number of applications from international students increased by 17%, a welcome trend when compared to the 40% drop in applications from domestic students.

Together with three other Canadian Forestry Schools (University of Alberta, University of Toronto, University of New Brunswick), we were successful with a proposal to HRSDC to have a formalized agreement with four European universities (University of Wales Bangor, SLU Swedish University of Agricultural Sciences, University of Joensuu and University of Freiburg) to increase student mobility and cooperation among our institutions. As part of the proposal, TRANSFOR, Transatlantic Education for Globally Sustainable Forests, we will be able to send 10 students, almost fully funded, to participate in different activities prepared by our European grant partners as well as host students from our partners. The activities will start in the summer of 2005 with the first European field course. We are grateful to Dr. Bruce Larson who is playing a major role in implementing this agreement.

**INTERNATIONAL FORESTRY PROGRAMS**

**PLAN FOR 2005 – 06**

**Curriculum Development**

With our international student exchange programs running successfully, it is now time to turn our focus to curriculum and program change. We continue to try to increase the “global content” of existing programs and courses wherever possible and appropriate. Challenging students with global issues, concerns and solutions is an important part of their university education and one that we see requiring careful nurturing. However, many of our courses have minimal international content, and this needs to change.

**International Recruitment and Exchange**

International students contribute their own experiences and knowledge of the world while in our classrooms. By increasing the number of visiting, exchange and full-time international students, we are increasing the internationalization of the entire Faculty. We will continue to create more institutional arrangements that will support students wishing to study forestry at UBC.

Of equal importance, International Programs will be working to increase the opportunities for domestic students to have international education experiences by:

- continuing to promote, maintain and grow, our international student exchange and mobility arrangements; and
- establishing international work co-op programs for our undergraduates.

**International Linkages**

During 2004 – 05, it became evident that the creation of linkages and opportunities is insufficient if greater internationalization is to be achieved within the Faculty. While it is important to increase opportunities for faculty to engage and collaborate with international research organizations, this is unlikely to occur under the current structure. We are therefore examining ways that would encourage faculty to become involved to a greater degree in international research activities.

In the coming year we will be looking at ways in which, with very limited resources, we could participate more actively in promoting, improving and communicating advances in forest education and research internationally. In particular, we will be looking for innovative ways to finance such activities.

**International Conferences and Events**

UBC Forestry will continue to co-ordinate and host relevant conferences and workshops on a range of international forestry issues.

As part of the relationship with the University of West Hungary, in December 2006 there will be a 50th Anniversary ceremony and celebration of the Sopron Faculty coming to UBC.
For more than 12 years, the Faculty has been developing and implementing its First Nations strategy. Starting with recognition of the increasing importance of British Columbia’s First Nations in the forest sector, the strategy is expanding to include the importance of indigenous peoples in all aspects of ecosystem management, including conservation policy, land use planning, and park co-management.

Today, in British Columbia, the need for First Nations involvement in forested land activities has never been more evident. In November 2004, the Canadian Supreme Court ruled in the Haida and Taku cases that First Nations must be consulted at a strategic level in forestry management. In spite of its view, the Court issued no injunction, and in late May, 2005, the Haida Nation, along with non-Haida community members, blockaded forest operations on Haida Gwaii in protest of actions they felt did not adequately address the public concerns or Aboriginal rights on the island.

Acting together, both political bodies representing First Nations in BC, the First Nations Summit and the Union of BC Indian Chiefs, issued several joint statements questioning the legitimacy of the BC Government’s process for establishing new legislation and policy affecting First Nations rights and access to traditional territories.

Although the extent of the practical effect of the Supreme Court’s recognition of a greater legal obligation to have First Nations involvement in forest management decisions is unclear, First Nations are gaining greater access to forest resources through Forest and Range Agreements, Interim Measures Agreements and joint-venture partnerships.

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

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

**ACHIEVEMENTS IN 2004 – 05**

- Dr. Ronald Troper from the Salish and Kootenai Tribes of the Flathead Reservation, Montana, joined the Faculty as Associate Professor of Aboriginal Forestry.
- Pamela Perreault, from Garden River First Nation in Ontario, became coordinator of First Nations Forestry. She presented a one year work plan to the First Nations Council of Advisors in September 2004.
- Four First Nations students entered into first year forestry programs for a total of 13 undergraduate and three graduate Aboriginal students enrolled in forestry.
- The Faculty and Malaspina University College formally created the First Nations Bridging and Laddering Partnership to offer the first two years of the B.S.F. degree program for block credit transfer to UBC. The first intake of students at Malaspina and UBC will be in September 2005.
- The coordinator undertook recruitment trips along the coast of mainland BC and on Vancouver Island to promote forestry to First Nations youth and introduce the MUC-UBC Bridging Program.
- Twenty-five aboriginal grade 8 and 9 students from around the province attended our second Summer Forestry Camp for First Nations Youth in August, 2004. This year’s camp was offered in collaboration with the Faculty of Science and Faculty of Agriculture at UBC and the BCIT Woodlot.
- The student coordinator of the 2004 Summer Forestry Camp was invited to present at the Chancellors Circle Dinner in recognition of the program’s achievement in meeting the goals and objectives of UBC’s Trek 2000.
- Pamela Perreault published the article “Meeting the challenge through Aboriginal forestry education” in the Nov/Dec 2004 issue of the Forum magazine.
- Pamela joined the Board of Directors for the Centre for Native Policy and Research Society and was invited to sit on the Wood Manufacturing Council’s Careers in Wood Promotion Program advisory committee.
- With help from the First Nations Coordinator for the Faculty of Science and the Faculty of Land and Food Systems, we successfully acquired $26,819 from the Teaching, Learning and Enhancement Fund to develop and implement a pilot math program for forestry students, including Aboriginal students enrolled in other science-based programs.
- In addition to teaching CONS 370, “First Nations and Forest Lands,” Dr. Troper established two new graduate courses, FRST 522, “Indigenous Peoples and Forest Land Management,” to be offered for the first time in the Fall of 2005, and FRST 529, “Ecological Economics,” which he taught in the Spring of 2005 and which he will offer for the second time in the Fall of 2005.
Dr. Trosper became involved with two research projects funded by the Sustainable Forest Management Network. He replaced George Hoberg as principal investigator for the research project, “First Nations and Sustainable Forestry: Institutional Conditions for Success,” which focuses upon the factors affecting the success of joint ventures involving First Nations, and other similar arrangements, in the forestry sector. Dr. Trosper also became a co-investigator on a new project, “A Participatory Approach to Aboriginal Tenure Reform in Canada.” The Carrier-Sekani Tribal Council is a participant in this new project, which will examine aboriginal tenures.

Dr. Trosper has also joined a new Task Force on Traditional Forest Knowledge of the International Union of Forest Research Organizations. The task force is currently building its work plan.

Dr. Trosper, Paul Lawson and Dean Saddler worked to develop a formal protocol with the Katzie First Nation in regard to the Malcolm Knapp Research Forest. While a formal agreement proved difficult to achieve, because of reluctance on the part of UBC’s legal counsel to recognize that the Research Forest may be in the Katzie Traditional Territory, we did decide to set up a committee to further improve the relationship and specify more detailed work projects.

**PLANS FOR 2005 – 06**

With the succession of the coordinator and the hiring of Dr. Trosper, the First Nations Council of Advisors agreed to review and re-establish the First Nations strategy within the Faculty of Forestry. The following planned activities are a reflection of this process:

- **First Nations Recruitment and Retention Fund** – to support recruitment and retention activities of the First Nations Coordinator, and initiatives such as the Summer Forestry Camp for First Nations Youth and visiting Elders and speakers.

- **Review and revise the First Nations strategy** – Many of the objectives of the current strategy have been accomplished. In addition, because of changes in the forest sector and in curriculum needs in forest land management, plans for the future need to be examined and refocused.

- **Restructure the delivery of the Summer Forestry Camp** – a new formula for delivering valuable forestry related experience to First Nations will reflect the needs and concerns of communities with increasing forest management responsibilities.

- **Further develop graduate studies** on questions important to First Nations, with an emphasis on First Nations students doing graduate work. Develop a network of First Nations in British Columbia interested in such research.

- **Complete the “Institutional Conditions for Success” research project.** Initiate the first year of the project on aboriginal tenure reform.

- **Further develop the relationship between the Katzie First Nation and the Faculty of Forestry, with special emphasis on the Malcolm Knapp Research Forest.**

- **Dr. Trosper will participate in a new graduate program in Forests and Society.** Students can pursue a masters degree either with a thesis or with a professional paper. This program provides ways to study indigenous forestry at the graduate level. Further information is available on the web at http://www.forestry.ubc.ca/forsoc/

<table>
<thead>
<tr>
<th>First Nations Council of Advisors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garry Merkel, R.P.F., Chair</td>
</tr>
<tr>
<td>Lloyd Roberts, FIT</td>
</tr>
<tr>
<td>Dwight Yochim, R.P.F.</td>
</tr>
<tr>
<td>Glenn Ricketts</td>
</tr>
<tr>
<td>Dr. Richard Vedan</td>
</tr>
<tr>
<td>Gordon Reid</td>
</tr>
<tr>
<td>Ross Hunt</td>
</tr>
</tbody>
</table>
SADDLER, J. N. (Jack)
B.Sc. (Hons.) (Edin.), Ph.D. (Glas.)
Dean
604–822–2467
jack.saddler@ubc.ca

MARSHALL, Peter L.
B.Sc.F., M.Sc.F. (Tor.), Ph.D. (Brit. Col.), RPF
Associate Dean, Undergraduate Studies
Responsible for administering undergraduate academic programs, including curriculum and calendar changes; admissions; retention; transfers and advancements; awards; discipline and teaching evaluations.
604–822–4918
peter.marshall@ubc.ca

PRESCOTT, Cindy E.
B.Sc. (Hons.) Brock, M.Sc., Ph.D. Calg.
Associate Dean, Graduate Studies and Research
Responsible for promoting and overseeing administration of externally-sponsored research activities, and administering all aspects of Forestry graduate programs.
604–822–4701
cindy.prescott@ubc.ca

WATTS, Susan B.
B.Sc. (Wales), M.F., Ph.D. (Brit. Col.), RPF
Director, Communications
Responsible for directing communications and external relations, for promoting research, for coordinating project proposal development and for producing Faculty Newsletters and Annual Reports.
604–822–6316
sue.watts@ubc.ca
ANDERSON, Geoffrey  
B.Comm. (Nfld.)  
Cooperative Education Coordinator  
604–827–5196  
geoff.anderson@ubc.ca

BAUMBER, Stephen  
B.S.F. (Brit. Col.), R.P.F.  
Recruitment Officer  
604–827–5195  
steve.baumber@ubc.ca

BERG, Anonda  
B.A. (Brit. Col.)  
Undergraduate Programs Secretary  
604–822–2727  
for.recep@ubc.ca

BORTHWICK, Barbara  
Director, Administration  
604–822–5542  
barbara.borthwick@ubc.ca

CARSON, Larry  
B.Sc. (Vic.), MCSE  
Systems Manager  
604–822–0773  
larry.carson@ubc.ca

CEDERBERG, Erin  
Development Coordinator  
604–822–8787  
erin.cederberg@ubc.ca

DAVIS, Neil  
B.Sc. (Brit. Col.)  
Associate Recruiter  
604–822–1834  
neil.davis@ubc.ca

DRAKES, Renita  
B.A. (Brit. Col.)  
Education and Web Technology Coordinator  
604–822–0024  
renita.drakes@ubc.ca

EVANS, Katrina  
B.Sc.F. (ANU)  
Senior Development Officer  
604–822–8716  
katrina.evans@ubc.ca

FEDUIK, Deborah E.  
(Capilano College)  
Graduate Programs Assistant  
604–822–6177  
deb.feduik@ubc.ca

KEATING-HUSK, Clare  
B.A. (Hons.) Lincolnshire & Humberside  
Dean’s Assistant and Alumni Relations Officer  
604–822–3542  
clare.keating-husk@ubc.ca

LONGHI, Chiara  
M.A. (Univ. Pisa)  
International Recruitment Officer  
604–822–9187  
chiara.longhi@ubc.ca

NELSON, Lori  
Graduate Admissions Secretary  
604–822–6784  
lori.nelson@ubc.ca

PARSONS, Candace E.B.  
B.S.F. (Brit. Col.), R.P.F.  
Director, Student Services  
604–822–3547  
candace.parsons@ubc.ca

PERREAULT, Pamela  
B.Sc. (Waterloo), M.Sc. (Brit. Col.)  
Coordinator, First Nations Forestry  
604–822–0651  
pamela.perreault@ubc.ca

SCHINNERL, Sandra  
B.Com, M.Ed, (Brit. Col.)  
Associate Director, International Forestry Programs  
604–822–9627  
sandra.schinnerl@ubc.ca

SHUM, Eston  
Financial Coordinator  
604–822–4312  
eston.shum@ubc.ca
HOBERG, George  
Professor and Head  
Forest Policy  
604–822–3728  
george.hoberg@ubc.ca

ALILA, Younes  
Associate Professor  
Forest Engineering Hydrology  
604–822–6058  
younes.alila@ubc.ca

BENDICKSON, Dennis F.  
Senior Instructor and Director,  
Forest Operations Major  
Forest Operations  
604–822–5932  
dennis.bendickson@ubc.ca

BULL, Gary Q.  
Assistant Professor  
Forest Economics and Forest Policy  
604–822–1553  
gary.bull@ubc.ca

COOPS, Nicholas C.  
Associate Professor and Canada Research Chair  
in Remote Sensing  
Remote Sensing and Spatial Data Modeling in  
Forestry and Ecology  
604–822–6452  
nicholas.coops@ubc.ca

FANNIN, R. Jonathan  
Professor (Forest Resources Management,  
Civil Engineering)  
Forest Engineering, Roads, Soils, Terrain Stability  
Assessment  
B.Sc. (Hons.) (1983) Belfast,  
604–822–3133  
jonathan.fannin@ubc.ca

GULATI, Sumeet  
Assistant Professor (Forest Resources Management,  
Land and Food Systems)  
Food and Resource Economics  
604–822–2144  
sumeet.gulati@ubc.ca

INNES, John L.  
Professor and Forest Renewal BC Chair in Forest  
Management  
Sustainable Forest Management, Cumulative  
Impacts Analysis, First Nations  
604–822–6761  
john.innes@ubc.ca

LeMAY, Valerie M.  
Associate Professor  
Biometrics/Mensualtion  
604–822–4770  
valerie.lemay@ubc.ca

LYONS, C. Kevin  
Assistant Professor  
Forest Engineering  
604–822–3559  
kevin.lyons@ubc.ca

MANESS, Thomas C.  
Associate Professor and Director, BC Forum on  
Forest Economics and Policy  
Forest Economics and Systems Analysis  
604–822–2150  
thomas.maness@ubc.ca

MARSHALL, Peter L.  
Professor and Associate Dean,  
Undergraduate Studies  
Growth and Yield, Sampling Design  
604–822–4918  
peter.marshall@ubc.ca

MEITNER, Michael  
Assistant Professor  
Environmental Perception and Visualization,  
Recreation and GIS  
B.Sc., M.A., Ph.D. (Arizona)  
604–822–0029  
michael.meitner@ubc.ca

MOORE, R. Dan  
Associate Professor (Forest Resources  
Management, Geography) and Forest Renewal BC  
Chair in Forest Hydrology  
Hydrology  
B.Sc. (Hons.) (1979) Brit. Col.,  
604–822–3538  
rmoore@geog.ubc.ca

2004 Annual Report  21
NELSON, John D.
Associate Professor and Director, Forest Resources Management Major
Timber Supply Planning
604–822–3902
john.nelson@ubc.ca

SHEPPARD, Stephen R.J.
Associate Professor (Forest Resources Management, Landscape Architecture) and Director, Collaborative for Advanced Landscape Planning
Visual Management, Planning, Visualization
604–822–6582
stephen.sheppard@ubc.ca

TAIT, David E.N.
Assistant Professor
Optimization Techniques, Forest Planning
604–822–2997
david.tait@ubc.ca

TINDALL, David B.
Associate Professor (Forest Resources Management, Sociology)
Environmental Sociology/Social Research Methods
604–822–2550/2363
david.tindall@ubc.ca

TROSPER, Ronald
Associate Professor
Aboriginal Forestry
604–822–8089
ronald.trosper@ubc.ca

WEILER, Markus
Assistant Professor (Forest Resources Management, Geography) and Forest Renewal BC Chair in Forest Hydrology
Watershed Hydrology
604–822–3169
markus.weiler@ubc.ca

WOOD, Paul
Assistant Professor
Conservation Policy, Environmental Ethics
604–822–0951
paul.wood@ubc.ca

Sessional Lecturer

STAUDHAMMER, Christina
B.Sc. (U. Calif., Davis.), M.Sc., Ph.D. (Brit. Col.)
Statistical Process Control

Research Associates

LUO, Qiang (Charles)
B.Sc., M.Sc., (Beijing, China)
Ph.D. (Tokyo, Japan)
Hydrology

NELSON, Harry
B.A. (Carleton), M.A. (Harvard), Ph.D. (Brit Col.)
Forest and Resource Economics, Policy and Trade

Post-doctoral Fellows

HARSHAW, Howard
B.A. (Lakehead), B.A. (Dalhousie), M.F. (Brit. Col.)
Forest Recreation

HICKEY, Gordon
B.S.F. (Hons.) (Melbourne), Ph.D. (Brit. Col.)
Monitoring and Information Reporting for Sustainable Forest Management.

JOST, Georg
B.Sc., Ph.D. (Vienna)
Forest Engineering Hydrology

NIGHTINGALE, Joanne M.
B.Sc., (Hons.), Ph.D. (Queensland, Australia)
Remote Sensing

Adjunct Professors

D’EON, Robert
(Consultant)
B.Sc.F., M.Sc.F., Ph.D.
Ecology and Management of Forested Landscapes

HOGAN, Dan
(B.C. Ministry of Forests)
Geomorphology

HUDSON, Robert
(B.C. Ministry of Forests)
B.Sc. (Hons.), M.Sc., Ph.D
Forest Hydrology

ILES, Kimberley
(Consultant)
B.S., M.Sc., Ph.D.
Forest Inventory

LECKIE, Donald G.
(Canadian Forest Service)
B.Sc., Ph.D.
Remote Sensing
MAGNUSSEN, Steen  
(Canadian Forest Service)  
M.Sc., Ph.D.  
Forest Inventory and Biometrics

MATAKALA, Patrick  
(International Centre for Research in Agroforestry, Mozambique)  
B.Sc., M.Sc., Ph.D.  
Community Resource Management and Conservation Planning

MAGNUSSEN, Magnus  
(J.S. Thrower & Associates)  
B.A.Sc., Ph.D.  
Forest Biometrics

MATAKALA, Patrick  
(International Centre for Research in Agroforestry, Mozambique)  
B.Sc., M.Sc., Ph.D.  
Community Resource Management and Conservation Planning

THIERRY, Guillaume  
(J.S. Thrower & Associates)  
B.A.Sc., Ph.D.  
Forest Biometrics

WHITE, Clifford  
(Parks Canada)  
B.Sc. (Hons.), M.Sc., Ph.D.  
Recreation, Parks Management, Conservation

WILSON, Bill  
(Canadian Forest Service)  
B.A., M.Sc., Ph.D.  
Forest and Resource Economics, International Trade

WINKLER, Rita D.  
(B.C. Ministry of Forests)  
B.S.F., M.Sc., Ph.D.  
Watershed Management, Snow Hydrology

WULDER, Mike  
(Canadian Forest Service)  
B.Sc. (Hons.), M.Sc., Ph.D.  
Forest Geomatics, Remote Sensing

Staff

AKAI, Heather  
Administrator

AQUINO, David  
B.Sc.F. (National Agrarian), M.F. (Brit. Col.)  
Research Assistant/Technician

BASTIDAS, Rafael  
B.Sc. (Bogota, Columbia), Syst. Sup. Specialist Cert. (BCIT)  
Technician

HASSANI, Badre  
B.S.F. (Algeria), M.Sc. (Brit. Col.)  
Research Scientist

MAEDEL, Jerry  
B.A., T.C. (Vic.), M.Sc. (Brit. Col.)  
GIS/RS Coordinator

MANESS, Katie  
B.Sc. (Brit. Col.)  
Research Assistant/Technician

RELOVA, Marissa  
B.A. Econ. (Maryknoll Coll., The Philippines)  
Financial Clerk

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

ROBINSON, Nicole  
B.Sc. (McGill), M.Sc. (Brit. Col.)  
Associate Director, B.C. Forum on Forest Economics and Policy

SCHNEIDER, Markus  
B.Eng. (RMC), M.A.Sc. (Brit. Col.)  
Research Scientist

SCHUETZ, Andre  
Computer Developer

SMOLKA, Shelley  
Department Secretary

THONY, Paul,  
M.F. (Brit. Col.), R.P.F.  
Research Scientist

VERWOERD, Harry  
Computer Support Specialist

WATERMAN, Laurel  
B.A. (Brit. Col.)  
Research Scientist

Retirement

Dr. David Haley retired on December 31, 2004. During his 38 years with the Faculty, David taught forest economics, forest policy and introductory forestry and had close to 40 graduate students study under his direction. His research has been broadly based in forest economics with an emphasis on the institutional environment within which forests are managed – particularly tenure and fiscal arrangements. For many years he championed community forestry in BC and since 1997 has been a member of the Minister’s Advisory Committee on Community Forestry.

In his retirement, David will continue to pursue his professional interests.

New Faculty Appointments

Dr. Nicholas Coops has joined the department as an associate professor and Canada Research Chair in remote sensing. Nicholas worked at the Australian Commonwealth Industrial and Scientific Research Organization (CSIRO) for the past 10 years, both within the Division of Wildlife and Ecology and Forestry and Forest Products in Canberra and Melbourne. His research interests include the application
of remote sensing technology and spatial data modeling to forestry and ecology issues. Nicholas has also worked in the United States on NASA funded projects and has strong collaborative links with a number of forestry organizations around the world.

Dr. Ron Trosper, who founded the Native American Forestry Program at the Northern Arizona University, has joined the department as an associate professor of Aboriginal forestry. A member of the Salish and Kootenai Tribes of the Flathead Indian Reservation, Montana, Ron has a Ph.D. in economics from Harvard and has published extensively on Aboriginal natural resource management and economic development.

ACHIEVEMENTS IN 2004 – 05

- Dr. Nicholas Coops was awarded $249,411 from the Canadian Foundation for Innovation to establish a world class remote sensing laboratory for research and teaching.
- Drs. Alila, Coops and Sheppard received new NSERC research grants. Drs. LeMay, Lyons, Meitner, Nelson and Weiler received ongoing NSERC funding.
- Drs. Jonathan Fannin and Valerie LeMay received Killam Teaching prizes.
- Dr. Ron Trosper was hired as associate professor in Aboriginal forestry.
- Dr. Thomas Maness moved from Wood Science to join FRM.
- The new BC Forum on Forest Economics and Policy was launched with Dr. Thomas Maness as director.
- Dr. Alila co-chaired the Eighth International Conference on Precipitation held August 8 – 11, 2004, in Vancouver, British Columbia.
- Dr. Innes hosted a workshop “Monitoring Effectiveness of Biological Conservation”, November 2004.
- Drs. Hoberg and Haley worked with Dr. Ilan Vertinsky and the Forest and Economics Policy Analysis group to host a Tenure Workshop, January 20 – 21, 2005.
- Dr. John Nelson was awarded a large SFM grant. Drs. Bull, Hoberg, Sheppard, Meitner and Tindall collaborated on various large SFM grants.
- Dr. Younes Alila was awarded the UBC Izaak Walton Killam Memorial Faculty Research Fellowship.

PLANS FOR 2005 – 06

- Help to develop the next stage of the Faculty’s First Nations initiative.
- Revise the Forest Resources Management curriculum to increase flexibility and enrolment.
- John Innes to chair the Congress Scientific Committee at the XXII IUFRO World Congress in Brisbane Australia, August 8 – 13, 2005.
- Introduce a graduate program in Forests and Society.
- Recruit for a faculty position in Forests and Society.
- Co-host with UNBC, a series of events on Mountain Pine Beetle research.
- Host a public forum designed to inform the Lower Mainland about the significance of the Mountain Pine Beetle epidemic for the future of the provincial economy.
BC FORUM ON FOREST ECONOMICS AND POLICY

ACHIEVEMENTS IN 2004 – 05

• Delivered a public symposium, in collaboration with FPAC, entitled “Besieged by global change: Defining the future role of BC’s forest sector”.
• Formed an Advisory Board with representatives from industry, MoF, NRC, FPAC, Forintek, and UBC.
• Launched the Forum’s new website at www.bc-forum.org
• Delivered synthesis papers and issues briefs.

PLANS FOR 2005 – 06

• Organize the BC Forum Roundtable, a strategic planning group to provide direction on economic and policy issues in British Columbia.
• Coordinate an international speaker series on major policy issues (UBC campus, downtown Vancouver, and Victoria).
• Hold a major symposium on land ownership and tenure issues in late 2005.
• Hold an international conference on sustainable development and value-added manufacturing in early 2006.
• Publish a quarterly newsletter on economic issues related to the forest industry.
• Recruit two post-doctoral fellows in forest economics to undertake priority research.
• Create a graduate education and research program in forest economics and planning.
• Work on priority issues including land ownership and tenure, value-added, human resource issues, strategic planning for global competitiveness, and community sustainability.
VAN DER KAMP, Bart J.
Professor and Head
Forest Pathology
604–822–2728
bart.vanderkamp@ubc.ca

AITKEN, Sally N.
Associate Professor,
NSERC Chair in Population Genetics,
Director, Forest Science Program and
Director, Centre for Forest Gene Conservation
Forest Genetics and Gene Conservation
604–822–6020
sally.aikten@ubc.ca

ARCESE, Peter
Professor and Forest Renewal BC Chair in Applied
Conservation Biology
Population Ecology of Birds and Mammals
Brit. Col.
604–822–1886
peter.arcese@ubc.ca

BOHLMANN, Jörg
Associate Professor (Forest Sciences,
Biotechnology Laboratory, Botany)
Molecular Genetics, Genomics and Biochemistry
of Forest Trees
Braunschweig, Germany
604–822–0282
bohlmann@interchange.ubc.ca

BUNNELL, Fred L.
Professor
Principles of Conservation Biology, Influences of
Forestry Practices on Wildlife
B.S.F. (Hons.) (1965) Brit. Col.,
604–822–8287
fred.bunnell@ubc.ca

CHANWAY, Christopher P.
Professor (Forest Sciences, Land and
Food Systems)
Soil Microbiology
604–822–3716
christopher.chanway@ubc.ca

EL-KASSABY, Yousry A.
Professor
Quantitative Genetics
604–822–1821
y.el-kassaby@ubc.ca

FELLER, Michael C.
Associate Professor
Fire Science and Water Quality
B.Sc. (Hons.) (1968), M.Sc. (1969) Melb.,
604–822–3729
michael.feller@ubc.ca

GERGEL, Sarah E.
Assistant Professor
Watershed Landscape Ecology
Wisconsin
604–827–5163
sarah.gergel@ubc.ca

GRAYSTON, Susan J.
Associate Professor and Canada Research Chair in
Soil Microbial Ecology
Soil Microbial Ecology
604–822–5928
sue.grayston@ubc.ca

GUY, Robert D.
Professor
Plant Physiology
604–822–6023
rob.guy@ubc.ca

HINCH, Scott G.
Associate Professor and Director, Natural
Resources Conservation Program
(Aquatic Ecology and Fish Conservation)
Ph.D. (1992) Tor.
604–822–9377
scott.hinch@ubc.ca

KIMMINS, J.P. (Hamish)
Professor and Canada Research Chair in Forest
Ecosystem Modelling
Forest Ecology, Sustainability of Managed Forests,
Modelling Forest Ecosystems
M.Phil. (1968), Ph.D. (1970) Yale, R.P.F. (Hon.)
604–822–3549
hamish.kimmins@ubc.ca

KRZIC, Maja
Assistant Professor (Forest Sciences, Land and
Food Systems)
Soil Science
B.Sc. (1986), M.Sc. (1990) (Belgrade),
604–822–0252
maja.krzic@ubc.ca
LARSON, Bruce
Professor and Forest Renewal BC Chair in Silviculture
Silviculture and Stand Dynamics
604–822–1284
bruce.larson@ubc.ca

MARTIN, Kathy M.
Professor
(Canadian Wildlife Service)
Avian Ecology and Conservation
604–822–9695
kathy.martin@ubc.ca

McLEAN, John A.
Professor
Forest Entomology
604–822–3360
john.mclean@ubc.ca

MITCHELL, Steve J.
Associate Professor
Silviculture
604–822–4591
steve.mitchell@ubc.ca

PRESCOTT, Cindy E.
Associate Professor and Associate Dean, Graduate Studies and Research
Forest Nutrition
604–822–4701
cindy.prescott@ubc.ca

RICHARDSON, John S.
Associate Professor
Stream-Riparian Ecosystems
604–822–6586
john.richardson@ubc.ca

RITLAND, Kermit M.
Professor and NSERC Chair in Population Genetics
Population and Quantitative Genetics
604–822–8101
kermit.ritland@ubc.ca

SIMARD, Suzanne
Associate Professor
Forest Ecology and Silvics
604–822–1955
suzanne.simard@ubc.ca

SULLIVAN, Thomas P.
Professor (Forest Sciences, Land and Food Systems)
Wildlife Ecology
604–822–6873
tomsu@interchange.ubc.ca

WATTS, Susan B.
Lecturer and Director, Communications
Forest Entomology
604–822–6316
sue.watts@ubc.ca

Sessional Lecturer

HARRISON, Georgie
B.Sc. (S. Fraser), M.Sc. (UNBC)
Wildlife Ecology

Research Associates

BOYLAND, Mark
B.Sc., Ph.D. (Brit. Col.)
Strategic Forest Planning

CHAN-McLEOD, Ann C. Allaye
B.S.F., M.Sc. (Brit. Col.), Ph.D. (Alaska)
Physiological Ecology

HAMANN, Andreas
M.Sc. (Germany), M.Sc. (New York St.), Ph.D. (Brit. Col.)
Quantitative Genetics, Genecology and Ecology

KAZANTSEVA, Olga
B.Sc., Ph.D. (Moscow)
Soil Ecology and Ectomycorrhizae

PEARSON, Audrey
B.Sc., M.Sc. (Brit. Col.), Ph.D. (Washington)
Natural Disturbances in Coastal Forests

RITLAND, Carol
B.Sc., M.Sc. (Brit. Col.), Ph.D. (Tor.)
Molecular Genetics

SEELY, Brad
B.S. (Redlands), Ph.D. (Boston)
Nutrient Dynamics and Forest Hydrology

VERNIER, Pierre
B.A., M.Sc. (Brit. Col.)
Habitat Modelling and Landscape Ecology
WANG, Tongli
M.Sc., Ph.D. (Helsinki)
Forest Tree Breeding

WELHAM, Clive
B.Sc., M.Sc., (Manit.), Ph.D. (S. Fraser)
Biosciences

WELLS, Ralph
B.Sc., M.R.M. (Simon Fraser)
Applied Forest Ecology

ZHANG, Yixin
B.Sc. (Nanjing), Ph.D. (Umeå)
Stream Ecology

Honorary Research Associates

ZHENG, Bai Yen
B. Engineering (Jilin), M.Sc., Ph.D. (Tokyo)
Forest Ecology

ZHONG, Anliang
B.Sc., M.Sc. (Fujian), Ph.D. (Nanjing), Ph.D. (Brit. Col.)
Forest Ecology

Post-doctoral Fellows

BASILIKO, Nathan
B.S. (Hon.) (Ithaca)
Ph.D. (McGill)
Biogeochemistry and Microbial Ecology of Wetlands; Global and Environmental Change

COOKE, Steven J.
B.ES., M.Sc. (Waterloo), Ph.D. (Illinois)
NSERC and Izaak Killam Fellowship
Fish Conservation

EVANS OGDEN, Lesley
B.Sc. (Tor.), M.Sc. (York), Ph.D. (S. Fraser)
NSERC Fellowship
Avian Ecology and Conservation

MELLINA, Eric
B.Sc., B.Sc. (McGill), Ph.D. (Brit. Col.)
Ecology and Fish-forestry Interactions

NORRIS, Ryan
B.E.S. (Hon.) (Waterloo), M.Sc. (York), Ph.D. (Queens)
Migration, Behavioural and Population Ecology, Stable-isotopes

SAKAMAKI, Takashi
B.E, M.E, D.E. (Tohoku)
Dynamics of Organic Matter and Nutrients in Estuaries and Tidal Flats

SMETS, Pia
M.Sc. (Leuven), Ph.D. (Brit. Col.)
Forest Genetics, Genealogy

Visiting Scholars

DO VALE BARRETO FIGUERIDO, Márcia
B.Sc., M.Sc. (Pernambuco), Ph.D. (Rio de Janeiro)
Soil Microbiology

MALLIK, Azim
B.Sc. (Dhaka), Ph.D. (Aberdeen)
Ericaceous Allelopathy on Conifers and Disturbance Effects on Riparian Vegetation

TAKEH, Ghorbandordi
B.Sc., M.Sc. (University of Tehran), Ph.D. (Gorgan, Iran)
Sustainable Forest Management

TANG, Jingen (Carl)
B.Sc., M.Sc., Ph.D. (Nanjing)
Forest Entomology

Adjunct Professors

ALFARO, Rene I.
(Canadian Forest Service)
B.Sc., M.Sc., Ph.D.
Forest Entomology

ANDISON, David
(Bandaloop Landscape-Ecosystem Services)
B.Sc., M.Sc., B.Arch., Ph.D.
Forest Landscape Ecology

BARKER, John
(Consultant)
B.Sc., M.Sc., Ph.D.
Silviculture

BISHOP, Christine
(Canadian Wildlife Service)
B.Sc., M.Sc., Ph.D.
Amphibian and Avian Ecology

BOTHWELL, Max
(National Water Research Institute)
B.A., M.A.
Stream Ecology

BURTON, Philip J.
(B.C. Ministry of Forests)
B.Sc., M.Sc., Ph.D.
Productivity of Disturbed and Rehabilitated Soils

COATES, David
(B.C. Ministry of Forests)
B.S.F., M.Sc., Ph.D.
Silviculture and Forest Ecology

DICKINSON, Thomas E.
(University College of the Cariboo)
B.Sc., M.Sc., Ph.D.
Ecology of Forest and Grassland Songbirds
DURALL, Daniel
(Okanagan University College)
B.Sc., Ph.D.
Mycorrhizal Ecology

GROSSNICKLE, Steven C.
(Cellfor Inc.)
B.Sc., M.Sc., Ph.D.
Regeneration Silviculture, Physiological Genetics

HAWKES, Brad
(Canadian Forest Service)
B.S.F., M.Sc., Ph.D.
Fire Ecology and Management

KLENNER, Walter
(B.C. Ministry of Forests)
Forestry Wildlife

KURZ, Werner
(Canadian Forest Service)
Diplom Holzwirt, Ph.D.
Forest Ecosystem Modelling

MacDONALD, John S.
(Department of Fisheries and Oceans)
B.Sc., Ph.D.
Fish Forestry Interactions

MORRISON, Duncan J.
(Canadian Forest Service)
B.S.F., M.Sc., Ph.D.
Root Diseases

NEWMAN, Reg
(B.C. Ministry of Forests)
B.Sc., B.S.F., Ph.D.
Range Ecology

SHAMOUN, Simon
(Canadian Forest Service)
B.Sc., M.Sc., Ph.D.
Plant Pathology

SHORE, Terrence
(Canadian Forest Service)
B.Sc.(Hons.), Ph.D.
Bark Beetles

YANCHUK, Alvin
(B.C. Ministry of Forests)
B.Sc., M.Sc., Ph.D.
Gene Conservation

Staff

BERG, Nora
B.Sc. (U. of Alberta)
Research Assistant/Technician

CHENG, Rosemarie
B.S.I.E. (UP, The Philippines)
Administrative Clerk

CHOURMOUZIS, Christine
B.Sc. (Hons.), M.Sc. (Guelph)
Research Scientist

DESCALZO, Rolando
M.P.M., Ph.D. (S. Fraser)
Research Assistant/Technician

GIBSON, Will
B.Sc. (Brit. Col.)
Research Assistant/Technician

HAAG, Devon
B.Sc., M.Sc. (Brit. Col.)
Research Assistant/Technician

HODGES, Norman
B.Sc. (Vic.)
Computer Specialist

HOFER, Nancy
B.S.C.N. (Brit. Col.)
Research Assistant/Technician

HORNER, Maxine
Departmental Secretary

HOUDÉ, Isabelle
B.Sc. (McGill), M.Sc. (Brit. Col.)
Coordinator and Project Manager

KRAKOWOWSKI, Jodie
B.Sc., M.Sc. (Brit. Col.)
Research Scientist

KREMSATER, Laurie
B.S.F., M.Sc. (Brit. Col.)
Manager, Sustainable Forestry Project

LANQUAYE, Naa
B.Sc. (Ghana), M.Sc. (Brit. Col.)
Research Assistant/Technician

LI, Jane
B.A. (Heilongjiang, China),
MBA (W. Syd.)
Financial Clerk

LIAO, Limin
B.Sc. (Shangsha), M.Sc. (Beijing)
Research Assistant/Technician

LOTTO, Andrew
R.M.O.T. (Malaspina)
Research Assistant/Technician

MISCAMPBELL, Allyson
B.Sc. (Lakehead), M.Sc. (Brit. Col.)
Research Assistant/Technician

MOSSOP, Martin
B.Sc. (S. Fraser)
Research Assistant/Technician

MOY, Arnold
B.Sc. (Brit. Col.)
GIS Specialist

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

PHELAN, Conan
B.Sc. (Vic.)
Research Assistant/Technician
New Faculty Appointment

Dr. Tom Sullivan has joined the Forest Sciences department as a full professor in a joint appointment with the Agroecology Program in the Faculty of Land and Food Systems. Tom is teaching courses in research methods, agroforestry, agroecology and biodiversity. His research interests include forest-wildlife interactions and conservation as well as managing biodiversity and sustainability in agroecosystems. Tom was a member of the Faculty of Forestry from 1990 to 1997 and an independent research scientist from 1997-2004, before returning to UBC this year.

AchEiVEmEnts in 2004 – 05

- Dr. Susan Grayston was awarded $327,115 from the Canada Foundation for Innovation to establish a Soil Microbial Ecology Laboratory – identification and development of indicators of forest sustainability.
- Drs. Grayston, Arcese, Hinch, and Simard received new NSERC Discovery Grants. Dr. Martin received a new NSERC Discovery Grant – Northern Research Supplement. Drs. Grayston and Prescott received a new NSERC Strategic Project grant. Drs. Martin and Richardson received new NSERC Research Tools & Instruments grants. Drs. Aitken, Chanway, Guy, Hinch, Kimmins, Martin, Mitchell, Prescott, Richardson, and Ritland received ongoing NSERC funding. Drs. Grayston and Prescott received a new NSERC CRD project grant. Drs. Bunnell, Chan-McLeod, Grayston, Hinch, Larson, Mitchell, Prescott, Richardson, Simard, Sullivan, van der Kamp and Zhang were awarded Forest Science Program grants under the Forest Investment Account for a total of $1,428,445.
- Dr. Richardson hosted a major international conference of the North American Benthological Society.
- Dr. Worrall (professor emeritus) continued to teach FRST 300 as well as contributing to several other courses.
- We held two lectures in the Namkoong Family Lecture Series. Funding for this lecture series was made possible by a gift from the Namkoong Family to promote “the exchange of scientists and philosophers between UBC and other institutions to promote the study and development of science or philosophy pertaining to the sustainability and conservation of forests.” The desire of the late Professor Gene Namkoong (former head of the Forest Sciences Department) was to develop more fully our understanding of issues at the intersection of biological science, conservation and ethics. The fund provides for support of graduate students, teaching exchanges and public lectures. Copies of this year’s lectures “The commercialization of sustainability: Transforming primary production in New Zealand” by Hugh Campbell from the Department of Anthropology at the University of Otago in New Zealand, and “Does the variety of life on Earth have a future?” by Stuart Pimm from the Nicolas School of Environment and Earth Sciences at Duke University in North Carolina, are available at www.forestry.ubc.ca/lectures/namkoong/
McFARLANE, Paul N.
Professor and Head
Environmental Aspects of Wood Products and Processing
604–822–7667
paul.mcfarlane@ubc.ca

AVRAMIDIS, Stavros
Professor
Wood Physics and Drying
604–822–6153
stavros.avramidis@ubc.ca

BARRETT, J. David
Professor
Wood Products Engineering
604–822–5852
david.barrett@ubc.ca

BREUIL, Colette
Professor
Forest Products Biotechnology
604–822–9738
collete.breuil@ubc.ca

COHEN, David H.
Professor
Forest Products Marketing and Management
604–822–6716
david.cohen@ubc.ca

CRAMOND, Patrick
Senior Instructor (Wood Science, Mechanical Engineering)
Wood Products Processing
604–822–1287
p.cramond@mech.ubc.ca

ELLIS, Simon C.
Associate Professor and Director, Wood Products Processing Program
Wood Anatomy and Quality
604–822–3551
simon.ellis@ubc.ca

EVANS, Philip D.
Professor and Director, Centre for Advanced Wood Processing
Photoprotection and Modification of Wood
604–822–0517
phil.evans@ubc.ca

FÜRST, Robert
Instructor I
Manufacture of Secondary Wood Products
Master Dipl. (1992) Augsburg, Germany
604–822–0034
robert.furst@ubc.ca

KADLA, John
Associate Professor and Canada Research Chair in Advanced Biomaterials Chemistry
Polymer Chemistry and Materials Science
604–827–5254
john.kadla@ubc.ca

KOZAK, Robert A.
Associate Professor
Sustainable Business Management
604–822–2402
rob.kozak@ubc.ca

LAM, Frank
Associate Professor
Wood Mechanics
604–822–6526
frank.lam@ubc.ca

MANSFIELD, Shawn D.
Assistant Professor and Canada Research Chair in Wood and Fibre Quality
Biotechnology and Chemistry of Wood Fibres
604–822–0196
shawn.mansfield@ubc.ca

PRION, Helmut G.L.
Associate Professor (Wood Science, Civil Engineering)
Engineered Timber Structures Design
604–822–3864
prion@civil.ubc.ca
RUDDICK, John N.R.
Professor
Wood Preservation
604–822–3736
john.ruddick@ubc.ca

SADDLER, Jack N.
Professor and Dean
Forest Products Biotechnology
604–822–2467
jack.saddler@ubc.ca

SMITH, Gregory
Assistant Professor
Wood Composites
604–822–0081
gregory.smith@ubc.ca

SOWLATI, Taraneh
Assistant Professor
Operational Research, Performance Assessment
604–822–6109
taraneh.sowlati@ubc.ca

Research Associates

BRAUN, Jennifer
B.Sc., M.Sc., Ph.D. (University of Cincinnati)
Polymer Science

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

KUBO, Satoshi
B.Sc. (Shizuoka, Japan), M.Sc., Ph.D. (Hokkaido, Japan)
Lignin-based Polymer Blends

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

OODJEHANE, Azzeddie
B. Eng. (ENPA, Algeria), M.Sc. (INPG, France), Ph.D. (Université Blais Pascal Clermont Ferrand, France)
Process Modeling

Post-doctoral Fellows

ASFOUR, Fadi
B.Sc. (Canisius Coll., New York), M.Sc. (McM.), Ph.D. (Michigan State)
Polymer Synthesis

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

BURA, Renata
B.Sc. (Hons.), M.A.Sc., (Tor.), Ph.D., (Brit. Col.)
Bioresorption of Biomass to Ethanol

DAI, Qizhou
M.Sc. (Science & Technol., China), M.Sc. (Chinese Academy of Sciences, China), Ph.D. (N. Carolina)
Cellulosic Nanocomposites and Liquid Crystals

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

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

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

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

LOHRASEBI, Abdolhossein
B. Eng. (Iran), M.Sc. (Tor.), Ph.D. (Brit. Col.)
Wood Fibre Utilization, OSB Orientation and Properties

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

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

SARAVI, Albert
B.Sc. (Amir Kabir University of Technology, Iran), M.Sc. (Sharif University of Technology, Iran), Ph.D. (Brit. Col.)
Process Control

SEMPLE, Kate
B.Sc. (Hons.) (Australian National), M.Sc. (Melb.), Ph.D. (Australian National)
Wood Composites
WANG, Liyu
B.Eng., M.Eng. (Northeast Forestry, China), Ph.D. (Beijing Forestry)
Non-destructive Grading of Timber

WU, Hongwei
B.Sc., M.Sc. (China), Ph.D. (Beijing University)

Visiting Scholars

AZAMDOKHHT, Safi Samghabadi
B. Sc. (University of Tehran), M.Sc., Ph.D. (Tarbiat Modarres University, Iran)
Operations Research, Fuzzy Systems

DAVALOS-SOTELO, Raymundo
B.Sc. (National Univ. of Mexico), M.Sc., Ph.D. (Colorado State)
Behaviour of Timber Connections

PARK, Hee Jun
B.Sc., M.Sc., Ph.D. (Seoul Nat., Korea)
Wood Composites

RAHNAMA, Kamran
B.Sc. (Ferdosii, Iran), Ph.D. (Sheffield)
Forest Pathology

YANG, Jun
B.Sc., Ph.D. (Tsing hua University, China)
Timber Construction

Adjunct Professors

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

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

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

GASTON, Chris
B.Sc., M.Sc., Ph.D. (Forintek Canada Corp.)
Forest Products Marketing

MORRIS, Paul
B.Sc., Ph.D. (Forintek Canada Corp.)
Preservation and Protection

Staff

CULLIS, Ian
B.Sc., M.Sc. (Brit. Col.)
Research Assistant/Technician

de GIULI VALVERDU, Federico
B.Sc. (Universidad de Belgrano, Argentina)
M.B.A. (S. Fraser)
Research Analyst

FENG, Liyang
B.Sc. (Northeast University, China)
Research Assistant/Technician

FISHER, Karen
Administrator

GILKES, Neil
B.Sc., Ph.D. (Wales)
Senior Research Scientist

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

KUEI, Yung-Ping
B.Sc., M.Sc. (Taiwan)
Research Assistant/Technician

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

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

NIEH, Kuo Wei (Jason)
Research Assistant/Technician

TONG, Yonghui (Larry)
B.Sc., M.Sc. (Northeast Forestry, China)
Research Assistant/Technician

VOSS, Coral
Secretary

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

XIE, Dan
B.Eng. (Tianjin, China)
Research Assistant/Technician
YAN, Hui Jun
B.S. (Shandong Inst., China), M.A.S. (Harbin, China)
Research Engineer

YANG, Li
B.Sc. (Northeast Technology University, China), M.Sc. (University of Idaho)
Research Assistant/Technician

ACHIEVEMENTS AND PLANS

ACHIEVEMENTS IN 2004 – 05

• The Wood Products Processing program achieved its highest ever enrolment level of 113 undergraduate students. The new student intake for 2004 – 05 was 39.

• The co-op program continued as an integral and highly successful component of the Wood Products Processing program. This year, 32 students completed a total of 47 placements in British Columbia, Alberta, Manitoba, New Brunswick, Ontario, Saskatchewan, Quebec and Guatemala.

• Dr. Thomas Maness, in his role as Director of the Forum on Forest Economics and Policy, transferred to the Department of Forest Resources Management. Dr. Maness’ substantial contributions to both the Department and the Centre for Advanced Wood Processing were acknowledged at a Department function.

• Drs. Beatson, Breuil, Kadla, Saddler, and Sowlati received new NSERC operating grant funds. Drs. Avramidis, Barrett, Beatson, Breuil, Dai, Kozak, Lam, Mansfield, Ruddick, and Saddler are receiving ongoing NSERC operating grant funding.

• Drs. Kozak and McFarlane received ongoing SFM NCE funding.

• Department members were actively engaged in international programs in wood science in Australia, Chile, China, New Zealand, and South Africa.

• The Charles Larre Memorial Graduating Prize was established for the most outstanding graduating student in the Wood Products Processing program. Robert Bosch was the first recipient of this award. The strong support of the Larre family and the faculty members of the department in contributing to the endowment for this award is gratefully acknowledged.

• Department members were successful in obtaining international research contracts from the United States and New Zealand.

PLANS FOR 2005 – 06

• In association with the Faculty of Applied Science, we will complete funding for a Chair in Wood Building Design and Construction.

• We will generate matching funds for a BC Leadership Chair in Advanced Forest Products Manufacturing Technologies.

• Alumni will be hosted at a function to recognize the tenth anniversary of the Wood Products Processing program.

• A recruiter will be hired to ensure continued growth in undergraduate student numbers.

• A review of the core curriculum of the Wood Products Processing program will be undertaken.

• The faculty will continue to vigorously pursue federal and provincial research funding for wood products research.
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 utilize 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.

Notable achievements in our mandated areas of responsibility were continued growth of student numbers in the Wood Products Processing program with 33 students joining the program in 2004; development of an award, the Larre Medal (in memory of Charles Larre), for the outstanding graduating student in the Wood Products Processing program; development by the Timber Building Technology Group of a flourishing continuing education program in timber building construction; graduation of the first industry participants with a UBC Certificate in Lumber Drying; signing a formal MOU with the University of Stellenbosch and Port Elizabeth Technikon in South Africa to jointly develop wood products processing curricula and a suite of related activities; strengthening of research activities in the field of value-added wood processing and the approval of research chairs in the fields of Advanced Wood Products Manufacture and Wood Building Construction. Seven companies; Loewen Design and Viceroy Homes, Interforest, Goodfellow, Superior Millwork, Raywal Kitchens and Weyerhaeuser are supporting CAWP’s programs via our industry partnership program and a number of machinery companies continue to provide significant in-kind support. I would like to extend my sincere thanks to all of the companies and individuals that are currently assisting our programs. Wendy Johnston, CAWP’s administrator departed in 2004 for a new position in the Biomedical Research Centre of the Faculty of Medicine. I would like to thank her for her important contributions to CAWP and wish her well in her new position. Finally I would like to thank the Board of CAWP for the advice and support they have given to the Centre in the past year. Our activities and plans for the future are described below.

Educational Programs

The number of students in the Wood Products Processing program continued to climb following an intake of 33 new students in 2004. Overall student numbers in the program are 113, an increase of 20% over the past three years. The Wood Products Processing program is now the 2nd largest degree program in the Faculty of Forestry, behind the B.Sc. in Natural Resources Conservation, but ahead of the Forest Resources Management program, which for many years provided the Faculty with the majority of its undergraduate students. The size of the undergraduate student body engaged in the study of wood and wood products at UBC is the largest of any North American university. There were 47 co-op students placements in 2004-05, located in British Columbia, Alberta, Manitoba, New Brunswick, Ontario, Saskatchewan, Quebec and Guatemala.

A survey of graduates of the Wood Products Processing program was completed in 2004 by Dr. Simon Ellis. This survey showed that the graduates are earning 37% more than the average science graduate, with starting salaries of just less than $50,000 per year. Thirty-four percent of graduating students have confirmed job offers before graduating and more than one third left university with no debt. CAWP is committed to providing students with access to the best, state-of-the-art wood processing and computing facilities and, as part of this commitment, during 2004-05 we further upgraded our finishing laboratory, installing electrostatic powder coating and U.V. curing systems, and added or replaced several pieces of machinery in our high head machinery laboratory including an SCM Olympic S2000 Edgebander, Robland E45 Multipurpose Machine Centre/Saw, Flex-trim A/S Contour Sander, Radiofrequency Press and Henger Scroll Saw. We are indebted to SCM, Weinig, Forintek, Robland (West Coast Pacific Homes), and Hundegger for their support.
CAWP’s continuing education and extension program was highly active in 2004 – 05. In May 2004 our first group of industry participants graduated from the Kiln Drying Certificate program and additional people will graduate in the coming year. The Timber Building Technology Group, in collaboration with the software company Dietrich’s, ran a highly successful series of workshops on timber frame design and construction, advanced 3D CAD/CAM and machining using the Hundegger K2. In December the group also organized and conducted a wood construction and design tour of advanced wood processing facilities in Southern Germany and Austria. This tour preceded the Holzbau Forum, Europe’s largest international conference on wood building construction and design, and there are plans to hold a similar conference in Vancouver in 2005.

A major conference on industrial wood finishing was organized by CAWP in Atlanta in August of 2004. The conference preceded the International Wood Machining Fair and attracted a mix of 150 technical specialists and managers of wood finishing and processing operations from across North America. The conference was the third of its kind that CAWP has organized and there are plans to hold similar events in the future. Technical skills workshops on industrial wood finishing were again held in Ontario, thanks to our on-going collaboration with Connestoga College. CAWP continued to assist industry through in-plant training and consulting, and two more companies achieved certification through the WoodMark QC program.

Significant on-line educational resources were developed during 2004 including an e-based course on industrial wood finishing, and a learning objects repository to share papers, proceedings and videotaped presentations from continuing education events with faculty and students. These activities, which will grow in the coming years, are linked to our strategic goal of being the global leader in providing wood products processing education to industry and maximizing the impact and geographical reach of CAWP’s programs with the resources available to us.

CAWP produced its third comprehensive annual report in 2004 and five issues of the CAWP Communications Newsletter.

Research

The year that has just passed saw further progress in the development of CAWP’s research program. The Timber Building Technology Group is engaged in a range of research projects in the field of advanced wood processing related to wood building design and construction. Current projects include development of innovative wood-to-wood connections utilizing CNC machining technology and strand-based wood connections, computer modelling of wood-to-wood connections and innovative finger-jointing technology for post-and-beam construction. The surface-engineered lumber laboratory, CAWP’s second research cluster, installed state-of-the-art equipment to quantify the physical and chemical characteristics of wood surfaces and is using the equipment to develop better coating systems for wood and to improve the surface characteristics of wood composites during machining and sanding. CAWP’s graduate scholarship scheme is supporting students in the Departments of Wood Science and Mechanical Engineering and industry is supporting additional projects. As mentioned in last year’s annual report, CAWP is managing and co-ordinating the UBC component of the NRCAN/CFS Value-to-Wood Scheme which is supporting several projects on value added wood processing. Three new projects were initiated as part of this program in 2004 including; life cycle analysis of windows in the North American residential market (Sowlati); procedures to qualify new constructions and species for glulam beams (Lam) and integrated protection of structural composites for exterior exposure (Evans). One additional research project on wood quality assessment of hybrid poplar (Mansfield), supported by NRCAN/CFS, will commence in the coming year.

PLANS FOR 2005 – 06

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

- Increase industry support for CAWP by further developing our industry partnership program.
- Develop links with the UBC Okanagan campus.
- Run an on-line certificate in industrial wood finishing.
- Develop additional on-line courses on advanced wood processing.
- Develop a BC Leadership Chair in Advanced Wood Products Manufacture.

---

VISITING AND POST-DOCTORAL FELLOWS

Chowdhury, Jahangir (CAWP, UBC)
Ki-young, Zin (Chinju National Univ., Korea)
Krause, Hans (Christian Albrechts Univ., Kiel, Germany)

CENTRE ASSOCIATES

Avramidis, Stavros (UBC)
Barrett, David (UBC)
Blyt, Christian (Emily Carr Institute of Art & Design)
Bramer, Mark (Connestoga College)
Breuil, Colette (UBC)
Dai, Chunping (Forintek)
Ellis, Simon (UBC)
Hartley, Ian (Univ. of Northern British Columbia)
Kadla, John (UBC)
Kataoka, Yutaka (FFPRI, Tsukuba, Japan)
Kiguchi, Makoto (FFPRI, Tsukuba, Japan)
Köster, Heinz (Fachhochschule Rosenheim)
Lam, Frank (UBC)
Mai, Carsten (Univ. of Göttingen)
Maness, Thomas (UBC)
Mansfield, Shawn (UBC)
McFarlane, Paul (UBC)
Militz, Holger (Univ. of Göttingen)
Morris, Paul (Forintek)
Prion, Helmut (UBC)
Romilly, Douglas (UBC)
Schajer, Gary (UBC)
Smith, Gregory (UBC)
Yellowly, Ian (UBC)
By 2050 the world population will approach 10 billion people and global needs for natural resources will have increased accordingly. Coping with increased demand while maintaining healthy, sustainable forests, is a key challenge in the future. To address these issues, Dr. Fred Bunnell and Dean Clark Binkley established the Centre for Applied Conservation Biology in 1991. Over the past 14 years, faculty members, post doctoral fellows and graduate students have helped the Centre gain a reputation for excellence in research and contributions to biodiversity conservation internationally.

In 2001 the Centre became the Centre for Applied Conservation Research (CACR) under the direction of Dr. John Innes, to reflect a broadened mandate to incorporate biological sciences, social sciences and economics into applied conservation research. The Centre now draws on more than 70 faculty, research scientists, and graduate students from the Faculty of Forestry and Departments of Animal Science, Geography, Zoology, Botany, the School of Community and Regional Planning, Centre for Biodiversity Research and other universities. John’s contributions were deeply appreciated as he passed his duties to Peter Arcese and Sarah Gergel, who have shared directorship since November 2004.

**HIGHLIGHTS OF 2004 – 05**

Our Fall 2004 CACR Seminar speakers set a tone of learning and interaction that will hasten our work in the coming year, with talks by:

- Fred Bunnell (Forest Sciences). *Too much of a good thing: conservation challenges in BC*
- George Hoberg (Forest Resources Management). *Conservation policy under the Campbell government*
- Faisal Moola (David Suzuki Foundation). *Why save the “guts and feathers”: conservation value of old forest patches for maintaining plant biodiversity*
- Chuck Rumsey (Round River Conservation). *Conservation area design: approaches and applications*
- Rob Kozak (Wood Science). *Value-added wood products: The conservationist’s axe*
- Nicholas Coops (Forest Resources Management). *Remote sensing advances for forest conservation*
- Brian Klinkenberg (Geography). *Will we ever know enough? Limits of spatial modeling in conservation biology*

**Research Projects**

**Biodiversity and forest management in British Columbia**

Researchers have developed methods to define, measure, and monitor diversity, but steps in the management process pose significant challenges. A collaboration of MSRM, MoF, WLAP, and FORREX and CACR, led by Fred Bunnell, has produced a web-site to help (http://www. forestbiodiversityinbc.ca/). This web-based extension information synthesizes knowledge on forest biodiversity and how to sustain it in managed forests, disseminates information to decision makers, and identifies key indicators to assess biodiversity.

**Understanding Garry oak ecosystems**

The American Academy for the Advancement of Science, Cannon Corporation, and the US National Parks Service selected Ms. Emily Gonzales (Ph.D candidate) for their 2005 Cannon Scholars Award ($100,000) in recognition of outstanding research on causes of biodiversity decline. Gonzales and co-authors published a leading example of reserve design in British Columbia in their 2003 paper “Strategic reserve design in the central coast of British Columbia: integrating ecological and industrial goals” (Can. J. Forest Res. 33(11):2129-2140).

**International trade, subsidies and biodiversity declines in Africa**

Peter Arcese and colleagues reported in a November 2004 issue of Science (306:1180) that European subsidies to fishing are accelerating marine fish declines in West Africa and protein shortages on shore, and thereby fueling the illegal harvest of large mammals in parks. Mammal biomass declined by over 70% from 1967-99 in Ghana. The authors demonstrate economic links to biodiversity decline and identify policies to reverse those declines.

**The genetics of carnivores**

The Genetic Data Centre (est. 1998), directed by Dr. Carol Ritland, conducts state-of-the-art DNA genotyping and sequencing, trains undergraduate and graduate students, post-doctoral fellows and faculty, and advises in research. Recent achievements describe a) the inheritance of coat colour and population structure of the Kermode bears (Current Biology 11:1468; Molecular Ecology 11:685-697.), b) the genetics of transient and resident killer whales on the West Coast (L. Barrett-Lennard, http://www.wildwhales.org/BCresearch/conservation_research.html); and c) the population structure of Alaskan carnivores (L.R. Prugh, C.E. Ritland, S.M. Arthur and C.J. Krebs. 2005 Molecular Ecology, in press).
Salmon migration research
Pacific salmon in the Fraser river have migrated to freshwater earlier than normal over the past 10 years, and have also experienced extremely high mortality (over 90%) prior to spawning, threatening these populations. Scott Hinch and colleagues are using basin-wide telemetry studies, and lab and field experiments to show that high water temperatures advance senescence, disease and energy depletion, are a primary cause of mortality. The research has helped explain the ‘disappearance’ of over one million Fraser sockeye in 2005, many of which perished due to record high river temperatures.

Landscape ecology and riparian management
Sarah Gergel is working with economists and ecologists to identify win-win scenarios for biodiversity conservation in BC coastal forests, focusing on the dynamics and post-harvest recovery of riparian zones. Gergel and colleagues are creating an historic timber inventory of Queen Charlotte Islands and other areas with aerial photographs from the 1930s. These records are essential for defining and mapping natural variation in riparian zones. The Gergel lab will also study the potential for carbon and biodiversity credits based on restored state of riparian zones.

Remote sensing for biodiversity monitoring
Nicholas Coops arrived at UBC as an international leader in remote sensing. Nicholas plays a leading role as advisor to NASA in the classification of land types at high resolution in the continental US, and in the development of leading edge tools for the remote monitoring of biological diversity.

Value-added wood products and biodiversity conservation
Rob Kozak specializes in value-added wood products in Canada, socially-responsible business practices and forest certification. A collaboration of Kozak, Gary Bull and Sarah Gergel is asking if value-added production can help in the balance between conservation and employment in forest dependent communities.

Bundling biodiversity and carbon in credit markets
Gary Bull and colleagues are studying how biodiversity conservation might be used to offset the economic and opportunity costs of forest harvest under ecosystem based management in coastal forests in BC. Bull collaborates with CIFOR, Forest Trends and the FAO to enhance biodiversity conservation in western Canada, China, and tropical countries around the world.

Soil biodiversity and sustainable forest management
Sue Grayston, Cindy Prescott and colleagues are assessing the biodiversity of the world of soil organisms beneath our feet. Their green tree project brings together a unique multi-disciplinary group of researchers from UBC, UBCO, UNBC, MoF and RRU to apply a range of novel techniques to quantify changes in soil microbial and faunal diversity and function in response to harvesting and to assess the potential of variable retention harvesting as a management tool to maintain soil functioning and site productivity after harvesting.

Monitoring effectiveness of biological conservation
In November, the Centre for Applied Conservation Research and the BC Ministry of Water, Land and Air Protection, together with the International Union of Forest Research Organizations, the Smithsonian Institution’s Monitoring and Assessment of Biodiversity Program, the BC Ministry of Forests, Environment Canada, the World Wildlife Fund, the US Forest Service and Canadian Forest Products Ltd., organized an extremely successful meeting ‘Monitoring the effectiveness of biological conservation’ which brought together resource managers, scientists, environmental groups and decision-makers with an interest in the conservation of biological diversity from around the world. The conference provided an opportunity to identify some of the leading-edge methods being used both in BC and elsewhere. Although much of the recent work on monitoring has been directed at forestry, the conference also addressed monitoring methods needed to integrate other ecosystem types and activities, for example drinking water supplies in urban development areas and grasslands with livestock grazing.

PLANS FOR 2005 – 06
Sarah Gergel and Peter Arcese will lead Centre partners to identify and develop solutions to interdisciplinary problems in natural resource conservation via forums and research at CACR. A seminar series led by Sarah and an incumbent post-doctoral fellow will draw the attendance of faculty, students and off-campus organizations. The seminar will offer experience to graduate students and training to conservation partners, and facilitate multi-authored papers on a range of issues related to the valuation of biodiversity, conservation area design, carbon and biodiversity credits markets, the Species at Risk Act, and climate change.

The 2005 CACR Fall Symposium will emphasize advances in conservation research. Graduate students voted Dr. Gretchen Daily, Senior Fellow at Stanford University, as their top choice for visiting speaker in the “Frontiers for Conservation Science” lecture.
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 BC and the 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, other partner universities and research organizations in serving the people of BC through teaching and research. This is accomplished by hosting research from a variety of disciplines in order to create teaching opportunities for students from UBC, other post-secondary institutions and continuing education programs.

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

**ACHIEVEMENTS IN 2004 – 05**

### MALCOLM KNAPP FOREST

**Paul Lawson**  
B.S.F., M.B.A., R.P.F.  
Manager  
paul.lawson@ubc.ca

- Initiated 14 new research projects.
- Employed two UBC forestry students in four-month internship positions.
- Increased Loon Lake facility use to 14,600 visitor-days in 2004 from 9,900 in 2003.
- Hosted courses in the Faculty’s Spring Field School, Conservation Field School and the Year III Integrated Term.
- Hosted the second Summer Forestry Camp for First Nations Youth.
- Hosted 252 children and over 300 volunteers at the first Camp Goodtimes to be held at Loon Lake.
- Broke ground on the $1.1 million Loon Lake Student Centre which will include the Cadillac Fairview Trevor Linden Gymnasium.
- Hosted a design/build course with the UBC School of Architecture. Students designed and built an amphitheatre at Loon Lake.
- Hosted a field day for the Mountain Logging Conference co-sponsored with FERIC.
- Published the book “Innovation and Discovery: A Legacy of 50 Years at the UBC Malcolm Knapp Research Forest”.
- Developed and hosted a database of research projects for all of the research forests in BC
- Continued silviculture operations with surveys on 74 ha, commercial thinning on 41 ha, brushing on 20 ha, and planting of 17 ha.

### ALEX FRASER FOREST

**Ken Day**  
B.Sc.F. (Hons.), M.F., R.P.F.  
Manager  
ken.day@ubc.ca

- Initiated 10 new research projects.
- Led 14 Research Forest tours for local industry, government, educational institutions and general public, as well as visitors from Russia, Finland, Sweden and Australia.
- Provided eight talks and participated in two exhibitions for audiences ranging from resource professionals to elementary school students and the general public.
- Participated in Forest Capital of BC events in Williams Lake (Fraser Forest Open House, guided walks, displays, workshops and talks).
- Recorded 880 contact days of extension activities, including UBC field school.
- Assisted the City of Williams Lake with planning the removal of dying Douglas-fir trees in an urban park.
- Initiated a multi-party planning project to mitigate against urban interface fire in the community and environs of Williams Lake.
- Redesigned and updated the Forest’s website and completed the University Research Forests Extension and Public Relations Strategies and Plans document.
- Hosted one international intern from Australia and two from Germany.
- Hosted five student volunteers during reading week and employed one university student for four months.
- Remeasured 30 growth and yield research plots in collaboration with Dr. Peter Marshall and funded by FSP.
- Planted 10,000 trees on 11.5 ha.
- Hosted the Hon. Minister of Forests, Mike deJong, for a Research Forest tour and discussion about new tenure arrangements for all crown-land research forests in BC
- Adjusted cost structure of operation to recognize falling revenues.
Initiated nine new research and education projects.

Co-hosted the 20th Annual Western Symposium on Research Forest Management in October with the John Prince Research Forest.

Received support from the BC provincial government through the announcement of crown grant for 19 acres of land directly adjacent to the forest. The site will be used for a future research station site.

Collaborated with Fraser Forest, UBC and UNBC to pursue new tenure arrangement with the BC provincial government.

Initiated the Aleza Forest’s new research seed grant program: four research projects were supported in 2004.

Reforested 40 ha. of land with 71,000 spruce, Douglas-fir, and lodgepole pine seedlings.

Cleared 10 km of demonstration trails and installed trail signs.

Hosted 10 education and demonstration tours.

Staff conducted eight guest lectures in classes and at field camps.

Employed one undergraduate student in a four-month internship position.

Knapp Forest utilized a variety of harvest methods in 2004 including mechanized feller/processor, multi-span skyline and helicopter. Silvicultural systems ranged from clearcut with reserves to group selection and variable retention. Commercial thinning continued to be the major proportion of the area under operations.

Bark beetles continued to drive the harvest program at the Fraser Forest, and salvage of windthrow from a storm on October 16, 2003 has caused us to re-enter several of our partially cuts stands. Silvicultural systems included group shelterwood, single-tree selection, group selection, patch cutting, and clearcut with reserves.

The Aleza Forest, which occurs in wet sub-boreal spruce-subalpine fir-paper birch forest has generally not been affected by the mountain pine beetle epidemic. Winter harvesting stand entries in 2003/04 and 04/05 focussed primarily on overmature spruce-balsam stands affected by windthrow and spruce beetle. Interestingly, Fall 2004 beetle probes at Aleza indicated that endemic spruce beetle infestations at the Aleza Forest were substantially reduced compared to the previous year. We speculate that the -35° to -40° C periods during January 2004 may have contributed to the spruce beetle decline.

**PLANS FOR 2005 – 06**

**Malcolm Knapp Forest**

- Complete the Loon Lake Student Centre and begin construction of the 40 bed, $2 million Loon Lake Lodge conference facility.
- Begin upgrade of sawmill as specialty lumber manufacturing facility.
- Complete installation of a major research project on stand density.
- Reduce timber harvest to 21,000 cubic metres.

**Alex Fraser Forest**

- Complete Management Plan #3.
- Complete new tenure arrangements with BC Ministry of Forests.
- Support the development and implementation of the “Williams Lake and Area Interface Fire Plan”.
- Complete the harvesting of merchantable and accessible stands affected by mountain pine beetle. Our future harvesting will focus on thinning in mule deer winter range.

**Aleza Lake Forest**

- Complete Management Plan # 2.
- Establish Endowment Fund for research seed grants.
- Continue ongoing wildlife inventory program.
- Install two replicated silviculture trials.
- Develop International Internship Program.
- Develop long-range plans for road networks and operational forest management.
- Explore options for Aleza field station.
A LONGSIDE their teaching and research commitments, most Faculty members have committee responsibilities with off-campus organizations and groups. These involvements are listed below together with various distinctions and awards (in bold-face type) bestowed on Faculty members during the past year.

AITKEN, S.N.
- NSERC Industry Junior Chair in Population Genetics.
- Associate Editor, Tree Genetics and Genomes.
- Guest Associate Editor, Canadian Journal of Forest Research.
- Member, Forest Genetics Council.
- Reviewer, Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning Grant Program.

ARCESE, P.
- Councilor and Fellow, American Ornithologist’s Union.
- Member, American Ornithologist’s Union: Captive Breeding and Release of Endangered Species.
- Member, IUCN Antelope Specialist’s Group.
- Scientific Advisor, Garry Oak Ecosystem Recovery Team.
- Scientific Advisor, Canadian Marbled Murrelet Recovery Team.
- Associate Editor, Journal of Avian Biology.

AVRAMIDIS, S.
- Fellow, International Academy of Wood Science.

BOHLMANN, J.
- Distinguished University Scholar Award.

COOPS, N.
- Canada Research Chair in Remote Sensing.
- Member, NASA Carbon Science Review Panel.
- Reviewer, Japan Forestry and Forest Products Research Institute Forest Health Assessment.

ELLIS, S.
- Chair, Robert E Dougherty Educational Foundation, Selection Committee.
- Fellow, Institute of Wood Science.

EVANS, P.
- Inaugural winner, Commonwealth Forestry Association Americas Regional Medal.
- George Marra Award for Excellence in Research and Writing.
- Adjunct Professor, The Australian National University.
- Member, NRCAN Value to Wood Research Advisory Committee.
- Fellow, International Academy of Wood Science.
- Fellow, Institute of Wood Science.
- Founder, Institute of Wood Science, Canadian Branch.
- Member, Organising Committee Pacific Rim Biobased Composites Symposia.

FANNIN, F.
- Karl Terzaghi Fellowship.
- Associate Editor, Canadian Geotechnical Journal.

FELLER, M.C.
- Member, Mixed Severity Forest Fire Conference Organizing Committee.

GRAYSTON, S.
- Canada Research Chair in Soil Microbial Ecology.
- Peter Wall Early Career Scholar.
- Member, Canada Foundation for Innovation, Air and Atmosphere Expert review committee.
- Proposal reviewer, DEFRA (UK) Farmland Conservation and Biodiversity research programme.
- Reviewer, NSERC Canada Research Chairs Program.
- Associate Editor, Canadian Journal of Forest Research.
- Associate Editor, Soil Biology & Biochemistry.
- Associate Editor, Canadian Journal of Soil Science.

GUY, R.
- Managing Editor for the Americas, Trees Structure and Function.
- Communicating Editor, Trees Structure and Function.
- Vice President, Canadian Society of Plant Physiologists.
- Member, College of Reviewers, Canada Research Chairs program.
- Member, Plant Canada Board of Directors.
- College of Reviewers, NSERC Special Research Opportunity Program.

HINCH, S.
- Member, Cultus Lake Sockeye Salmon Recovery Team.
INNES, J.
- Chairperson, IUFRO Congress Bidding Rules ad hoc Committee.
- Chairperson, IUFRO 2005 Congress Scientific Committee.
- Member, IUFRO Executive Board.
- Member, IUFRO Policy Committee.
- Member, IUFRO Publications Committee.
- Chairperson, IUFRO Task Force on Environmental Change.
- Member, IUFRO Task Force on the Role of Forests in Carbon Cycles, Sequestration and Storage.
- Chairperson, Ecological Committee EE2, Air and Waste Management Association.
- Member, Interdisciplinary Committee, World Cultural Council.
- Chairperson, Interim Steering Group, Global Forest Information System.
- Member, Management Team, Research Planning Committee, SFM Network.
- Member, Sustainable Forestry Board.
- Member, Drafting Committee, Sustainable Forestry Board.
- Chairperson, Mutual Recognition Task Force, Sustainable Forestry Board.
- Member, Resource Committee, Sustainable Forestry Board.
- Member, Board of Experts, Committee for Research Evaluation, Italy.
- Editorial Board, BC Journal of Ecosystems and Management.
- Editorial Board, Forest, Snow and Landscape Research.
- Vice-chairperson, SUNARE Program Evaluation Committee, Finland.
- Chairperson, Board of Directors, FORREX.

KOZAK, R.
- Member and Country Delegate, Team of Specialists on Forest Products Marketing for the UN Economic Commission for Europe.
- Associate Editor, Journal of Forest Products Business Research.
- Deputy, IUFRO Working Group 5.10.10.
- Fellow, Institute of Wood Science.
- Member, UN/ECE Timber Committee Team of Specialists on Forest Products Markets and Marketing.

KRZIC, M.
- Member, Canadian Society of Soil Science and American Society of Soil Science, Organizing Committee.

LAM, F.
- Adjunct Professor, Tongji University, China.
- Fellow, Institute of Wood Science.

LEMAIY, V.
- 2004 Killam Teaching Prize.
- Nominated for Graduate Student Mentorship Award – Oct 2004.
- Deputy Chair, IUFRO 4.01.03 (Experiments).
- Member, Stand Management Cooperative Policy Committee.
- Associate Editor, Forestry Chronicle.
- Associate Editor, Canadian Journal of Forest Research.
- Associate Editor, Forest Science.

LYONS, K.C.
- Member, Organizational Committee, International Mountain Logging Conference.

MANSFIELD, S.
- Member, International Advisory Board, Holzforschung.
- Member, Editorial Board, Journal of Industrial Microbiology and Biotechnology.
- Chair, Wood Products and Utilization Task Leader for Poplar Council of Canada.
- Publicity Chair, American Chemical Society, Cellulose and Renewable Materials Division.
- Member, ICBPPI Scientific Program Committee.

MARSHALL, P.
- Associate Editor, Forestry Chronicle.
- Immediate Past President, Assoc. of BC Forest Professionals.
MARTIN, K.  
- Associate Editor, Wildlife Biology.  
- Associate Editor, Canadian Journal of Forest Research.  
- Referee, Challenge for Biodiversity Awards (U of Alberta).  
- Canadian Representative, IUCN/ICBP (The World Conservation Union) Specialist Group for Galliformes.  
- Member, American Ornithologists Union (AOU) Council.  
- Member, Animal Behavior Society.  
- Member, Board of Bird Studies Canada.

McFARLANE, P.  
- Member, Editorial Board, Appita Journal.  
- Fellow, International Academy of Wood Science.  
- Fellow, Institute of Wood Science.

MEITNER, M.  
- Nominated, Killam Teaching Prize, 2005.

MITCHELL, S.J.  
- Chair, Scientific Committee, IUFRO Wind and Trees 2007 Conference.  
- Chair, Association of BC Forest Professionals Silviculture Academic Standards Subcommittee.  
- Member, ABCFP Board of Examiners.

MOORE, R.  
- Secretary, Canadian National Committee for the International Association of Hydrological Sciences.  
- Junior Representative for Canada, International Association of Hydrological Sciences.  
- Guest Associate Editor, Canadian Journal of Forest Research.  
- Past President, Canadian Geophysical Union Hydrology Section.  
- Member, Sustainability Program Advisory Committee for the Forest Science Board  
- Member, Steering Committee for the Watershed Management Program of FORREX.

NELSON, J.D.  
- Deputy Coordinator, IUFRO S4.04.10 Sustainable Harvest Scenarios.  
- Co-chair, IUFRO S3.06. International Mountain Logging Conference 2004 Conference.

PRESCOTT, C.  
- Member, Forest Science Board.  
- Proposal Reviewer, National Science Foundation.  
- Proposal Reviewer, Austrian Science Fund.  
- Chair, Environment Review Panel, Academy of Finland.  
- Editor, Canadian Journal of Forest Research.

PRION, H.  
- Guest Associate Editor, Canadian Journal of Civil Engineering.

RICHARDSON, J.  
- Associate, Peter Wall Institute for Advanced Studies.  
- Associate Editor, Journal of the North American Benthological Society.

RUDDICK, J.  
- President, American Wood Preservers’ Association  
- Vice Chair, CSA Wood Preservation Technical Committee  
- Past President, International Research Group on Wood Protection  
- Head, Canadian Delegation ISO TC165 Task Force  
- Member, Royal Chemical Society  
- Member, Association of Preservation Technology

SADDLER, J.  
- Editor, World Journal Microbiology and Biotechnology.  
- Associate Editor, International Microbiology and Biotechnology Journal.  
- Task Leader, IEA Biotechnology Network.  
- Member, US DoE Biofuels Program.  
- Member, BCMEM Wood Ethanol Technology Committee.  
- Leader, Liquid Biofuels Task 39, IEA Bioenergy.  
- Reviewer, Food and Agriculture Organisation  
- Member, NREL Biofuels Program (US Dept. of Energy).
SHEPPARD, S.R.J.
• Co-chair, Steering Committee, International Association for Society and Resource Management, Vancouver 2006 Organizing Committee.
• Member, Scientific Board, Our Shared Landscape Conference, Ascona, Switzerland.
• Reviewer, Scientific Board, Laser-Scanners for Forest and Landscape Assessment, Freiburg, Germany.

SIMARD, S.
• Member, Expert Advisory Panel, Northmoor Trust Future Landscapes Project, UK.
• Member, Mycorrhizal Management Working Group, National Center for Ecosystem Analysis and Synthesis.
• Associate Editor, Canadian Journal of Forest Research.

SOWLATI, T.
• Member, Canadian Operational Research Society.

TROSPER, R.
• Member, IUFRO Task Force on Traditional Forest Knowledge.
• Member, Editorial Board, Ecology and Society.

WATTS, S.B.
• Member, Board of Directors, Evans Lake Forest Education Society.
• Member, ABCFP Biometry Academic Standards Committee.

WOOD, P.
• Member, Environmental Ethics, Board of Referees.
Members of the Faculty of Forestry were awarded just over $10.4 million in research funding between April 1, 2004 and March 31, 2005. Federal funding increased in amount and relative proportion for the year, contributing more than half of our total research support. Tri-council funding (NSERC/SSHRC/NCE) continued to be the largest source of research support for the Faculty of Forestry (78 awards totaling more than $3 million). Members of the Faculty held 11 NSERC Strategic grants, 3 Collaborative Research and Development grants, 4 Tools and Instruments grants, 1 Special Research Opportunity grant, 2 Industrial Research Chairs, 30 Discovery grants, and 23 National Centres of Excellence awards, mostly from the Sustainable Forest Management NCE. Canada Research Chair and Canada Foundation for Innovation awards contributed another $1 million. An additional $1.2 million came from Natural Resources Canada, mostly to support research addressing the mountain pine beetle problem.

Provincial research funding was primarily from the BC Forest Science Program, from which we received more than $1.5 million in 23 research grants. An additional 26 grants worth more than $1 million were received from other provincial government sources (primarily BC Ministry of Forests).

Private industry support for our research contributed another $1.35 million (13% of total research funding). The largest industry contributors were Coast Forest and Lumber Association, Woodflow Systems Corp. and Bruker Biospin Ltd. Other private sources, primarily BIOCAP Foundation, contributed 2% of our total research funding.

International research support contributed to just over 5% of our total funding with the largest amounts of funding coming from the US Department of Agriculture and the International Environmental Institute.

We also received endowment income of $1.7 million for the year 2004/05. This funding is provided from endowments originally set up by Forest Renewal BC in support of five Chairs, as well as from private sources.

During the year we launched the new BC Forum on Forest Economics and Policy with Dr. Thomas Maness (Forest Resources Management) as director. The Biotechnology and Biomaterials research cluster was formed, bringing our number of research clusters to fourteen, all of which are described on our web site www.forestry.ubc.ca/research/clusters.htm. Our research web site also profiles more than twenty research groups/projects and highlights some of the fascinating research currently undertaken by our faculty, research associates, post doctoral fellows and graduate students.

### Extramural Funding Sources 2004 – 05*

<table>
<thead>
<tr>
<th>Source</th>
<th>$000</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NSERC/SSHRC/NCE</td>
<td>3,138</td>
<td>78</td>
<td>30.1</td>
</tr>
<tr>
<td>Canada Research Chairs</td>
<td>592</td>
<td>5</td>
<td>5.7</td>
</tr>
<tr>
<td>Canada Foundation for Innovation</td>
<td>455</td>
<td>7</td>
<td>4.4</td>
</tr>
<tr>
<td>Natural Resources Canada</td>
<td>1,287</td>
<td>28</td>
<td>12.3</td>
</tr>
<tr>
<td>Other</td>
<td>230</td>
<td>13</td>
<td>2.2</td>
</tr>
<tr>
<td>Subtotal</td>
<td>5,702</td>
<td>131</td>
<td>54.7</td>
</tr>
<tr>
<td>Provincial</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forest Science Program</td>
<td>1,511</td>
<td>23</td>
<td>14.5</td>
</tr>
<tr>
<td>BCMoF</td>
<td>585</td>
<td>15</td>
<td>5.6</td>
</tr>
<tr>
<td>Other</td>
<td>517</td>
<td>11</td>
<td>5.0</td>
</tr>
<tr>
<td>Subtotal</td>
<td>2,613</td>
<td>49</td>
<td>25.1</td>
</tr>
<tr>
<td>Private</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>1,349</td>
<td>45</td>
<td>12.9</td>
</tr>
<tr>
<td>Other</td>
<td>203</td>
<td>11</td>
<td>1.9</td>
</tr>
<tr>
<td>Subtotal</td>
<td>1,552</td>
<td>56</td>
<td>14.9</td>
</tr>
<tr>
<td>International</td>
<td>559</td>
<td>13</td>
<td>5.3</td>
</tr>
<tr>
<td>Total</td>
<td>10,427</td>
<td>249</td>
<td>100</td>
</tr>
</tbody>
</table>

* Excluding endowments.
The following list reflects research funding obtained between April 1, 2004 and March 31, 2005.

**AITKEN, S.N.**
- Junior Industrial Research Chair in population genetics (NSERC, industry $38,247)
- Adapting forest genetic resource management to climate change (BIOCAP/NSERC $118,796)
- Proposal to establish a Centre for Forest Gene Conservation at the University of British Columbia (BCMoF $220,000)
- Determining the environmental controls on tree populations in British Columbia (BCMoF $10,000)
- Population genomics of cold adaptation in forest trees (NSERC $20,000)

**ALILA, Y.**
- Effects of forest management on stream-flows (NSERC $24,000)
- Effects of varying logging rates on streamflow in Upper Penticton Creek Watershed Experiment (BCMoF $24,990)
- Tsitika River sediment budgets project: Effectiveness evaluation of road deactivation at Russell Creek using a sediment budget approach (BCMoF $37,275)
- Cotton Creek research project. Forest management in interior BC: Moving beyond equivalent cut area (BCMoF/Kalesnikoff Lumber Co. Ltd. $99,510)
- Hydrologic decision making tools for sustainable forest management in rain dominated coastal BC watersheds (FSP $59,850)
- Mountain pine beetle hydrological modelling (BCMoF $15,000)
- Forest management in interior BC: moving beyond equivalent cut area (ECA) (FSP 94,510)

**ARCESE, P.**
- Southern Gulf Island plant survey (Parks Canada $7,000)
- The population demography and genetics of island birds (NSERC $39,500)
- Development of monitoring methods for the marbled murrelet (BCMoWL&AP $10,000)
- Development of a province-wide database for radar monitoring of marbled murrelet populations (BCMoWL&AP $14,000)
- Herbivores and exotic plants in endangered Garry oak ecosystems. Emily Gonzales (American Association for the Advancement of Science $30,275)
- Impact of the use of MSMA (monosodium methanearsonate) for bark beetle control on cavity nesting birds in BC forests (Environment Canada $42,000)
- Predicting Marbled Murrelet radar counts using catchment characteristics and forest cover data (BCMoF $5,000)

**AVRAMIDIS, S.**
- Hem-fir stability and moisture class assessment (Coast Forest and Lumber Assoc. $52,000)
- Timber drying quality prediction model (CFS $76,125)
- Dynamic vapor sorption apparatus (NSERC $85,968)

**BARRETT, J.D.**
- Reliability of wood products (NSERC $22,000)
- Engineering properties of structural wood products: modules of elasticity of glue laminated timber (International Forest Products Limited $11,620)
- Douglas-fir design stresses for the Australian market (Coast Forest and Lumber Assoc. $40,000)
- Engineering properties of BC coastal timbers (Coast Forest and Lumber Assoc. $71,050)
- Engineering properties of BC coastal timbers (Coast Forest and Lumber Association $74,200)
- Douglas-fir design stresses for the Australian market (Coast Forest and Lumber Association $54,800)

**BEATSON, R.**
- Genetic control of arabidopsis fibre properties (NSERC $52,000)

**BREUIL, C.**
- Role of the proteinases in fungal growth and pigmentation on wood (NSERC $18,000)
- Fitness and pathogenicity of the fungi associated with the MPB and other secondary beetle in green attack (NRC $88,536)
- Fungi degrade wood quality in green, red and gray lodgepole pine attacked by the mountain pine beetle (Forintek Canada Corp. $10,500)
- Molecular & genetic characterization of conifer host laminated root rot phathosystems (NRC $12,000)
- The mountain pine beetle epidemic: Strategies for improvement of pine host defense and reduction of fitness of beetle-associated fungi (NSERC $25,325)
• Phytosanitary risks associated with MPB-killed trees (NRC $60,900)
• Role of extractives depletion and fungal colonization in the failure of old and second-growth western red cedar wood products (NSERC $78,325.00)

BULL, G.Q.
• Institutional development of a domestic emission trading system that includes carbon offsets from the agriculture and forestry sectors (BIOCAP $21,900)
• Forest market research in China (Forest Trends Assoc. $13,652)
• Market opportunities and channels of distribution for hybrid timber frame housing in the United States (BC Wood Specialties Group $6,000)
• Survey of Chinese forest policy (Forest Products Association of Canada $960)
• Old-growth forests in eastern Canada: Exploring tradeoffs among timber, biodiversity, carbon, and public preferences (NCE $12,000)

BUNNELL, F.L.
• A bioregional assessment of sustainable forest management for the boreal plains (NCE $36,800)
• Developing regional biodiversity indicator models and tools to assess forest practices in coastal British Columbia (NCE $25,750)
• Applying avian indicator models in forests of northeastern British Columbia (NCE $28,000)
• Refining conservation priorities in British Columbia (FSP $46,941)
• A species accounting system to integrate indicators of biological diversity (FSP $70,739)
• Development of applied science methods for monitoring biodiversity (BCMowL&AP $15,000)
• Evaluating large-scale forest zoning to improve the efficiency of timber production and biodiversity objectives (FSP $74,287)
• Ecosystem representation in support of high conservation value forest evaluation in TFL14. (WWF Canada $10,000)
• Development of provincial standards for monitoring effectiveness of biodiversity conservation consistent with a results-based Forest and Range Practices Act (BCMowL&AP $66,000)
• Linking multiple indicators of biological diversity to forest management decisions (FSP $51,240)

CHAN-MCLEOD, A.
• Climate change impacts and adaptation program (NRC $15,698)
• Effects of climate change on avian communities and implications for sustainable forest management (FSP $42,404)
• Factors affecting the ecological legacy of unsalvaged post-beetle stands (NRC $37,118)
• Integrating silvicultural control of mountain pine beetle with wildlife and sustainable forest management objectives (NRC $82,956)

CHANWAY, C.P.
• Nitrogen balance in pine forests: Evaluation of two possible missing links (NSERC $38,000)

COHEN, D.H.
• Benchmarking Chinese building specifiers (BC Wood $54,000)
• Benchmarking study of the Canadian wood products sector in a global context (NRC $50,000)
• Technology for full exploitation of wood (International Environmental Inst. $172,500)

COOPS, N.
• Establishment of a world-class Remote Sensing Research Laboratory (CFI, BC Knowledge Development Fund $249,411)
• Canada Research Chair in remote sensing (CRC $91,667)
• Mountain pine beetle initiative: Spatial and temporal patterns of MPB infestation and susceptibility in newly infested stands within the South Peace Region (TFL48) of North-eastern British Columbia (NRC $41,108)
• Process-model simulation of landscape-level carbon dynamics (NRC $10,000)

DAI, C.
• Fundamentals of low-density wood composite products (NSERC $30,375)

DAY, K.
• Quantifying the dynamics of stands under selection management for mule deer winter range (FSP $47,738)

EVANS, P.D.
• Development of software to quantify defects at wood surfaces (Chemical Specialties Inc. $8,989)
• Improving the hardness of hemlock for value-added products (Coast Forest Lumber Assoc. $30,000)
• Integrated protection of structural composites for exterior exposure (NRC $3,000)
• Wood products processing education in South Africa (AUCC/CIDA $20,058)
• Surface engineered lumber laboratory for the advanced wood processing industries (PerkinElmer Life and Analytical Sciences $49,320)

FANNIN, J.
• Piping erosion and landslide travel distance (NSERC $28,000)

FELLER, M.C.
• Time of burning and stand susceptibility to the MPB in Canada’s Southern Rocky Mountains (NRC $20,000)
• Maintaining open canopy conditions in Interior Douglas-fir forests at Isobel Lake – treatment effects on tree growth, forest fuels, and nutrients (BCMoF $30,000)
• Nutrient cycling in Engelmann spuce – subalpine fir forests (BCMoF $4,000)
• Whitebark pine in seven mountain national parks (Canada Parks Agency $14,600)

GERGEL, S.
• Climate change, disturbance, and tall shrub dynamics in the Mackenzie Delta (Global Forest Science $6,000)

GRAYSTON, S.
• Forest fertilization and identification of microbiol indicators to enhance C&D sequestration and reduce GHG emissions (co-investigator) (NSERC, BIOCAP $151,985)
• Green-tree retention: A tool to maintain ecosystem health and function (co-investigator) (FSP $99,945)
• Nutrient biogeochemistry in Athabasca Oil Sands reclamation (co-investigator) (NSERC $222,857)
• Canada Research Chair in soil microbial ecology (CRC $100,000)
• The soil microbial ecology laboratory - identification and development of indicators of forest sustainability (CFI, BC Knowledge Development Fund $309,512)
• Plant-microbe interactions in forest soils (NSERC $40,000)

GUY, R.D.
• Carbon isotope discrimination in Tsuga heterophylla and its relationship to mineral nutrition and growth (NSERC $40,038)
• British Columbia flux station of fluxnet-Canada: Influence of climate and disturbance on carbon cycling in forest and peat-land ecosystems (co-investigator) (Canadian Foundation for Climate & Atmospheric Sciences, NSERC $26,100)
• Physiological basis of resource-use efficiency trade-offs in trees (NSERC $44,000)

HINCH, S.G.
• Abnormal migration and premature mortality in Pacific salmon (NSERC $458,590)
• Energetics and behaviour of anadromous fish migrants (NSERC 26,100)
• Stream habitat and rainbow trout responses to clear-out logging in north-central British Columbia (FSP $67,032)

HOBERG, G.
• Development and evaluation of First Nations forest policy: The Nisga’a case (NCE $36,000)
• First Nations and sustainable forestry: Institutional conditions for success (NCE $77,000)
• Research area leader assistance (NCE $22,500)
• Synthesis of socio-economic indicators and techniques for assessing tradeoffs in land-use planning (FORREX $20,000)

HUDSON, R.
• Upper Nahmient river watershed monitoring project (Weyerhaeuser Company Ltd $20,003)

INNES, J.L.
• Assessing tradeoffs between timber and non-timber values within a TRIAD zoning framework (Riverside, BC) (NCE $53,500)
• Cumulative impacts of development on forests in northeast British Columbia: Pilot study (NCE, FORREX $108,975)
• A common ground for criteria and indicators of sustainable forests for British Columbia. (FORREX $25,000)
• Surface and subsurface processes in debris-flow generating hollows in the Kalum Forest District (BCMoF $40,000)

KADLA, J.
• Canada Research Chair in advanced biomaterials (CRC $100,000)
• Wood and fiber quality of juvenile pine: Characterization and utilization (US Dept. of Agriculture $180,490)
• Chemical, mechanical, and durability properties of mountain pine beetle infested timber (NRC $84,000)
• Biopolymers – precursors to advanced materials (NSERC $26,960)
• Integrated laboratory for biopolymers and biomaterials from renewable resources (Bruker Biospin Ltd. $101,496)
KIMMINS, J.P.
- Canada Research Chair in forest ecosystem modelling (CRC $200,000)
- Development of an ecologically based decision-support tool for assessing the implications of variable retention management and complex cutblocks for selected indicators of SFM (NSERC $21,250)
- Role of hybrid poplar plantations for wood, farm diversification and carbon sequestration in Saskatchewan (NSERC $30,000)
- Modelling stand level response of montane spruce forests on TFL 49 to intensification of management (NCE $32,200)
- A systems approach to integrating ecological, economic and social values within the SFM framework for TFL 49 (NCE $29,750)
- Critical loadings of acid and nitrogen to Georgia Basin ecosystems – modelling the ecological effects of nitrogen deposition (Environment Canada $21,000)
- Development of indicator 2-1 of the SFM framework: establishing thresholds, evaluating current practices, and refining monitoring strategies (Canadian Forest Products Ltd $15,225)
- Modelling succession, and its application in the design of sustainable forestry and agroforestry systems (NSERC $35,000)
- Possible forest futures: avoiding predictable surprises of MPB management (NRC $21,473)

KOZAK, R.A.
- Developing a model for the healthy house (International Environmental Inst. $45,000)
- Statistical process control of colour for wood products (NSERC $16,200)

KRZIC, M.
- Soil conditions and tree growth in BC’s Forests (co-investigator) (BCMoF $11,000)

KURZ, W.
- Linear feature and access management modeling and scenario analysis (NCE $29,574)

LAM, F.
- Structural performance of Japanese post and beam shear wall system (Coast Forest and Lumber Assoc. $207,400)
- Seismic performance of timber structural systems (NSERC $33,000)
- Tensile strength of wide widths of machine stress rated lumber (COFI $16,000)
- CAF/Forintek/UBC China-Canada ingrade testing collaboration project (Forintek $28,500)

LEMA, V.M.
- Elucidating the variations in fibre chemistry and morphology of aspen clones to improve pulp processing and quality (NSERC $18,000)

LYONS, K.
- The mechanics of anisotropic materials applied to the management of forests (NSERC $15,000)
- Load sharing between log stringers in gravel decked log bridges (FSP $21,384)

MANSFIELD, S.D.
- Canada Research Chair in wood and fibre quality (CRC $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 allocation and metabolism (CFS, NSERC $60,000)
• Characterizing wood and fibre properties by metabolic profiling (NSERC $139,505)
• Wood quality assessment technology for the value-added industry (NRC $89,500)
• Genetic engineering of cellulose biosynthesis in hardwood and softwood trees (US Dept. of Agriculture $40,137)
• Metabolic profiling of radiata pine - proof of concept (WQI Ltd. $15,000)

MARSHALL, P.L.
• Calibrating Prognosis\textsuperscript{BC} in the sub-boreal spruce and sub-boreal pine-spruce biogeoclimatic zones (BCMoF $42,174)

MARTIN, K.M.
• Using cavity nester biodiversity to develop indicators of forest ecosystem function and resilience (NCE $64,141)
• Species-level tests of ecological representation on the Arrow TSA (Slocan Forest Products $4,500)
• Alpine and forest landbird ecology and conservation research (Environment Canada $37,500)
• Avian ecology and climate variability in Kluane alpine ecosystems (NSERC $8,200)
• Ecology of alpine and forest birds. (NSERC $29,000)

MCFARLANE, P.N.
• Innovative methods of chain of custody tracking of certified forest products (NCE $154,500)
• Surface quality of MDF for value-added industries (co-investigator) (CFS $65,000)

MCLEAN, J.
• GIAs: diatomaceous earth evaluation program (Enviran Enterprises Ltd. $2,000)
• Gulf Island national park reserve terrestrial invertebrate baseline survey (Parks Canada Agency $8,000)

MEITRNER, M.
• Public perceptions of mountain pine beetle management alternatives (NRC $29,678)
• Interactivity and usability of environmental visualization systems (NSERC $17,200)
• Social sustainability: Strategies for definition, measurement and management (NCE $11,976)

MITCHELL, S.J.
• Windthrow risk modeling (NCE $38,000)
• Wind drag on conifer crowns (NSERC $26,000)
• Numerical modeling of wind flow in retention system openings (FSP $67,069)
• Wind disturbance patterns on Haida Gwaii (Gwaii Trust Society $92,085)
• Integrating silvicultural control of mountain pine beetle with wildlife and sustainable forest management objectives (NRC $32,007)

MOORE, R.D.
• Catchment hydrology and the stream environment (NSERC $23,840)
• Forest hydrology (Donation $10,000)

NELSON, J.D.
• A systems approach to integrating ecological, economic and social values within the SFM framework for TFL 49 (NCE $76,000)
• Decision support systems for forest land use planning (NSERC $21,000)

PRESCOTT, C.E.
• Forest fertilization and identification of microbials indicators to enhance C&D sequestration and reduce GHG emissions (co-investigator) (NSERC, BIOCAP $151,985)
• Green-tree retention: A tool to maintain ecosystem health and function (co-investigator) (FSP $99,945)
• Nutrient biogeochemistry in Athabasca Oil Sands reclamation (co-investigator) (NSERC $222,857)
• Nutritional indicators for the maintenance of boreal forest productivity (NCE $12,000)
• British Columbia flux station of Fluxnet-Canada: influence of climate and disturbance on carbon cycling in forest and peatland ecosystems (co-investigator) (Canadian Foundation for Climate & Atmospheric Sciences, NSERC $24,000)
• SCHIRP: Ecology and management of ericaceous shrub-dominated ecosystems in coastal BC (FSP $80,000)
• The roles of C and N in humus decomposition (NSERC $18,000)

RICHARDSON, J.S.
• Variation in detritus-based food webs and community structure based on quality of organic matter (NSERC $48,642)
• Designs for the evaluation of the effectiveness of protection for threatened and endangered riparian species (BCMoWL&AP $5,000)
EpHects - a cumulative effects analysis method using automated continuous pH measurements in streams (FSP $29,505)
• Fish communities as ecosystem indicators for a changing system: the lower Fraser River (Fraser River Estuary Management Program $15,000)
• Ecology and management of riparian-stream ecosystems: a large-scale experiment using alternative streamside management techniques (FSP $194,919)
• Flood sensitivity of riparian plant communities and their roles in restoration (BC Hydro International Limited $4,999)
• Literature review and creation of annotated bibliography for multi-phase project to develop research strategies in conservation biology in the skagit river watershed (National Park Service $10,926)
• Recovery potential of amphibian communities (BCMoWL&AP $22,000)

RITLAND, K.M.
• NSERC Senior Industrial Research Chair in population genetics (NSERC, industry $39,246)
• Population genomics of plants (NSERC $80,000)

RUDDICK, J.N.R.
• Wood preservation (Arch Wood Protection Inc. $7,246)
• Wood preservation - factors impacting on the performance of wood preserving chemicals (BASF Aktiengesellschaft, Chemical Specialties Inc. $33,743)
• The role of nitrogen compounds in the fixation of copper in wood (NSERC $31,900)

SADDLER, J.N.
• Substrate and enzyme factors that affect the efficient hydrolysis of cellulose to ethanol (NSERC $22,000)
• The development of a technically and economically viable pretreatment and enzymatic process for the conversion of softwood residues to ethanol (NSERC, BIOCAP $158,000)
• Supply of pretreated biomass for surface characterization and enzymatic digestion studies (National Renewable Energy Lab $36,300)
• Bioprocessing centre for sustainable fuels (Dionex Canada Ltd, Applikon Inc., CFI $109,275)
• Bioconversion technologies: biodiesel and ethanol (NRC $52,500)
  Softwood residues-to-ethanol scale-up & bottleneck reduction (NRC $156,791)
• IEA bioconversion task (International Energy Agency $2,270)
• Participation of forest products biotechnology, UBC, in the biomass consortium on applied fundamentals (NRC $35,588)
• The development of value-added bioproducts from the bioconversion of lignocellulosics (NSERC $75,000)

SHEPPARD, S.R.J.
• Development and testing of advanced landscape visualization (NSERC $19,550)
• Social sustainability: Strategies for definition, measurement and management (NCE $12,000)

SIMARD, S.
• CFI Infrastructure operating funds (CFI $3,750)
• Ectomycorrhizae and their networks: their role in facilitating Douglas-fir regeneration under water, site and climatic stresses (FSP $52,276)
• Improving predictions of juvenile tree growth in complex mixtures for sustainable forest management (FSP $59,325)
• Effects of young standsilviculture on conifer/broadleaf mixtures in seral ICH forests of southern British Columbia (FSP $88,305)
• Nutrient dynamics in the mycorrhizosphere of Douglas-fir seedlings establishing after the BC wildfires of 2003 (NSERC $35,478)
• Predicting development and productivity of southern interior mixed species stands through calibration and modeling with SORTIE-BC (FSP $59,483)
• Relationship between nitrogen status and light availability on juvenile tree growth (BCMof $35,910)
• Role of common mycorrhizal networks in plant community dynamics (NSERC $35,000)

SMITH, G.
• Improving the properties of particle board for value added industries (NRC $67,000)
• Quantitatively determining the relationship of CSL composite strength with special strand length, strand angular deviation and target panel density (Huber Engineered Woods $23,448)
SOWLATI, T.
• Efficiency measurement and improvement in the Canadian wood industry (NSERC $12,000)
• Life cycle analysis of windows for North American residential market (NRC $19,500)

SULLIVAN, T.
• Old-growth attributes in managed forests: Integrating stand productivity with mammal diversity (BCMoF $29,400)
• Vole population and seedling damage monitoring with diversionary feeding methods (BCMoF $29,764)

TINDALL, D.
• Social sustainability: Strategies for definition, measurement and management (NCE $18,794)

VAN DER KAMP, B.J.
• Reducing the impact of Armillaria root disease via mixed species plantation including western red cedar (FSP $77,229)
• SRD 1791 hazard tree failure study (British Columbia Transmission Corporation $5,250)

WEILER, M.
• Evaluation of the effectiveness of tracer methods for discharge estimation (Environment Canada $13,000)
• Water and solute response of runoff generation processes (NSERC $23,500)
• A wireless sensor cluster for high-resolution spatial-temporal monitoring of water flow and solute transport in watersheds (NSERC $76,200)

WOOD, P.
• Assigning sufficient priority to biodiversity conservation: Principles and practice (SSHRC $47,850)

ZHANG, Y.
• Cumulative watershed effects of forestry practices on stream ecosystems (FSP $85,388)


Spetic, W. and R.A. Kozak. 2004. UBC survey finds willingness to pay more for healthy houses. The Vancouver Sun, June 19, 2004 (Westcoast Homes Section, F2).


Building our future, through support for education, research, and community outreach, is the key goal of the Faculty of Forestry’s Alumni and Development Programs. Our goal is to establish the Faculty of Forestry as a world leader in education and research for the conservation and sustainable management of our forest and forest products that contribute to preserving the environment and improving the welfare of society. It is thanks to the ongoing support provided by our alumni and friends, industry, government, foundations and the broader community that we will achieve this goal.

For the period April 2004 to March 2005 the Faculty of Forestry raised $1,919,297 in gifts, contributions and pledges in support of awards, research, endowments, upgrading of our facilities and special activities. Once again the funds raised for the Faculty grew over the previous year’s total of $1,906,447.

Donor gifts and contributions to the Faculty of Forestry – 2004/05

<table>
<thead>
<tr>
<th>Area of designation</th>
<th>$ pledged</th>
<th>% of $ pledged</th>
<th>$ received</th>
<th>% of $ received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scholarships, Bursaries and Awards</td>
<td>102,196</td>
<td>5</td>
<td>101,959</td>
<td>10</td>
</tr>
<tr>
<td>John Worrall “Tree Enthusiast” Prize ($7,736)</td>
<td>7,736</td>
<td>100</td>
<td>7,736</td>
<td>100</td>
</tr>
<tr>
<td>Kenneth Graham Memorial Award ($15,290)</td>
<td>15,290</td>
<td>100</td>
<td>15,290</td>
<td>100</td>
</tr>
<tr>
<td>Charles Larre Memorial Graduating Prize ($8,250)</td>
<td>8,250</td>
<td>100</td>
<td>8,250</td>
<td>100</td>
</tr>
<tr>
<td>Property, Building and Equipment</td>
<td>1,527,662</td>
<td>80</td>
<td>538,273</td>
<td>50</td>
</tr>
<tr>
<td>Loon Lake redevelopment ($1,527,362)</td>
<td>1,527,362</td>
<td>100</td>
<td>538,273</td>
<td>100</td>
</tr>
<tr>
<td>Research</td>
<td>212,613</td>
<td>11</td>
<td>358,167</td>
<td>34</td>
</tr>
<tr>
<td>BC Forum on Forest Economics and Policy ($100,000)</td>
<td>212,613</td>
<td>100</td>
<td>358,167</td>
<td>100</td>
</tr>
<tr>
<td>Academic Programs</td>
<td>20,100</td>
<td>1</td>
<td>8,100</td>
<td>&lt;1</td>
</tr>
<tr>
<td>CAWP Partnership Program ($20,100)</td>
<td>20,100</td>
<td>100</td>
<td>8,100</td>
<td>100</td>
</tr>
<tr>
<td>Endowments</td>
<td>2,815</td>
<td>&lt;1</td>
<td>3,765</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Other</td>
<td>53,911</td>
<td>2</td>
<td>54,054</td>
<td>5</td>
</tr>
<tr>
<td>Summer Forestry Camp for First Nations Youth ($41,940)</td>
<td>53,911</td>
<td>100</td>
<td>54,054</td>
<td>100</td>
</tr>
<tr>
<td>Total donations &amp; contributions</td>
<td>1,919,297</td>
<td>100</td>
<td>1,064,318</td>
<td>100</td>
</tr>
</tbody>
</table>

Forestry Alumni Support

Our alumni continue to support the Faculty and our students generously. This year’s annual appeal raised $58,079 in support of projects such as the redevelopment of Loon Lake, the John Worrall “Tree Enthusiast” Prize and Bursary, the Conservation Volunteers Program and many other important projects and funds that support a wide variety of student and research activities in the Faculty. The family and friends, including a number of our alumni and faculty, also supported the establishment of the Kenneth Graham Memorial Award for graduate students undertaking research in forest health. Dr. Graham taught forest entomology in the Faculty for thirty years and was an international leader in his field.

Volunteer support from our alumni was also a highlight of this year’s annual campaign. Whether it was thank you calling, or calling their classmates to help support the Faculty, or just being advocates for the Faculty in the community, their enthusiasm and dedication to forestry continues to be much appreciated.

Events

We held two major alumni events during the year – the Spring Camp Tour and BBQ at the Malcolm Knapp Research Forest in April 2004, and the UBC Alumni Reunion Weekend in October 2004. In addition there were a number of smaller alumni gatherings held in Toronto and Montreal in September 2004 during a trip by the Dean and Katrina Evans to eastern Canada. All in all, over 90 alumni participated in the different events.

The theme of the Spring Camp event centered on a new book entitled ‘Innovation and Discovery – A legacy of 50 years at the UBC Malcolm Knapp Research Forest’. The tour visited a number of research sites highlighted in the book and was
followed by a reception and BBQ at the Loon Lake Research and Education Centre.

The UBC Alumni reunion weekend included a lunch and a “Technology tour” of the Forest Sciences Centre. Alumni visited the Visualization Lab where Dr. Stephen Sheppard demonstrated how computer models, projected on to large projection screens, can show forest growth in response to change over a 200 year period. Dr. Philip Evans, Director of the Centre for Advanced Wood Processing, toured alumni through the machine laboratory to view some recently acquired state-of-the-art wood processing equipment.

ACHIEVEMENTS IN 2004 – 05

- Construction of the extension to the Loon Lake Student Centre, formerly known as the “Yacht Club”, began in August 2004. Funding for construction was contributed by the Canadian Cancer Society British Columbia and Yukon and an additional contribution of $400,000 from the Cadillac Fairview Trevor Linden Invitational Golf Tournament, the proceeds of which are dedicated to Camp Goodtimes.
- Other support secured for the Loon Lake redevelopment included a donation of $250,000 from Charlie and Sue Johnson towards the construction of a new cabin, and $76,434 through the Canadian Cancer Society from Ronald McDonald House Charities for the construction of a new dock and swimming area at the base of the Loon Lake Student Centre.
- A fundraising committee was established for a new Chair in Wood Building Design and Construction.
- A Letter of Intent for a BC Leadership Chair in Advanced Forest Products Manufacturing was approved by the Provincial Government’s Leading Edge Endowment Fund. The government will provide $2.25 million towards the Chair on condition the Faculty raises a matching amount from the private sector.
- The CAWP Industry Partnership Program was launched to support student scholarships, recruitment and co-op, equipment purchases and hiring of industry experts for training.
- A Professorship in Aboriginal Forestry was established thanks to supplementary support provided by the BC Ministry of Forests.
- Our second Summer Forestry Camp for First Nations Youth was held in August 2004 with the support of Weyerhaeuser, Tembec (Cranbrook Division), Borland Creek Logging, Chendi Enterprises Ltd., Ecolink Forest Services, Tsi’bas Forest Services, Tsi Del Del Enterprises, Yun Ka Whu Ten Holdings Ltd., Charlie and Sue Johnson, and Elizabeth Backman.
- Four new awards were established that will provide an additional $4,350 in support for students. These new awards include the Kenneth Graham Memorial Scholarship, Canadian Woodworking Machinery Distributors Association Prize, August & Cristina Crucil Scholarship in Forestry and Charles Larre Memorial Graduating Prize and Medal.
- In our efforts to increase communication with our alumni and donors, the Faculty developed the new ‘Alumni’ and ‘Support Us’ web-pages. The ‘Alumni’ web-pages provide information on reunions and events, the alumni development newsletter, and links to the UBC Alumni website. The ‘Support Us’ website provides information on the current Faculty priority projects, news and events, and general information on giving.

PLANS FOR 2005 – 06

- Continue to strengthen our relations with our alumni and supporters. In particular, engaging our younger alumni, providing opportunities for our alumni to be more involved in the mentoring of our students and new graduates, and reaching out to our alumni across BC and beyond.
- Increase financial support available to our students.
- Continue to raise support for the redevelopment of the Loon Lake Research and Education Centre with emphasis on raising support for the new Loon Lake Lodge.
- Secure support for the establishment of the new Chair in Wood Building Design and Construction, and the BC Leadership Chair in Advanced Forest Products Manufacturing.
- Strengthen support for forest economics and policy research in the Faculty through the BC Forum in Forest Economics and Policy, and the establishment of a Chair in Forest Resource Economics.
- Obtain support for the Centre for Applied Conservation Research.
- Increase the number of industry members for the CAWP Industry Partnership Program.

The students, faculty and staff at the UBC Faculty of Forestry wish to thank all those who have contributed their time, interest and support for the Faculty in 2004/05. We look forward to continuing to build closer links in the coming year.
PRODUCTION INFORMATION

This Annual Report was created using both Apple and Windows platforms running Adobe’s InDesign CS and Photoshop CS applications.

Cover: Cornwall cover coated 10 pt.
Text: Opus dull 80 lbs.

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

Dr. Susan Watts, R.P.F.
Annual Report Editor
Faculty of Forestry, Dean’s Office
Forest Sciences Centre
University of British Columbia
2005 – 2424 Main Mall
Vancouver, B.C. V6T 1Z4
CANADA

Phone: 604–822–6316
Fax: 604–822–8645
E-mail: sue.watts@ubc.ca

Printed in Canada using recycled paper.