

# 1997 Annual Report



Faculty of Forestry

The University of British Columbia  
Vancouver, B.C.  
Canada



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Weyerhaeuser Canada

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Pulp and Paper Research Institute  
of Canada



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**ANNUAL**

**REPORT**

**Faculty of Forestry**

University of British Columbia

April 1, 1997 – March 31, 1998



## COVER BACKGROUND PHOTOGRAPH

*Photographer:* **Bryan Evans**

Elaho Valley, Squamish, B.C.

## COVER INSET PHOTOGRAPHS

*Photographer:* **Laura Nagel**

*Clockwise from top left — photographs of students in the new Integrated Conservation Field School (CONS 451).*

- Trapping northwestern salamanders (*Ambystoma gracile*) to determine population density in Shirley Lake at the Malcolm Knapp Research Forest.
- One of the largest cutthroat trout (*Oncorhynchus clarki*) caught in Loon Lake at the Malcolm Knapp Research Forest — trapped this year as part of an abundance study.
- Censusing plant communities to examine distribution and abundance of exotic species in the grasslands near Riske Creek.
- Biological surveys of Loon Lake include assessing water quality, macroinvertebrates and fish populations.

## TEXT PHOTOGRAPHS

*Photographers:* **UBC Media Services**

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**T**HE Faculty of Forestry exists at the University of British Columbia only because society finds a set of activities collectively called “forestry” to be important enough to merit the attention of one of the world’s great universities. Hence, the Faculty’s mission is to serve society — in British Columbia, in Canada and throughout the world — by improving its capacity to deal with forestry broadly defined. We do so through educational programs ranging from short courses to advanced doctoral degrees, through research on an array of topics stretching from molecular genetics to sociology, and through direct professional service to government, industry, native bands and private non-governmental organizations.

The Faculty continues to enjoy strong support from its stakeholders outside the University. Enrolment is growing in all programs, extramural research activity leads the University, and the Faculty sustains the highest level of alumni support of any faculty at UBC.

Despite these positive factors, we face major challenges associated with declining governmental support for higher education in the Province. This year the Faculty was assigned a 4% budget reduction in order to help meet the University’s operating deficit, bringing the cumulative budget cuts since 1990 to about 20%. Growth in undergraduate (5%), graduate (4%) and diploma (98%) enrolment has placed considerable stress on faculty and staff. The increasingly serious problems associated with declining resources/student have been a recurring theme in each of the recent external reviews of the various departments. The problem is particularly challenging as we lose the talent and energy of young faculty members to resignations (four during the past year) and the wisdom and leadership of senior faculty to retirements (one). Accommodating increased student numbers while sustaining high-quality education, a substantial extramural research activity and a strong commitment to external service — all with continued reductions in our core university support — remains the Faculty’s abiding challenge.

This annual report provides the basic facts describing how we are responding to that challenge.

## Highlights of 1997/98

The table below provides basic indicators of the Faculty’s activities over the past five years, along with our forecast for the 1998/99 academic year.

**Faculty of Forestry Activities, 1993/94 – 1998/99e**

	93/94	94/95	95/96	96/97	97/98	98/99e
Undergraduate enrolment <sup>a</sup>	400	452	522	591	621	635
Distance credit education (fte)	22	22	29	36	37	37
Graduate enrolment	171	180	189	201	209	235
Diploma in Forestry	–	–	73	47	48	59
Diploma in Forest Engineering	–	–	–	–	45	65
FCSN <sup>b</sup> registrants	12,000	21,000	14,000	12,000	9,500	9,500
Teaching Evaluation Index <sup>c</sup>	2.16	2.28	2.25	2.24	2.31	–
GPOB (\$000) <sup>d</sup>	5,084	4,939	4,808	4,798	4,741	4,545
GPOB/WFTE <sup>e</sup>	\$3,033	\$2,714	\$2,340	\$2,129	\$1,989	\$1,783
Extramural funding (\$000) <sup>f</sup>	5,047	5,079	7,141	10,409	9,089	7,500
Extramural funding/GPOB faculty member (\$000)	120	121	188	289	265	207

<sup>a</sup> Headcount unless otherwise noted.

<sup>b</sup> Forestry Continuing Studies Network.

<sup>c</sup> Average numerical score of several criteria used by students to assess teaching performance of faculty members.  
1 = Excellent; 2 = Very Good; 3 = Good; 4 = Fair; 5 = Poor; 6 = Very Poor.

<sup>d</sup> Base recurring budget.

<sup>e</sup> Calculated from headcount using UBC weights. In 1996/97 FTE:headcount = 0.763; Budget and Planning estimate of \$/WFTE was 16.9% higher than calculated.

<sup>f</sup> Research + special purpose + endowment (until 1996/97; excluded after this date).

## DEAN'S MESSAGE

In 1997/98 women comprised 37% of the total undergraduate enrolment, the same fraction as last year. Self-reported First Nations students totalled 15, a large increase over last year but still short of our proportional contribution (about 30) to the University's "1000 First Nations students in 2000" goal. In 1997/98, 17 Forestry students were on international exchanges in nine different countries, and 13 students were visiting UBC. We expect about the same number of exchange students next year.

Although financial support for forestry research is at a cyclical low and may well be trending downward,<sup>1</sup> the need for science and technology in the sector has never been greater. The UBC Faculty of Forestry is the single largest provider of professional/scientific/technical personnel for the forest sector in Canada, and is one of the largest research facilities supporting the sector as well. Last year this comparatively small Faculty garnered 2% of NSERC's *entire* budget for targeted research programs! The Faculty's extramural research program continues to be the largest at UBC when denominated on the basis of University-supported faculty members.

This year saw:

- the inauguration of CONS 451, a 15-credit, full-term field-oriented interdisciplinary course focused on solving real-world conservation problems.
- teaching, for the first time, Year 4 of the new five-year Wood Products Processing program; and
- the implementation of the new Diploma in Forest Engineering, developed in collaboration with the Department of Civil Engineering and the Institute of Forest Engineering of BC.
- grants from UBC's Teaching and Learning Enhancement Fund totalling \$128,167 for a variety of projects to improve the learning environment in the Faculty.
- the initiation of the International Forestry specialization for our Forest Resources Management and Forest Science programs.

Administrative activities included completing external reviews of all three departments as well as of our International Programs and our University Research Forests. In addition, we have thoroughly and exhaustively examined organizational alternatives for the Faculty, and concluded to retain our departments, strengthen our program directors and empower the Associate Dean for Undergraduate Programs to manage the resulting matrix structure.

We concluded our "Growing the Future" campaign with \$2.5 million raised from private-sector sources. Development activities this year have focused on (i) strengthening our connection with alumni and annual giving, (ii) stewarding supporters of the Faculty, (iii) bringing the industry fundraising for the Wood Products Processing program under the umbrella of UBC fundraising, and (iv) developing prospects for future major gifts.

Finally, as I write we are within a few weeks of moving into the splendid new Forest Sciences Centre. This building, largely constructed of wood, will bring together faculty from 11 different locations spread over more than 5 km. It provides us with modern classrooms and laboratories appropriate for forestry teaching and research well into the next millennium. We have developed a detailed procedure for allocating space among faculty members and research groups with the objective of maximizing the contribution this space makes to our teaching and research missions. The system automatically accommodates changes in the research programs of individual faculty members and Forest Sciences Centre faculty associates. As far as we know, Forestry and Medicine are the only two units in the University who have rationalized space allocation in this way.

### Plans for 1998/99

A major focus for next year is to solidify the changes that have been made in the Faculty during the past five years. Specific activities include:

- getting settled into the new Forest Sciences Centre and getting all the building systems working to support our teaching and research activities.
- completing searches for key leadership positions in the Faculty, including department heads for each of the departments, new associate deans and a new director for the University Research Forests.

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<sup>1</sup> See Binkley, C.S. and O.L. Forgacs. 1998. Status of forest sector research and development in Canada. *Pulp & Paper Canada*, January 1998: 39-42.



- implementing our new Year 1 and Year 2 enrolment quotas to keep the total size of the Faculty roughly at its present level. Doing so means a substantial reduction in our Year 1 quota for forestry programs — to 35 from 65 — and the imposition of our first-ever quotas on Year 2 transfers into the Faculty.
- participating in the development of a proposed UBC-wide “College of Life Sciences” to support both the basic science teaching for Forestry students and to introduce Science students to the interesting, intellectually challenging problems associated with forestry.
- completing revisions of the B.S.F. program which have been in development for three years. These revisions include the concepts of pre-professional and professional years, with the latter comprised of two terms of block-scheduled, integrated instruction.
- teaching Year 5 of the new Co-op Wood Products Processing program and developing an integrated BC-wide education strategy to support this program. Identifying and recruiting faculty for this program remains a major challenge.
- offering the integrated field course CONS 451 to a full class of students.
- implementing the organizational changes in the Faculty that have been recommended by past external reviews and our own year-long study of the problem.

Continued expectations for high quality teaching, research and service will confront tough internal and external resource constraints. To respond to this increasingly difficult external context, we will

- renew our **strategic planning**. Now that our organization dilemmas have been resolved, it is possible to clarify faculty directions for the next five years.
- increase our focus on **international markets** for our programs and research activities. The recent external review of our International Programs suggested that we establish an externally funded “International Forestry Institute” to help provide the expertise of UBC to this important area of concern. The faculty recruited for this initiative could help teach a full-cost masters degree program in international forestry.
- develop **full-cost masters programs** in Wood and Fibre Science, International Forest Business (collaboratively with Commerce) and Wood Building Design and Construction (collaboratively with Civil Engineering and Architecture). Ultimately these will be offered in modes where the quality of learning is independent of the location of the student.
- continue to explore ways to strengthen our programs through **interdisciplinary interaction** with other units of the University in both teaching and research. In addition to the initiatives noted above, we are working on (i) a proposed new program in natural resource and environmental economics (with Economics and Agricultural Economics), (ii) evolution of our Forest Operations program into a Forest Engineering program (with Civil Engineering), and (iii) collaboration on seeking ways to streamline undergraduate offerings in the area of the environment.
- focus on using support from the Canada Foundation for Innovation to amplify key program initiatives. Important areas include a proposed Advanced Wood Composites Institute, the Centre for Wood Building Design and Construction, a Genetics Data Centre, an Advanced Wood Processing Systems Analysis Laboratory, and a Centre for Computer-Based Forest Management Planning.

As humans press ever harder against our forests, the Faculty’s activities have never been more important. The Faculty’s mission is to help society resolve the resultant problems through better management of the land and more efficient utilization of its products. Our capacity to do so is limited only by our imagination and your support. I hope you will reflect on this report of how we steward the resources entrusted to us, and write to me to let me know how we can do a better job.



Clark S. Binkley  
Dean, Faculty of Forestry



## UNDER-GRADUATE STUDENTS

## PROGRAMS OF STUDY

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**T**HE Faculty of Forestry offers four-year degree programs in the following five areas:

#### ■ Forest Resources Management – B.S.F.

This major focuses on the multidisciplinary aspects of forest resources biology and management of forested ecosystems for such products as timber, grazing, wildlife, recreation, fish and water. Students learn about the unique characteristics of each resource, their interactions, and the manipulation of forests to yield a variety of desirable products in the context of social and economic environment. The program prepares graduates for responsible careers in forest management as professional foresters.

#### ■ 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.

#### ■ Forest Science – B.Sc. (Forestry)

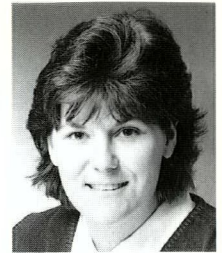
This major is for students interested in more specialized study of the scientific principles related to the growth, development, and ecology of forest species. Emphasis is placed on basic and interactional phenomena that influence the establishment, growth, and development of trees and other forest resources.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

#### ■ Wood Products Processing

B.Sc. (Wood Products Processing)

This program provides students with a broad knowledge of the wood products industry, including wood manufacturing, business management, and marketing. State-of-the-art wood processing equipment used during laboratory exercises enables students to develop skills in technical processes and operations carried out in today's industry. Students may choose an area of concentration in business, primary processing, product development, or wood building and design. In addition, qualified fourth year students may opt for a minor in Commerce. Graduates develop strong teamwork, leadership, and communication skills. An extensive five-year co-operative option is available.

**Helen Driscoll**  
Coordinator  
Student Services



#### ■ Natural Resources Conservation

B.Sc. (Natural Resources Conservation)

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

## PROGRAM UPDATES IN 1997-98

- The Natural Resources Conservation program's Integrated Field School was offered for the first time to 20 fourth year students.
- Introduction of new International Forestry specialization for Forest Science and Management programs.
- Thirty-three students were employed in industry as part of our targeted work placement sessions in the Wood Products Processing Cooperative Education program.

## PLANS FOR 1998-99

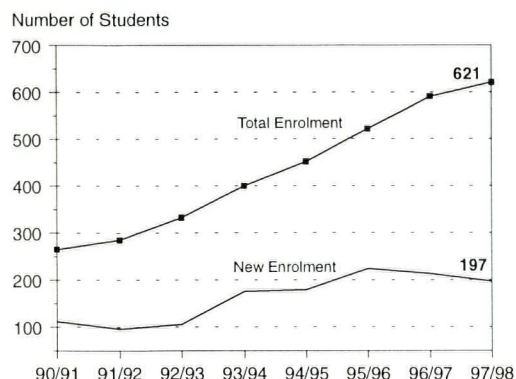
- Place 44 students in the Wood Products Processing Cooperative Education program for summer, 1998.
- Implement Year 5 of the new Wood Products Processing program. The first class of 10 students will graduate in April, 1999.
- Reduce admissions into B.S.F. program to 35 students in each of first and second year; increase admissions into B.Sc. (Natural Resources Conservation) program to 30 for first year and reduce admissions to 10 in second year.
- Set up career placement services for conservation students.
- Submit to UBC Senate for approval proposed revisions to the Forest Resources Management program.



## ■ Total Enrolment

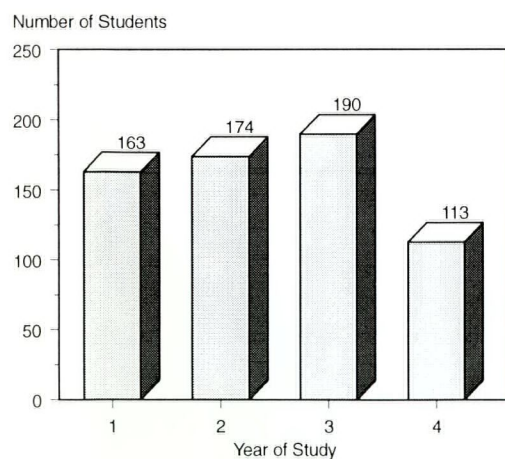
Undergraduate enrolment was maintained at a high level for the 97/98 session, with a record 640 students including 19 visiting and exchange students. Enrolment increased in each degree with the exception of the B.Sc. (Forestry) program.

The graph below illustrates the trend in enrolment since 1990 (excluding visiting and exchange students).



**Total enrolment and new enrolment  
1990/91 – 1997/98**

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



**Enrolment by year of study  
1997/98**

The largest number of undergraduate students were enrolled in the Forest Resources Management program. The Natural Resources Conservation program had the second highest enrolment. The following table provides a breakdown:

## Distribution of students among programs 1997/98

Program	Number enrolled	% of total
Forest Resources Management	288	46.4
Forest Operations	64	10.3
Forest Science	44	7.1
Wood Products Processing	65	10.5
Natural Resources Conservation	127	20.4
Undeclared*	33	5.3
<b>Total</b>	<b>621</b>	<b>100</b>

\*First year students.

Female students represented 37.0 per cent of the total enrolment. Self-declared First Nations students comprised 2.4% of the Faculty.

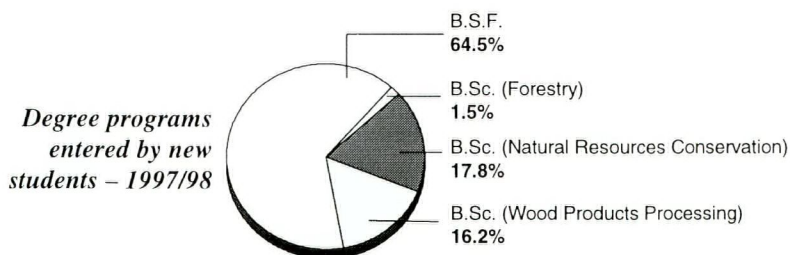
## ■ New Student Enrolment

In total, 197 new students entered the Faculty this year. Admissions increased slightly in Year 1, but decreased in Year 2 and Year 3. The numbers entering into the different years are tabulated below.

### New students entering the Faculty – 1997/98

Year of study	Number of new students entering
1	123
2	67
3	7
<b>Total</b>	<b>197</b>

The B.S.F. degree programs (Forest Resources Management and Forest Operations) continue to be the most popular with new students. The chart below illustrates degree choices of new students in 1997/98.



### Average entering GPA – 1997/98 for all new students

B.S.F.	73.3%
B.Sc. (Forestry)	71.0%
B.Sc. (Wood Products Processing)	67.0%
B.Sc. (Natural Resources Conservation)	80.0%

## ENROLMENT STATISTICS

### Undergraduate Students

## AWARDS

### Undergraduate Students

### FIRST YEAR STUDENTS

Anderson, A.E.	Northwood
Andrew, B.J.	Brock
Blomfield, H.D.	ABCPF <sup>1</sup> , Soderman
Cockle, K.L.	Banks, HRM <sup>1</sup> , Entrance
Erlendson, J.L.	Binkley, Out, Soderman
Glen, S.	Banks
Kraljevic, C.	SUS
Lam, J.L.T.	SUS
Le Couteur, A.C.	SUS, Out, MB, Soderman
Louie, K.C.	Banks
Luisser, F.S.	Hindmarch
McGladdery, W.T.	MacKenzie, Sopron
Mills, T.J.	Banks
Ogasawara, J.T.	Banks, UBC, MB
Price, S.P.	Banks
Reedman, D.M.	Banks, Out
Turner, J.S.	UBC, Splan

### SECOND YEAR STUDENTS

Banerjee, O.	Brock
Beaton, B.J.	Splan
Burke, M.P.	SUS, Soderman
Caskey, J.R.	SUS, Soderman
Davis, N.P.	Soderman, Splan, Brock
Devuono, S.	Splan
Errington, R.C.	Banks, Entrance, HRM <sup>1</sup>
Gardner, K.E.	Splan
Grant, M.J.	UBC, SUS
Haddock, R.L.	Banks, Chisholm, Splan, Out
Hansen, S.D.	Brock, Steneker
Harris, P.V.	ABCPF <sup>1</sup>
Hayward, A.J.	Banks, Out, Bell, HRM <sup>1</sup>
Jenks, R.	Brock, Berthier, Soderman, Out
Larsen, C.E.	Splan
LeRoy, M.A.	Brock, Berthier
MacKenzie, C.M.	Banks, Brock, Steneker
McFetridge, M.J.	Banks, Splan
McNaughton, M.A.	ABCPF <sup>1</sup> , Brock
Ng, C. S.-M.	Out, Splan
Sear, M.	UBC, Siddoo
Shelford, J.J.	Brock, Gage
Steiner, N.H.	UBC, Soderman
Stewart, J.S.	Splan
Taylor, S.H.	Brock
Tyler, K.M.	SUS, Out, Soderman
Wong, A.Y.	Splan

#### *Full Name of Award*

ABCPF<sup>1</sup> Scholarship.  
 ABCPF<sup>2</sup> Best Graduating Thesis.  
 ABCPF<sup>3</sup> Best Graduating Essay.  
 UBC Forestry Alumni Division.  
 Backman<sup>1</sup> Scholarship in Natural Resources Conservation.  
 Backman<sup>2</sup> Scholarship in Forest Resource Management.  
 Charles & Jane Banks Scholarship.  
 John D. Beaty Memorial Scholarship.  
 Pierre Berthier Ed. Abroad Scholarship.  
 Emily & Francis Binkley Scholarship.  
 Hugh M. Brock Ed. Abroad Scholarship.  
 Canadian Institute of Forestry Medal.  
 Hugh Robert Duncan Chisholm Scholarship in Forestry.  
 Robert J. Craig Memorial Scholarship.  
 Galt Elkington Memorial Scholarship.

Entrance (renewal) Scholarship.  
 Walter H. Gage & Elsie M. Harvey Ed. Abroad Scholarship.  
 Bob Hindmarch Award.  
 Forest History Prize.  
 Honours Standing.  
 H.R. MacMillan<sup>1</sup> Scholarship in Forestry.  
 H.R. MacMillan<sup>2</sup> Prize in Forest Harvesting.  
 H.R. MacMillan<sup>3</sup> Prize in Forestry.  
 Ted Johnson Scholarship in Forestry.  
 Janet Ketcham Scholarship.  
 David Bell Little Memorial Scholarship.  
 Machinery & Supply Companies Group Forestry Scholarship.  
 Norman MacKenzie Alumni Entrance Scholarship.

### THIRD YEAR STUDENTS

Abou Amara, W.	SUS, Soderman
Affleck, D.L.	UBC, Siddoo
Aldridge, R.V.	Splan
Bawa, M.	Splan
Beardsmore, C.T.	Johnson
Bullock, C.L.	Banks, Splan
Collins, D.B.	R.E. Mills, ABCPF <sup>1</sup> , Splan
Comey, R.J.	SUS, Machinery
Coulthard, M.J.	Splan
Deith, L.K.	UBC, Soderman, Alumni
Erickson, K.D.	Splan
Forsyth, J.P.	Banks, Elkington
Fraser, S.J.	Soderman, J.R. Mills
Frolek, J.L.	UBC, Craig, Splan
Harsch, S.K.	SUS, Wellwood
Hart, R.M.	Backman <sup>2</sup> , Splan
Hyndman, J.	Soderman
MacDonald, R.K.	Splan
MacKenzie, A.J.	UBC, SUS, Steiner
Mortimer, M.A.	Northwood
Muter, D.M.	SUS, Soderman
Norton, S.D.	Soderman
Perrakis, D.D.	Soderman, UBC, Backman <sup>1</sup> , Splan
Purves, B.C.	Splan
Schulz, J.D.	Banks, Splan
Scott, R.E.	UBC, Splan, Chisholm
Sellgren, M.J.	Splan
Shen, H.F.	SUS
Snow, C.M.	Splan
Steed, N.H.G.	SUS, Soderman
Stewart, J.C.	Splan
Sweatman, T.W.	SUS, Beaty
Talarico, T.J.	Soderman
Tobler, P.	Splan
Verschoor, P.G.	Backman <sup>2</sup> , English, Splan, Timber
Watkinson, S.J.	Ketcham
Watt, G.N.	PRT, Splan
West, K.-B.L.	UBC
Wise, H.J.	Soderman
Young, D.C.	Banks, Splan

### FOURTH YEAR STUDENTS

Brewster, L.G.	ABCPF <sup>3</sup>
Corsi, E.A.	Honours
Elder, C.	CIF Medal
Fischer, K.M.	History
Limacher, S.E.	Honours
Lyons, C.K.	ABCPF <sup>2</sup> , HRM <sup>2</sup>
Wenger, J-P. K.	Honours, HRM <sup>3</sup>

MacMillan Bloedel Limited Scholarship for Forestry.  
 James Russell Mills Memorial Award.  
 Robert E. Mills Memorial Award.  
 Northwood Pulp and Timber Limited.  
 Outstanding Student Initiative Scholarship.  
 Pacific Regeneration Technologies Inc.  
 Kapoor Singh Siddoo Scholarship.  
 Oscar Soderman Memorial Scholarship.  
 Special University Scholarship.  
 Paul Robert Steiner Memorial Scholarship in Wood.  
 Daniel J. Steneker Ed. Abroad Scholarship.  
 William John Splan Scholarship in Forestry.  
 Timberline Scholarship.  
 University of BC Scholarship.  
 Mary & Robert Wellwood Memorial Scholarship in Wood Sci. & Ind.



## Degrees Conferred, May 1997 and November 1997 Congregations

### ■ B.S.F. – Forest Resources Management

Bandstra, M.A.	Gerath, G.W.	Pellatt, M.R.
Beetham, A.M.	Ghazarian, S.	Proulx, K.C.
Behrner, A.L.	Gorman, A.E.	Roberts, L.E.E.
Birtch, G.J.	Gregson, J.A.	Robinson, J.A.
Boyland, M.N.	Gyurkovics, S.	Rudyk, M.A.
Brewster, L.G.	Hornburg, J.W.	Sampson, T.A.
Bubela, D.M.	Iacoviello, J.F.	Sankey, R.G.
Campbell, C.H.	Kalmakoff, H.C.	Smith, C.D.
Chapman, K.A.	Kyler, M.B.	Southam, D.A.
Corsi, E.A.	Laird, J.J.	Taylor, C.L.
Cross, D.	Lee, T.V.	Ternan, G.R.
Drixler, E.S.	Lloyd, B.P.	Tisch, D.G.
Drumm, W.C.	Long, E.R.	Toovey, P.J.
Eckley, R.E.	Luxmoore, J.M.	Tweedlie, J.B.
Elder, C.	MacAulay, C.A.	van de Weghe, K.N.
Ericson, P.M.	Manhard, D.	Vinnedge, R.B.
Fischer, K.M.	McDonald, T.	Watts, S.A.
Fogolin, K.V.	Merinuk, G.E.	Wenger, J.K.
Fransen, J.A.	Nielsen, A.	Wetherrill, R.J.
Geddes, S.D.	Nienaber, G.W.	Yap, H.A.

## GRADUATION STATISTICS

### Undergraduate Students

### ■ B.S.F. Forest Operations

Delwisch, C.L.  
Erickson, J.M.  
Leonard, E.M.  
Lyons, C.K.  
Roshier, P.M.  
Thuraisamy, S.  
Trenn, J.A.

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

Buchanan, B.K.  
Choi, E.C.M.  
Chow, V.Y.  
Dagenais, G.N.  
Finall, S.A.  
Hazenboom, C.  
Joe, L.P.  
Kang, Rea  
Limacher, S.E.  
Moore, J.M.  
Musslick, E.  
Pena, C.M.  
Rudd, H.D.  
Sharples, R.J.  
Wooldridge, J.S.

### ■ B.Sc. (Forestry) Wood Science & Industry

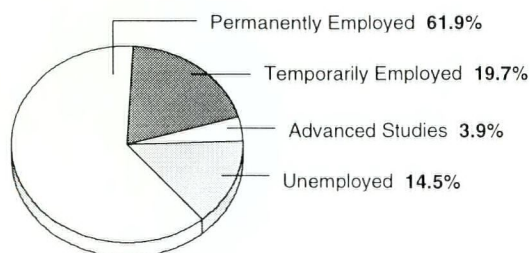
Brakop, R.E.  
Chiu, I.V.  
Crowther, S.M.  
Jovanovic, A.  
Louie, W.Y.H.  
Windsor, L.R.  
Wong, K.Y.

### ■ B.Sc. (Forestry) Forest Science

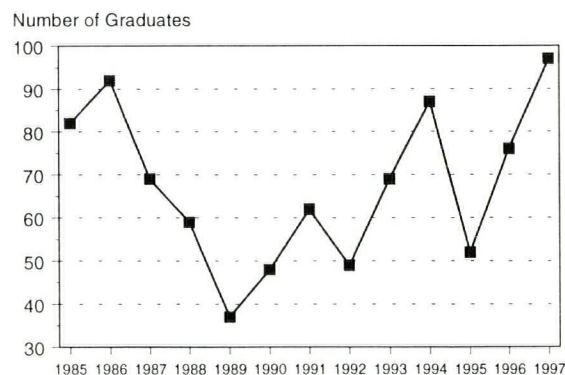
Brown, I.M.  
Hanchard, J.W.  
Henderson, D.R.  
Jarosch, R.M.  
Johnson, K.K.  
Kirkham, C.A.  
Scheck, D.C.  
Vari, S.I.

### ■ Diploma in Forestry (Advanced Silviculture)

McDonald, D.M.



*Employment survey of 1997 graduates*  
(78% response rate: 76 of 97 graduates responded)



*Number of students graduating 1985 – 1997*



## GRADUATE STUDENTS

## ENROLMENT STATISTICS

### CHANWAY, C.P.

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Associate Dean

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### SCHOBEL, Karen

Graduate Secretary

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## ■ Graduate Programs

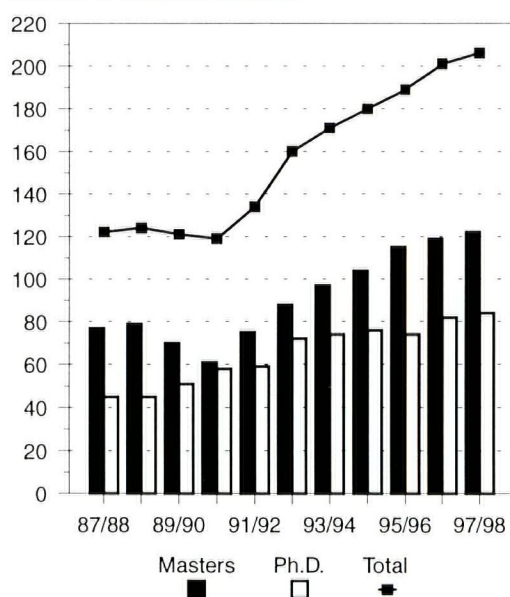
The Faculty of Forestry offers four graduate degrees:

- Doctor of Philosophy – Ph.D.
- Master of Forestry – M.F.
- Master of Science – M.Sc.
- Master of Applied Science – M.A.Sc.

## ■ Enrolment Trends

Enrolment in the Forestry graduate program has grown by 69% over the past decade. Today there are 206 graduate students registered in the Faculty. The graph below illustrates the distribution of these students between the different degree programs. The greatest growth has been in the number of Doctoral students – in 1987 there were only 45 enrolled in the program, whereas today there are 84 students. In this same period the number of Masters students has risen from 77 to 122.

Number of Graduate Students



*Graduate student enrolment  
1987/88 – 1997/98*

Women comprise 39% of our Masters and 18% of our Doctoral students, for an overall average of 31%. The following table shows enrolment data for 1997/98.

*Graduate student enrolment 1997/98*

Degree	Male	Female	Total
Ph.D.	69	15	84
M.F.	9	1	10
M.Sc.	63	47	110
M.A.Sc.	2	0	2
<b>Total</b>	<b>143</b>	<b>63</b>	<b>206</b>

As of October, 1997.

The proportion of graduate students from outside of Canada has remained fairly constant over the past few years and presently stands at 45% of Doctoral and 21% of Masters students. A total of twenty-six countries are represented in the graduate student body.

## ■ Graduate Student Funding

In the 1997/98 academic year, Forestry graduate students were awarded support totalling \$2,110,922, a decrease of 1% over 1996/97 funding levels. This consisted of \$516,028 in scholarship funding, \$266,529 in graduate teaching assistantships and \$1,328,365 in graduate research assistantships (provided by research supervisors from their research grants).

*Graduate student enrolment and funding*

Department	No. graduate students	Total funding
Forest Resources Management	59	\$464,035
Forest Sciences	98	\$1,039,481
Wood Science	49	\$607,406

## MASTERS STUDENTS

Bartel, Joseph	MacMillan <sup>1</sup>	Lumme, Minna	UGF
Boisvenue, Celine	McPhee	McCormick, James	VanDusen
Boss, Shelly	Macaree	Marianescu, Marian	Lumber
Brescia, David	GREAT	McKinnon, Leanne	NSERC
Bull, Jennifer	NSERC Industrial, VanDusen	Melles, Stephanie	Johal
Chandra, Richard	GREAT	Mitchell, Rene	McPhee
Csom, Gyongyver	Sopron	Mou, Desiree	Arnold, Backman
Davradou, Maria	Cochran, MCPhee	Paczek, Susan	NSERC
Dettman, Jeremy	Buckland, TimberWest <sup>1</sup>	Perreault, Pamela	Koerner
Dubois, Janson	McPhee	Sadowski, Keri	NSERC Industrial
Goodison, Clive	UGF	Sanders, Rebecca	McPhee
Hayward, Jell	McPhee	Serrouya, Robert	VanDusen
Hoffman Bradford	GREAT	Stonewall, Adam	McPhee
Kim Agi	Messenger	Welbourn, Derek	Forintek
Kovacs, Christina	Hanson, MCPhee	Xu, Ping	Bassett
Kraft, Dan	VanDusen	Young, Kyle	McPhee
Leone, Robert	NSERC Industrial		

## DOCTORAL STUDENTS

Bennett, Jennifer	NSERC Industrial	McCarthy, John	Allen, MCPhee
Clouston, Peggi-Lynn	VanDusen	McDermott, Constance	McPhee, TimberWest <sup>2</sup>
Ells, Arlene	McPhee	Mooney, Robert	UGF
Garcia, Pablo	UGF	Mtiraoui, Ahmed	McPhee
Haman, Andres	VanDusen	Ransom, Doug	GREAT
Harrison, Scott	CFP	Singh, Ramvir	UGF
He, Ming	Weyerhaeuser	Wang, Hao	Heller, MCPhee
Hope, Sharon	Namkoong	Wang, Honglong	UGF
Kinyua, Patrick	CIDA	Weber, Adrian	NSERC
Lohrasebi Peydeh, A.	Chisholm, MCPhee	Wu, Ming	GREAT
Lu, Congjin	McPhee	Yawalata, Dominggus	MacMillan <sup>2</sup>
Mahony, Nancy	Hoffmeister	Zabek, Lisa	GREAT
Mansfield, Shawn	GREAT		

### Full Name of Award

George S. Allen Memorial Scholarship.	Graduate Research Engineering And Technology Awards.	Namkoong Family Fellowship in Forest Sciences.
Theodore E. Arnold Fellowship.	Brenda Hanson Memorial Scholarship in Forestry.	Natural Sciences and Engineering Research Council of Canada Scholarship.
Backman Award in Natural Resources Conservation.	Paul Heller Fellowship.	Natural Sciences and Engineering Research Council of Canada Industrial Postgraduate Scholarship.
Edward W. Bassett Memorial Scholarship in Reforestation.	Bert Hoffmeister Scholarship in Forest Wildlife.	Sopron Alumni Fellowship.
Don Buckland Memorial Scholarship in Forest Pathology.	Asa Johal Fellowship.	TimberWest <sup>1</sup> Forest Limited Fellowship in Forest Science
Canadian Forest Products Ltd. Fellowship in Forest Wildlife Management.	Michael and Sonja Koerner First Nations Fellowship	TimberWest <sup>2</sup> Forest Limited Fellowship in Forest Wildlife Management.
Canadian International Development Agency Scholarship.	Lumber Inspectors' Benevolent Society Scholarship.	University Graduate Fellowship.
Hugh Robert Duncan Chisholm Scholarship in Forestry.	Mary and David Macaree Fellowship in Sustainable Forestry.	VanDusen Graduate Fellowship.
Ralph M. and Elizabeth E. Cochran Scholarship.	MacMillan <sup>1</sup> Bloedel Limited Fellowship in Forest Mensuration.	Weyerhaeuser Fellowship in Wood Design Management.
Commonwealth Scholarship.	MacMillan <sup>2</sup> Bloedel Limited Fellowship in Wood Chemistry.	
Forintek Canada Corporation Fellowship in Wood Science and Wood Products.	Donald S. MCPhee Fellowship.	
	Ann and William Messenger Fellowship.	

## SCHOLARSHIPS AND FELLOWSHIPS

Graduate  
Students



## Degrees Conferred, May 1997 and November 1997 Congregations

### DEGREES GRANTED

#### Graduate Students

#### M.F.

**PAVEL, Mihai** *Prof. G.G. Young*

Model for predicting net revenue of harvesting operations in coastal second-growth stands.

**ZHONG, Jianwen** *Dr. B. van der Kamp*

Pathology of conifer seed and seedlings on natural and disturbed forest floor seedbeds in the Engelmann spruce-subalpine fir zone of the interior of British Columbia.

**EASTON, Wendy** *Dr. K. Martin*

The effect of manual thinning and glyphosate application on breeding bird communities in southern British Columbia.

**EDGAR, Catherine** *Dr. J.N. Saddler*

Non-thesis.

**ENGLISH, Denise** *Dr. G.F. Weetman*

Strategy to convert an even-aged stratified stand to an uneven-aged mixed species stand.

**FORSYTH, Keith** *Dr. D. Haley*

Customer attitudes towards environmentally sound wood products in three British Columbia home improvement markets.

**HAFER, Mark** *Dr. A.F. Howard*

A control system framework for simulating forest landscape management.

**HELBERT, Sheldon** *Dr. J.P. Kimmins*

Sewage sludge nitrogen: A field study of sludge nitrogen dynamics and a laboratory study of ammonia and nitrous oxide gas evolution.

**HOUDE, Isabelle** *Dr. F.L. Bunnell*

Small mammal associations with habitat structure in riparian zones of a managed ICH forest, Revelstoke, B.C.

**JEKUBIK, Dan** *Dr. P.L. Marshall*

Non-thesis.

**LEE, Lily** *Dr. D. Cohen*

Relationship between markets and technology in large western Canadian sawmills.

**ONATE, Nilda** *Dr. P.L. Marshall*

Simulation models: A useful tool in the evaluation of planted coastal Douglas-fir silvicultural management.

**SHATFORD, Jeff** *Dr. S.M. Glenn*

Seed dispersal, seed attributes and edaphic factors: Their role and impact on the regeneration of antelope bitterbrush (*Purshia tridentata* Rosaceae).

#### M.A.Sc.

**HE, Ming** *Dr. F. Lam*

A study of wood based shear walls sheathed with oversize oriented strand board panels.

**NORLIN, Peter** *Drs. J.D. Barrett/F. Lam*

Fatigue behaviour and size effect perpendicular to the grain of laminated Douglas-fir veneer.

#### M.Sc.

**BENNETT, Doug** *Dr. J. Nelson*

Partial cutting in mountainous old-growth forests in coastal British Columbia: Harvesting productivity and cost, and residual stand impacts.

**BRETT, Bob** *Dr. K. Klinka*

Regeneration patterns on some old-growth and clear-cut sites in the mountain hemlock zone of southern British Columbia.

**BURWASH, Michael** *Dr. T. Sullivan*

The use of synthetic predator odours to elicit an avoidance response in the roof rat (*Rattus rattus*).

**DONALD, Stuart** *Dr. T. Maness*

Production planning for value added lumber manufacturing.



**SONG, Xianghou** *Dr. M.C. Feller*

Relationships between coarse woody debris and understory vegetation in six forest ecosystems in British Columbia.

**THOMAS, Keith** *Dr. C.E. Prescott*

Nitrogen mineralization in forest floors of three tree species on the same site: the role of litter quality.

**TIMUSK, Chris** *Dr. H.G.L. Prion*

Experimental evaluation of the ULAG glulam beam simulation program.

**TOLNAI, Steve** *Dr. D. Cohen*

B.C. moulding and architectural millwork: an analysis of the U.S. market and emerging competitors.

**VARGA, Pal** *Dr. K. Klinka*

The structure and regeneration pattern of old-growth stands in the moist cold Engelmann spruce-subalpine fir subzone of central British Columbia.

**WAHBE, Tanya** *Dr. F.L. Bunnell*

Tailed frogs (*Ascaphus truei* Stejneger) in natural and managed coastal temperate rain-forests of southwestern British Columbia, Canada.

**WANG, Kaiyuan** *Dr. F. Lam*

Robot-based research on three-layer oriented flakeboards.

**WIND, Elke** *Dr. F.L. Bunnell*

Habitat associations of wood frogs (*Rana sylvatica*) and effects of fragmentation in boreal mixedwood forests.

**YATICH, Sammy** *Dr. P.A. Murtha*

Landsat temporal discrimination of forest cover types of the Carmanah Valley, British Columbia.

**ZHANG, Yi** *Dr. J.N. Saddler*

Degradation of dehydroabietic acid by bacterial isolates grown on ctmp effluents.

**ZHOU, Bingning** *Dr. S. Avramidis*

Dielectric characteristics of two B.C. coastal species during radio frequency heating.

---

## Ph.D.

---

**BRADY, Mike** *Dr. J.P. Kimmins*

Organic matter dynamics of coastal peat deposits in Sumatra, Indonesia.

**CHEN, Han** *Dr. K. Klinka*

Responses of some conifers to light availability, survival growth, morphological characteristics, and physiological behaviour.

**CUMMING, Steve**

*Drs. P.L. Marshall/P. Burton*

Landscape dynamics of the boreal mixed-wood forest.

**GASTON, Christopher** *Dr. D. Haley*

An econometric analysis of the demand for wood products in Japan by product type, species, and source.

**LAU, Peter** *Dr. J.D. Barrett*

Behaviour and reliability of wood tension members exposed to elevated temperatures.

**LIU, Ruiying** *Dr. J.N. Ruddick*

The influence of didecyldimethylammonium chloride (DDAC) treatment on wood weathering.

**LU, Jianxiong** *Dr. S. Avramidis*

Non-darcian air flow in wood.

**McINTOSH, Rory** *Dr. J.A. McLean*

Biology and behaviour of the white pine weevil *Pissodes strobi* (Peck.) in white spruce.

**ROBINSON, Richard** *Dr. B. van der Kamp*

Response of western larch and Douglas-fir to infection by *Armillaria ostoyae*.

**SHISHIDO, Masahiro** *Dr. C.P. Chanway*

Plant growth promoting rhizobacteria (PGPR) for interior spruce (*Picea engelmannii* x *P. glauca*) seedlings.

**THOMAS, Len** *Dr. K. Martin*

Evaluation of statistical methods for estimating long-term population change from extensive wildlife surveys.

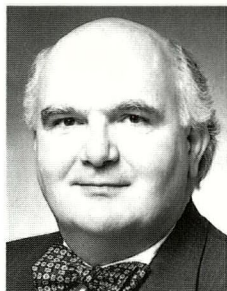
**WANG, Jianrang** *Dr. J.P. Kimmins*

Competition between paper birch and Douglas-fir in two different biogeoclimatic zones of British Columbia.

DEGREES  
GRANTED

Graduate  
Students

## OFFICE OF THE DEAN



### **BINKLEY, Clark S.**

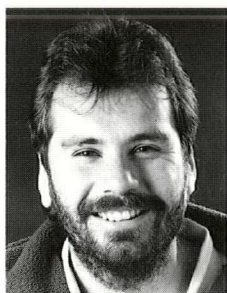
A.B., M.S. (Harvard), Ph.D. (Yale), R.P.F. (Hon.)

#### **Dean**

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## FACULTY AND STAFF



### **CHANWAY, Christopher P.**

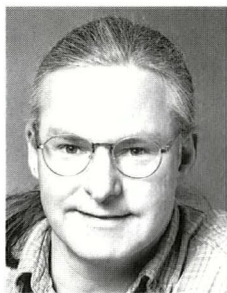
B.Sc. (Winn.), B.S.Ag. (Manit.), M.Sc., Ph.D. (Brit. Col.)

#### **Associate Dean, Graduate Studies**

Responsible for administering all aspects of Forestry graduate programs.

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### **GUY, Robert D.**

B.Sc., Ph.D. (Calg.)

#### **Associate Dean, Research**

Responsible for the promotion of research and for overseeing administration of all externally-sponsored research activities.

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### **KOZAK, Antal (Tony)**

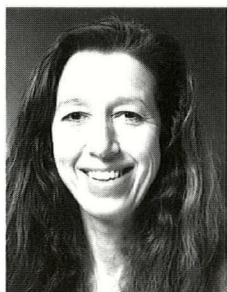
B.S.F. (Sopron), M.F., Ph.D. (Brit. Col.), D.Sc. *Honoris causa* (Sopron)

#### **Associate Dean, Undergraduate Programs & Academic Affairs**

Responsible for administering academic programs including curriculum and calendar changes, admissions, transfers and advancements and for disciplining undergraduate students.

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**Associate Director  
International Forestry Programs**

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AND  
STAFF**

---

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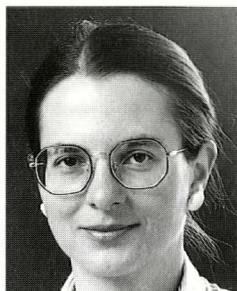
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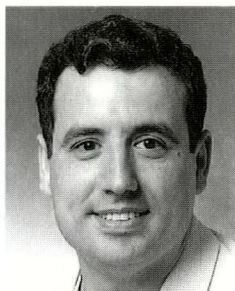
**TURNER, Ron**  
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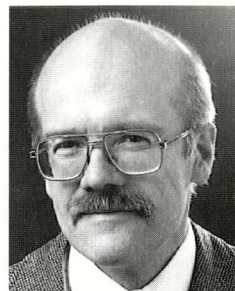
**FOREST  
RESOURCES  
MANAGEMENT  
DEPARTMENT**



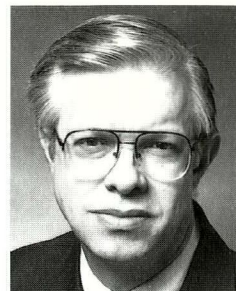
**Valerie LeMay**  
*Acting Head*



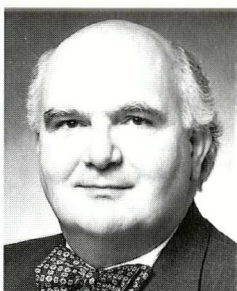
**Younes Alila**



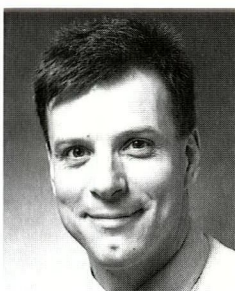
**Timothy Ballard**



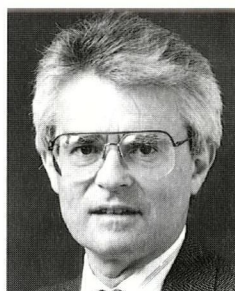
**Dennis Bendickson**



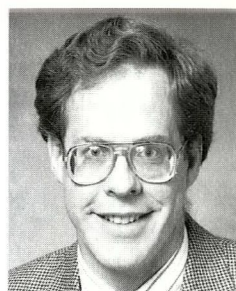
**Clark Binkley**



**Jonathan Fannin**



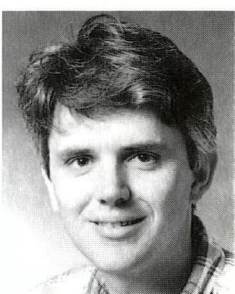
**David Haley**



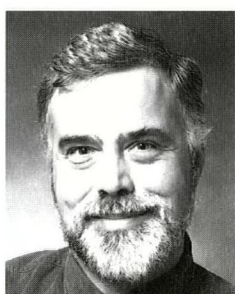
**George Hoberg**



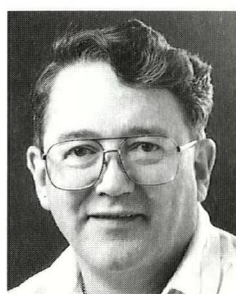
**Antal Kozak**



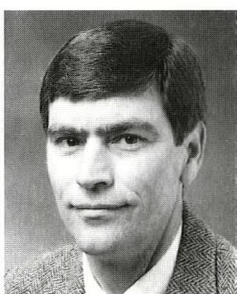
**Donald Luymes**



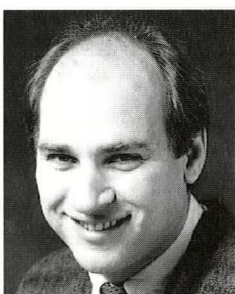
**Peter Marshall**



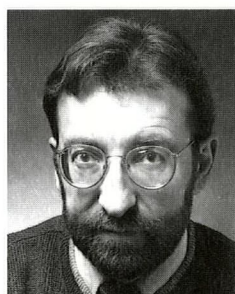
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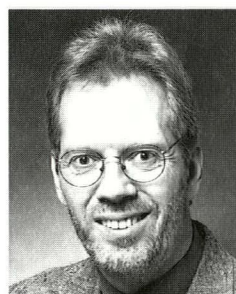
**John Nelson**



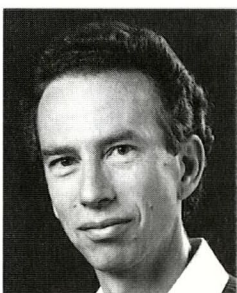
**S.E. (Tim)  
Salcudean**



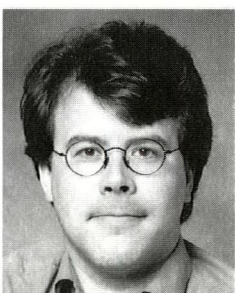
**Stephen Sheppard**



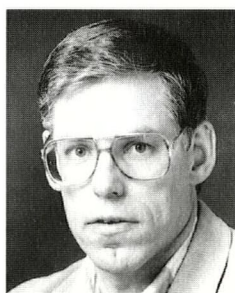
**Roy Sidle**



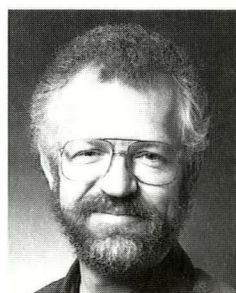
**David Tait**



**David Tindall**



**G.C. (Casey)  
van Kooten**



**Paul Wood**



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##### **MESSENGER, Meggin**

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#### ■ Honorary Lecturers

##### **SANDERS, Peter R.W.**

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 • *Silviculture*

##### **SAUDER, Brent J.**

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 • *Forest Operations*

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##### **WHITAKER, Andrew**

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##### **COTTELL, Philip L.**

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##### **DEMAERSCHALK, Julien P.**

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##### **HALL, Thomas H.**

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##### **ILES, Kimberley**

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##### **MAGNUSSEN, Steen**

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##### **MATAKALA, Patrick**

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##### **MITCHELL, Kenneth J.**

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##### **WILLIAMS, Douglas H.**

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##### **WOZNOW, Ron**

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**COUCH, Mary Lou**

Secretary

**GIZOWSKI, David**

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Computer Research Analyst

**LAI, Charles**

Departmental Clerk

**MAEDEL, Jerry**

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GIS/RS Coordinator

**SHANNON, Tim**

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Research Analyst

**VERWOERD, Harry**

Research Assistant/Technician

**■ Retirement**

Dr. Gordon Baskerville has retired from the Faculty after serving as Head of the Forest Resources Management Department since 1993. He is continuing his professional work as a consultant.

**■ New Faculty Appointments****BENDICKSON, Dennis**

Mr. Dennis Bendickson joined the Faculty as an Instructor in Forest Operations this year. He has many years of professional experience in forest operations, management, and consulting.

**HOBERG, George**

Dr. George Hoberg joined the Forestry Faculty as an Associate Professor in Forest Policy in 1997. Prior to joining the Faculty, he held a full time appointment in the Political Science Department at UBC. His research interests include comparative public policy, forest and environmental policy.

**SHEPPARD, Stephen**

Dr. Stephen Sheppard joined the Faculty in the summer of 1997 as an Associate Professor in a joint appointment with Landscape Architecture. He has worked in private practice in the US and UK for over 20 years, both as a specialist in visual resource management and visualization techniques, and as a senior planner applying GIS and environmental impact assessment techniques. He is currently developing a centre of excellence at UBC for research in integration of GIS, computer visualization, and public involvement techniques to support decision-making on forest resource and land planning issues.

**SIDLE, Roy**

Dr. Roy Sidle joined the Faculty this past year as Professor and FRBC Chair in Forest Hydrology. This is a joint appointment with Geography. Dr. Sidle has been conducting research and managing an international program within IGBP in Denmark and Holland for the past three years. His current research interests include cumulative watershed effects, headwater hydrology, and landslide studies.

**ACHIEVEMENTS IN 1997-98**

- A new diploma in Forest Resources Engineering was approved by Senate.
- Dr. Stephen Sheppard was hired in a joint appointment between Forest Resources Management and Landscape Architecture.
- Dr. Roy Sidle was hired in a joint appointment between Forest Resources Management and Geography to fill one of the two FRBC Chairs in Forest Hydrology.
- An external review of the department was completed.

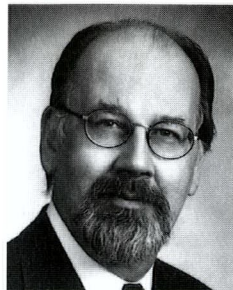
**PLANS FOR 1998-99**

- The search for a new Department Head will be conducted this year.
- The new B.S.F. (Forest Resources Management) program will be drafted this year, and will include two periods of forestry-only enrolment, allowing for more field-oriented and problem-based learning.
- Searches for the FRBC Chair and an Assistant Professor in Forest Management are being conducted. The two positions are expected to be very influential in teaching the revised B.S.F. (Forest Resources Management) program.
- The move to the new Forest Sciences Centre will bring all Department members together enhancing joint research programs.
- A review of the B.S.F. (Forest Operations) program will begin this year. The review will assess the possible eligibility of graduates to register as Professional Engineers.
- A study of the feasibility of offering a Master's degree leading to eligibility for obtaining status in the Association of B.C. Professional Foresters will begin this year.
- Expansion of GIS courses and teaching support.

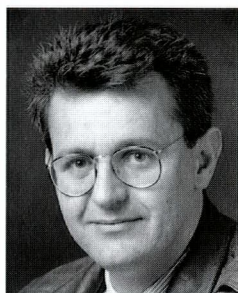
**ACHIEVEMENTS  
AND  
PLANS**

Forest Resources  
Management  
Department

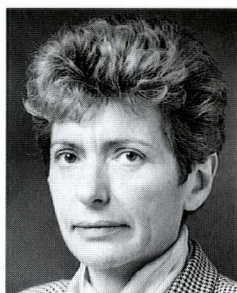
**WOOD SCIENCE  
DEPARTMENT**



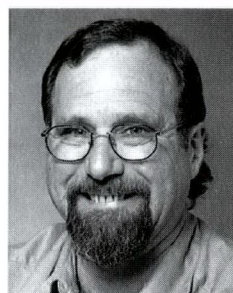
**David Barrett**  
*Head*



**Stavros Avramidis**



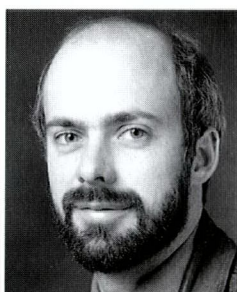
**Colette Breuil**



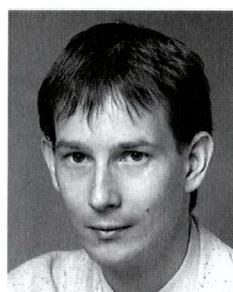
**David Cohen**



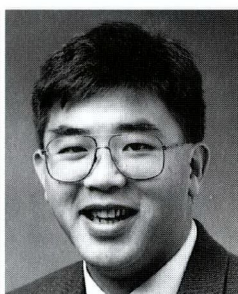
**Patrick Cramond**



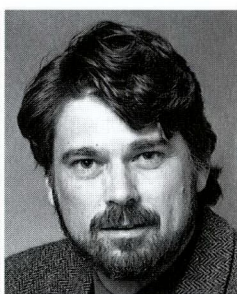
**Simon Ellis**



**Robert Kozak**



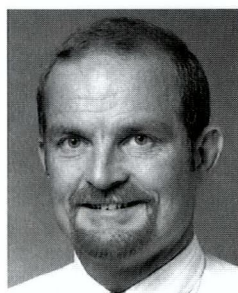
**Frank Lam**



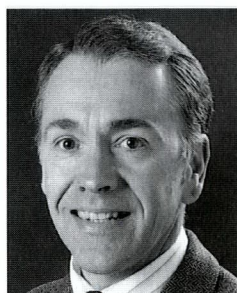
**Thomas Maness**



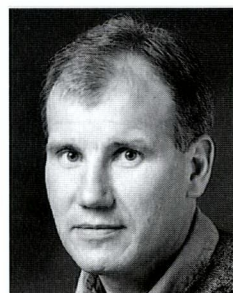
**Laszlo Paszner**



**Helmut Prion**



**John Ruddick**



**Jack Saddler**



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##### **JOHANSSON, Carl**

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##### **MORRIS, PAUL**

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##### **PLACKETT, David**

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##### **MYRONUK, Robert**

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##### **NORLIN, Peter**

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##### **THOMSON, Sandy**

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##### **WANG, Yin Tang**

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Wood Engineering Scientist

##### **ZHAO, Jay**

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M.A.Sc., Ph.D. (Brit. Col.),  
Computer Specialist



## ■ Promotions

**AVRAMIDIS, Stavros** – promoted to Professor effective July 1, 1998.

**BREUIL, Colette** – promoted to Professor effective July 1, 1998.

## ■ New Faculty Appointment

### **CRAMOND, Patrick**

Mr. Patrick Cramond joined the Faculty in 1997 as an Instructor in Mechanical Engineering after spending 23 years in industry, working mainly with forest products processing machines. Patrick is appointed jointly between Wood Science and Mechanical Engineering (Faculty of Applied Science). His teaching will include a course on machine component design to forestry students and industry training courses at the Centre for Advanced Wood Processing.

## **ACHIEVEMENTS IN 1997–98**

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- The 4<sup>th</sup> year of the new Wood Products Processing Degree program was implemented.
- Successfully introduced a block teaching format for selected Wood Products Processing courses using international experts.
- Through the efforts of the Centre for Advanced Wood Processing, our Wood Products Processing students have Coop placements in primary and secondary wood processing firms across Canada.
- Faculty members from the Fachhochschule Rosenheim and the Swiss Institute for Wood Engineering continue to make significant contributions to the design and delivery of the Wood Products Processing program.
- Appointed a Student Services Coordinator to lead the recruiting program for the Wood Products Processing program.
- Faculty searches for three new Wood Products Processing positions and a Wood Composites position were initiated.
- Collaborated with the B.C. industry to establish the BC Network for Wood Building Design and Construction.
- Completed detailed planning for teaching and research space in the new Forest Sciences Centre.
- An external review of the Department of Wood Science was completed.

## **PLANS FOR 1998–99**

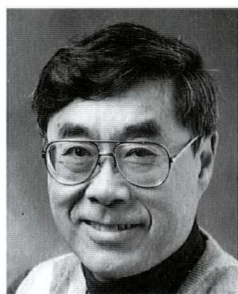
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- Implement Year 5 of the Wood Products Processing degree program.
- Complete faculty searches for Wood Products Processing position and the Wood Composites position.
- Submit a curriculum proposal to establish the new graduate program in Wood and Fibre Science and Technology.
- Submit a curriculum proposal to establish the new graduate program in Wood Building Design and Construction.
- Complete the move to the new Forest Sciences Centre and the Centre for Advanced Wood Processing.
- Expand research collaborations in the fields of secondary wood processing, wood composites and wood building design and construction.

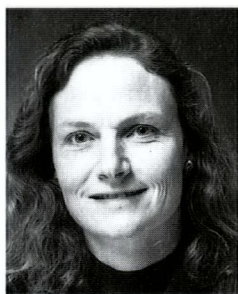
## **ACHIEVEMENTS AND PLANS**

Wood Science  
Department

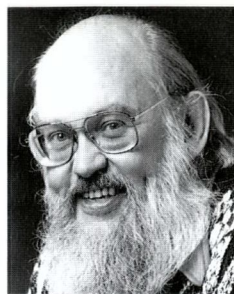
**FOREST  
SCIENCES  
DEPARTMENT**



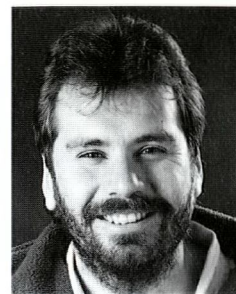
**Gene Namkoong**  
*Head*



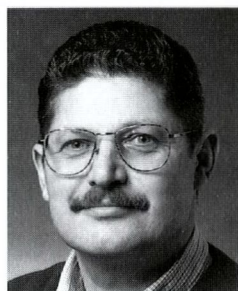
**Sally Aitken**



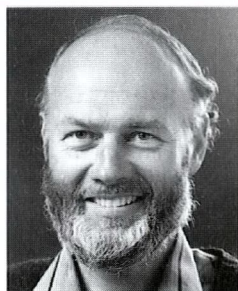
**Fred Bunnell**



**Chris Chanway**



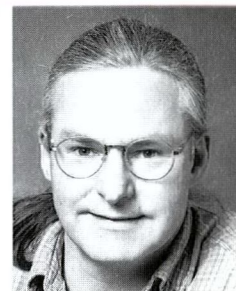
**Yousry El-Kassaby**



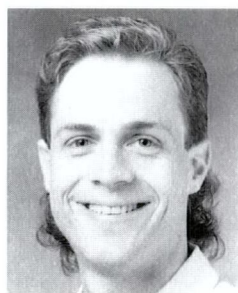
**Michael Feller**



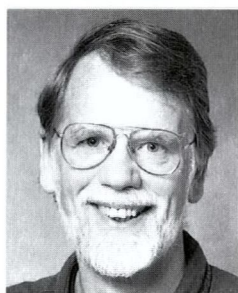
**Susan Glenn**



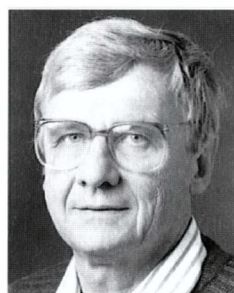
**Robert Guy**



**Scott Hinch**



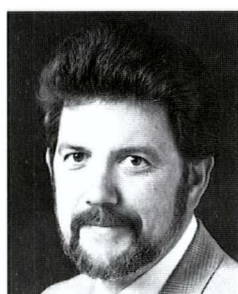
**J.P. (Hamish)  
Kimmins**



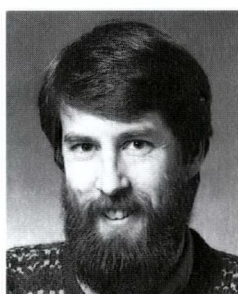
**Karel Klinka**



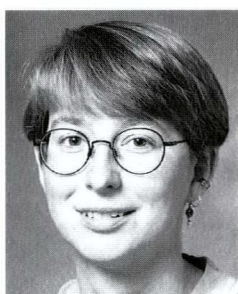
**Kathy Martin**



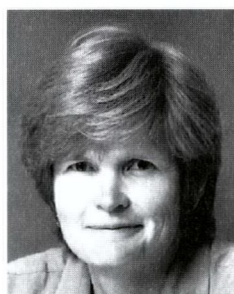
**John McLean**



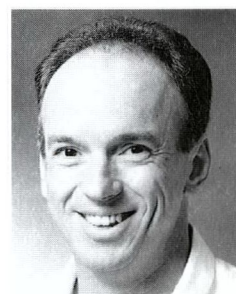
**Steve Mitchell**



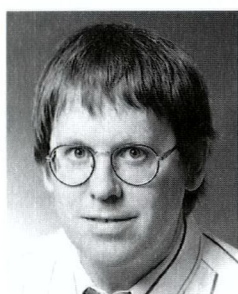
**Laura Nagel**



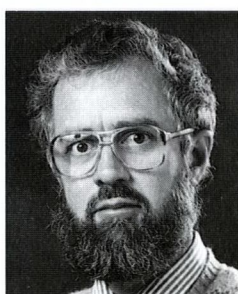
**Cindy Prescott**



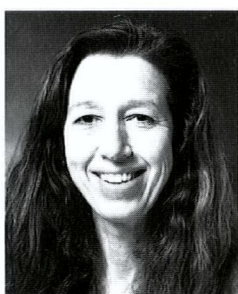
**John Richardson**



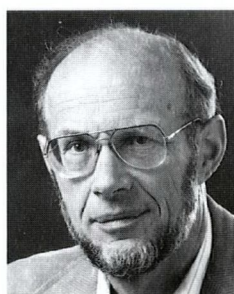
**Kermit Ritland**



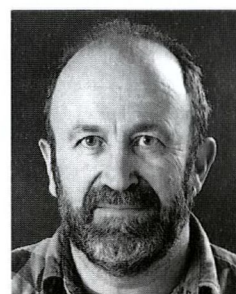
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**Susan Watts**



**Gordon Weetman**



**John Worrall**



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Forest Sciences  
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## FACULTY AND STAFF

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#### ■ Promotion

**MARTIN, Kathy** – promoted to Professor  
effective July 1, 1998.



## ACHIEVEMENTS IN 1997-98

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- Dr. Cindy Prescott was appointed to Assistant Professor (grant-tenure track) in Forest Nutrition.
- Steve Mitchell was appointed as an Instructor in Silviculture. On completion of his doctorate, this rank will be changed to Assistant Professor. His responsibilities include teaching courses in regeneration silviculture and organizing the Forestry Fall Field School.
- Laura Nagel was hired as Instructor in Conservation Biology. She is responsible for organizing a new interdisciplinary field course for fourth year students.
- Dr. Lisa Poirier was hired as the teaching support technician to collect and curate demonstration materials for dendrology, forest ecology, forest entomology, forest pathology and forest wildlife ecology and management.
- On November 3, 1997, nearly 200 people attended the Leslie L. Schaffer lecture by Dr. Daniel Botkin "*Getting the Paradigm Right: The Essential Ecological Foundation for the Conservation and Sustainable Management of British Columbia's Forests and Natural Resources.*" Copies of his talk are available from the Department.

## PLANS FOR 1998-99

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- Establish the Genetic Data Centre within the new Forest Sciences Centre.
- Initiate short courses on genetics and biodiversity for international students.
- The search for a FRBC endowed position in Applied Conservation Biology (Terrestrial Vertebrate or Riparian Ecologist) is expected to be completed this year.
- The search for a senior FRBC Chair position in Silviculture is expected to be completed this year.
- With the retirement of Dr. Gene Namkoong, a search for a new Department Head will be conducted.
- Appoint a computer specialist to provide computer and network support to the Department. This person is expected to participate in various research projects and assist in teaching labs and field schools.
- Maintain high level of proposals to NSERC, Forest Renewal BC and other funding agencies.
- The move to the new Forest Sciences Centre will bring all Department members together at the same location. This is expected to improve Department administration and increase the interaction between Department members.

## ACHIEVEMENTS AND PLANS

Forest Sciences  
Department

## UNIVERSITY RESEARCH FORESTS

**T**HE Faculty of Forestry operates two research forests: the coastal UBC Malcolm Knapp Research Forest (MKRF) in Maple Ridge, and the UBC Alex Fraser Research Forest (AFRF) in the interior near Williams Lake. The mission of the Research Forests is to support the Faculty of Forestry in serving the people of B.C. through excellence in education and scholarship in forestry broadly defined. Thus both Forests are dedicated to research and education. The location of the Forests, covering five biogeoclimatic zones and three different tenure systems, offers a wide array of research and education opportunities. The Malcolm Knapp Research Forest operates an adjacent Woodlot Licence which is used extensively for teaching and, to a limited extent, for research.

The Malcolm Knapp Research Forest was established in 1949, the Woodlot License WL0037 in 1986 and the Alex Fraser Research Forest in 1987 – a combined total of over 15,000 ha. The Forests provide sites and services for research and educational activities for UBC, other universities, colleges and a wide variety of agencies. Over 1,000 research projects have been initiated to date, ranging in scope from growth and yield studies, to forensic entomology, flying squirrel habitat studies and metal weathering. Currently over 300 research projects are active and can be referenced through the Faculty web site.

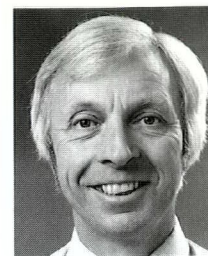
Financial constraints continue to dominate management strategies, and the Research Forests now operate without any form of financial support from the University. The primary source of funds is harvesting of timber, although there is an aggressive cost recovery policy on virtually all services.

The Research Forests host two field schools for undergraduate students; a Fall field school at Alex Fraser for third year students, and a Spring Field School for four year students at Malcolm Knapp. Accommodation facilities for both Field Schools are now at capacity, reflecting the continuing increase in undergraduate enrolment at the Faculty. The forests also host numerous continuing education programs.

### ACHIEVEMENTS IN 1997–98

- A review of both Forests was completed.
- Over 25 international students visited the Forests on internship and work experience programs.
- A number of policies were developed, with particular reference to cost recovery, including an Educator Use and Visitor Charge Policy.

**Peter Sanders**  
Director



### Malcolm Knapp Research Forest

- Thirty-seven new research projects were initiated.
- Infrastructure (roads and landings) for a major helicopter harvesting program was constructed.
- One new bridge was constructed.
- The rate of timber harvesting slowed down reflecting a downturn in the market.
- A major riparian zone research project covering over 400 ha was surveyed.
- A workshop was held to initiate a new series of spacing trials.

### Alex Fraser Research Forest

- Nine new research projects were initiated.
- Road upgrading continues to bring roads predating the Research Forest into compliance with the Forest Practices Code (some of this funded under the FRBC Watershed Restoration Program).
- 3.5 km of new roads were constructed, and three cutblocks were harvested to control mountain pine beetle infestations.
- A Geographic Information System was implemented and in-house capability is being developed for querying and reporting on map-based analyses.
- Development of significant demonstration projects for silviculture systems, mule deer winter range and forest health issues continues.

### PLANS FOR 1998–99

- Submit Working Plans for the Knife Creek Block (AFRF) and the Woodlot.
- Conduct inventories for timber and other values.
- Plan for the construction of a teaching and office facility (AFRF).
- Plan and schedule renovations at Loon Lake (MKRF).

#### **SANDERS, Peter**

B.S.F., M.F., R.P.F.  
Director

University Research Forests  
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#### **POWER, Cheryl**

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Malcolm Knapp Research Forest,  
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#### **DAY, Ken**

B.Sc.F., R.P.F.

Manager

Alex Fraser Research Forest  
Williams Lake  
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#### **TRETHEWEY, Claire**

R.P.F., R.P.Bio.

Research Forester

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Williams Lake  
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**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.**

- Chair, BC Tree Improvement Council Coastal Technical Advisory Cttee.
- Liaison Member, Pacific Northwest Tree Improvement Research Cooperative.

#### **ALILA, Y.**

- Vice President, Canadian Water Resources Association (CWRA), B.C. Branch.
- Co-Program Director and Editor, CWRA 1998 Annual Conference on Mountains to Sea: Human Interaction with the Hydrologic Cycle.

#### **AVRAMIDIS, S.**

- Member, Organizing Cttee., IDS '98 International Drying Symp., Thessaloniki, Greece.
- Member, SCBC Review Cttee., Forest Products Program.
- Member, Forest Products Society Wood Physics & Wood Drying Technical Interest Groups.
- Member, IUFRO Working Party on Wood Drying, S5-04.06.
- Member, European Commission FAIR Forestry-Wood Chain Review Cttee.
- Member, Conference Panel, 3<sup>rd</sup> International Conference on the Development of Wood Science/Technol. & Forestry, Belgrade, Yugoslavia.
- Program Chair, Wood Physics & Drying Session, 51<sup>st</sup> Forest Products Society Annual Meeting, Vancouver, B.C.

#### **BALLARD, T.**

- Member, ABCPF Forest Soils Subcttee.

#### **BARRETT, J.D.**

- Vice President, Society of Wood Science and Technology.
- Chair, Local Organizing Cttee. Forest Products Society Annual Meeting.
- Chair, CSA 086 Sawm Lumber Cttee. and Member, CSA Main Cttee.
- Chair, ISO TC165 WG5 Characteristic Values Cttee.

#### **BINKLEY, C.S.**

- Member, Board of Directors: FERIC; Forintek Canada Corp.; West Fraser Timber Ltd.

- Chair, AUFSC Dean's Cttee.
- Member, Provincial Forest Sector Strategy Cttee.
- Member, Sustainable Forest Management Network of Centres of Excellence Research Advisory Council.
- Member, BC Forest Research Advisory Cttee.
- Member, Federal Forest Sector Advisory Cttee.
- Member, Management Cttee., Nelson Forests Joint Venture.
- Member, Advisory Board Ecotrust Inc.

#### **BREUIL, C.**

- Representative, European Community Program for research in the field of forestry.
- Member, Technical Advisory Cttee., Forintek Canada Corp.
- Member, NSERC Advisory Cttee., University-Industry Grants.

#### **BUNNELL, F.L.**

- **Bill Young Award** for Excellence in Integrated Resource Management, Association of BC Professional Foresters and Association of Professional Biologists, 1998.
- **O.C. Wallmo Award** for Excellence in Research on Integrated Forest-Wildlife Issues, the Wildlife Society.
- Member, Steering Cttee., Enhanced Forest Management Pilot Program.
- Member, Spotted Owl Recovery Implementation Cttee.

#### **CHANWAY, C.**

- Member, Advisory Board, 8<sup>th</sup> International Symposium on Microbial Ecology, Halifax, 1998.
- Member, Editorial Board, Canadian Journal of Microbiology (Microbial Ecology Section).

#### **COHEN, D.H.**

- Member, Jury for Plenary Session on Forest Products Marketing (June 1997).
- Deputy Director, IUFRO Forest Products Marketing Group.
- Member, FRBC Value-Added Cttee.
- Chair, Organizing Cttee., IUFRO Group 5.6 Meeting in 1997.

## **OFFICES, AWARDS AND DISTINCTIONS**

## OFFICES, AWARDS AND DISTINCTIONS

### **DRISCOLL, H.**

- Treasurer, Canadian Institute of Forestry, Vancouver Section.

### **FANNIN, R.J.**

- **1998 UBC Killam Teaching Award.**
- **1998 International Geosynthetics Society Award** for research contributions on reinforced soil (1994-1998).
- Associate Editor, Canadian Geotechnical Journal.
- Chair-Elect, Geosynthetics Division, Canadian Geotechnical Society.
- Member, Board of Directors, Institute of Forest Engineering of BC (IFEBC).
- Reviewer, Professional Engineers Ontario, Geotechnical Engineering Exam.

### **FELLER, M.C.**

- Member, B.C. Medical Association Environmental Health Cttee.
- Member, 2<sup>nd</sup> International Wildland Fire Symposium Steering Cttee.

### **GUY, R.D.**

- Member, Multi-Species Initial Spacing Trial.
- Member, NSERC Grant Selection Cttee. 03 (Plant Biology and Food Science).
- Chair, Forestry Grant Selection Cttee., SCBC/FRBC.
- Member, Local Organizing Cttee. for 1997 Joint Meeting of the American Society of Plant Physiologists and the Canadian Society of Plant Physiologists.

### **HALEY, D.**

- Chair, Minister's Advisory Cttee. on Community Forest Tenure.
- Member, Social Science and Economic Steering Cttee., Sustainable Forest Management Network of Centres of Excellence.
- Member, SCBC/FRBC Advisory Cttee.

### **HINCH, S.G.**

- **Finalist** for "Best Paper of the Year" in the J. Trans. Amer. Fish. Soc.

### **KIMMINS, J.P.**

- Member, Technical Advisory Cttee. on Certification, Canadian Standards Assoc.
- Associate Editor, Environmental Reviews.
- Chair, Expert Panel, Forest Ecosystems Branch, Saskatchewan Ministry Environment and Resources Management.

- Adjunct Professor, College of Forest Resources and Environmental Sciences, Forestry University of Nanjing, PR China.
- Member, Reserves Acquisition and Fund-raising Cttee., Denman Island Conservancy.
- Member, Scientific Advisory Board, Mistik Management, Meadow Lake, Saskatchewan.

### **KLINKA, K.**

- Chair, IUFRO SI.02-06.
- Deputy Chair, IUFRO SI.01-00.

### **KOZAK, R.A.**

- Member, Wood Products Quality Council of Canada.
- Member, BC Centre for Wood Products Design Steering Cttee.
- Member, International Value-Added Wood Products Conference Organizing Cttee.

### **LAM, F.**

- Member, Canadian Wood Council Cttee. on Objective Based Code for Wood Frame Construction.
- Member, CSA086 Subcommittees. on Sawn Lumber and General Design and Objective Based Code for Wood Frame Construction.

### **LeMAY, V.M.**

- Chair, CIF Measurements Subcommittee. and Member of Council, Vancouver Section.
- Co-Chair, IUFRO 4.02 Working Group.
- Member, FRBC Inventory Group.
- Member, Stand Management Cooperative Policy Cttee. (western U.S. and B.C.).
- Member, Canadian Forest Inventory Cttee., Mensuration Subcommittee.
- Member, B.C. Forest Productivity Council.
- Member, CSA Scaling Cttee.

### **LUYMES, D.**

- Invited Team Leader, Brentwood Design Charrette.

### **MANESS, T.**

- Member, European Network for Advanced Wood Processing and Engineering Education, EUROLIGNA.
- Member, Organizing Cttee., FPS Annual Meeting.
- Chair, Industrial Engineering Working Group, IUFRO.
- Member, Forest Products Research Network Forum.



**MARSHALL, P.L.**

- Chair, CIF Forest Management Working Group.
- Member, Board of Directors, SIBC.
- Member, Canadian Forestry Accreditation Board.
- Member, ABCPF Board of Examiners.
- Member, TAC, B.C. Forest Productivity Councils.
- Member, SCBC/FRBC Growth and Yield Grant Review Cttee.
- Member, Steering Cttee., Inland Northwest Growth and Yield Cooperative.
- Member, Silviculture Technical Advisory Cttee., Stand Management Cooperative.
- Member, Monitoring Task Force, BCMoF.

**MARTIN, K.**

- Symposium Organizer and Convenor, the Society of Conservation Biologists' Annual Meeting, Victoria, June 1997.
- Member, Scientific Referee Panel, FRBC Sensitive Species Research Cttee.
- Associate Editor of the AUK.
- Vice President, Society for Canadian Ornithologists.
- Canadian Representative to IUCN/ICBP Specialist Group for Galliformes Cttee.
- Member, Scientific Review Panel, Wildlife Habitat Canada Research Advisory Cttee.
- Member, Scientific Referee, Endangered Species Recovery Fund.

**McLEAN, J.A.**

- Member, BCSC Forestry Cttee.
- Co-Chair, SCBC/FRBC Pest Management Review Cttee.
- Member, Forest Health Cttee., BCMoF.

**MURTHA, P.A.**

- Co-Chair, Remote Sensing Strategy Cttee., BCMELP.
- Liaison Officer, Canadian Remote Sensing Society and American Society of Photogrammetry and Remote Sensing.

**NAMKOONG, G.**

- Elected Member, Korean Academy of Science and Technology.
- Member, Royal Swedish Academy of Agriculture and Forestry.

- Member, Panel of Experts, UNFAO.
- Member, Technical Advisory, CIFOR.
- Board of Trustees, International Plant Genetics Research Institute.
- Member, SCBC/FRBC Scientific Review Panel, Genetics.
- Member, Technical Advisory Council, DANIDA.

**NELSON, J.D.**

- Member, Board of Directors, IFEBEC.
- Member, Curriculum Cttee., IFEBEC.
- Member, FERIC Forest Engineering Advisory Cttee.
- Chair, Forest Harvesting Academic Standards Cttee., ABCPF.
- Member, Land-Use Planning Peer Review Cttee., SCBC/FRBC.
- Member, TELSA Technical Cttee., ESSA Technologies.
- Member, ATLAS/SIMFOR Steering Cttee., Nelson Region.

**PASZNER, L.**

- Member, Expert Council on Utilization of Vegetal Materials, UNESCO.

**PRESCOTT, C.**

- Associate Editor, Canadian Journal of Forest Research.
- Member, Great Scholarship Cttee., SCBC.

**PRION, H.G.L.**

- University Representative, Structural Consultants of BC Steel Frame Cttee.
- Member, Subcttees. on Fasteners and Seismic Design (Limit States Design of Timber Structures Code).
- Member, Objective Based Design of Wood Buildings Cttee.

**RICHARDSON, J.S.**

- Member, Biodiversity Research Council of BC.
- Member, SCBC/FRBC Technical Review Cttee.
- Scientific Advisor to the Long Beach Model Forest.
- Scientific Advisor to West Vancouver Council and British Pacific Properties on Tailed Frog Conservation.

## OFFICES, AWARDS AND DISTINCTIONS

## OFFICES, AWARDS AND DISTINCTIONS

### **RITLAND, K.**

- Associate Editor, American Naturalist.
- Associate Editor, Canadian Journal of Botany.
- Member, FRBC Inventory Methodology Research Grant Council.

### **RUDDICK, J.N.R.**

- Head, Canadian Delegation, ISO TC165 Task Force.
- Reviewer, USDA Grant Proposal.
- President, International Research Group on Wood Preservation.
- Vice Chair, CSA Wood Preservation Technical Cttee.
- Member, Executive Board, Canadian Wood Preservation Association.
- Member, Executive Cttee., American Wood Preservers Association.
- Member, Planning Cttee. for Annual Meeting IRG-28 1997.
- ISO 9002, Member for Western Canada.

### **SADDLER, J.N.**

- Member, Bioenergy Advisory Board, Natural Resources Canada.
- Member, Biotechnology for the Forest Industries Network.
- Member, Wood Residue Utilization Cttee., BCMELP.

### **SALCUDEAN, S.E.**

- **Killam Research Fellowship** for Sabbatical Leave (September 1996/August 1997).
- **Canadian Institute of Advanced Research Fellowship** for Teaching Relief (1997/98).

### **SANDERS, P.**

- Member, Seymour Demonstration Forest Advisory Cttee.
- Executive Member, Federation of B.C. Woodlot Associations.
- Member, Maple Ridge Agriculture Sector Subcttee.
- First Vice-President, Canadian Federation of Woodlot Owners.

### **SHEPPARD, S.R.J.**

- **Yolo Basin Foundation Service Award** for services to Visitor Centre Development and Wetland Restoration (1993-1997), Davis, California.
- Chair, Yolo Basin Foundation Board of Directors, Visitor Centre Subcttee.

### **SIDLE, R.**

- Associate Editor (Charter), Journal of Forest Research, Japanese Forestry Society.
- Deputy Chair, Working Party on Shelterbelts, IUFRO.
- Chair and Organizer, Forest Hydrology Cttee., Canadian Geophysical Union.
- Member, International Affairs Cttee., American Water Resources Association.
- Coordinator, Symposium on "Preferential Flow" for 1999 SSSA Meeting, Salt Lake City, UT.
- Member, Erosion and Sedimentation Cttee., American Geophysical Union.

### **TAIT, D.E.N.**

- Member, Board of Directors Wonder Tree Education Society.

### **TINDALL, D.B.**

- Reviewer, Social Science and Humanities Research Council.
- Member, SCBC/FRBC Community Research Proposal Review Cttee.

### **VAN KOOTEN, G.C.**

- Director, Western Agricultural Economics Association.
- Associate Director, FEPA Research Unit, UBC.
- Member, Editorial Board, Journal of Agricultural and Resource Economics.

### **WATTS, S.B.**

- Member, ABCPF Biometry Academic Standards Cttee.

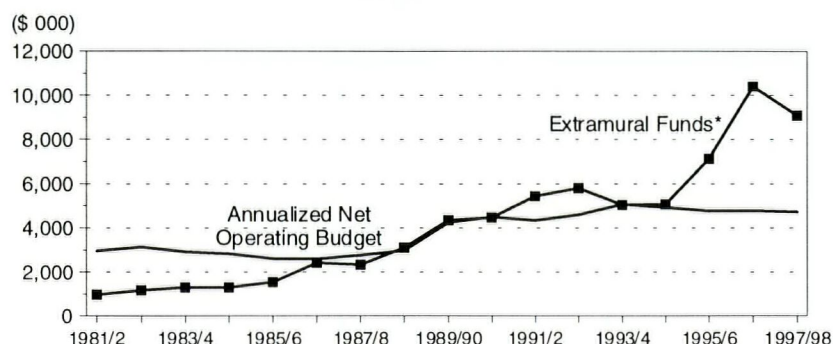
### **WEETMAN, G.F.**

- **ABCPF 1997 Distinguished Forester Award.**
- Chair, Board of Examiners, ABCPF.
- Member, Alberta Forest Management Science Council.
- Member, ABCPF Council.



## EXTRAMURAL FUNDING & SPONSORED RESEARCH

**E**XTRAMURAL funding in 1997/98 totalled \$9,089,000, or approximately twice the level of funding received from the core operating budget. Although extramural support is down by 12.7% relative to the peak value achieved in 1996/97, it is still well above the level attained in any other previous fiscal year. We obtain support from a variety of provincial, national, international and private sources (see table below), which vary from year to year. The current decrease largely reflects a reduced reliance on federal granting agencies, from \$3,046,000 in 1996/97 to \$2,112,000 in 1997/98. We expect a further decrease in total extramural funding in 1998/99 because of the cancellation of the fall 1997 Forest Renewal BC (FRBC) research grants competition. Future activity will depend in part on the recent announcement of increased federal spending in support of NSERC programs, as well as new programs administered by the Canadian Foundation for Innovation.



Extramural Funds per Faculty Member in \$000**	37	57	89	118	136	120	188	265
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\*Not including Forestry Continuing Studies Network funding, and from 1996/97 onwards, not including endowment income.

\*\*Calculated from operating budget supported Faculty members.

### Operating budget, extramural funds and research activity 1981/82 – 1997/98

Funding obtained from provincial sources remained relatively static at \$5,769,000, with Forest Renewal BC accounting for over 50% of our extramural dollars. We had 63 active research projects wholly funded by FRBC in 1997/98. Forest Renewal BC also supports

#### Extramural funding sources 1997/98

Source	\$000	%
<b>Federal</b>		
NSERC/SSHRC	1,271	14.0
NRC/CFS	333	3.7
Other	508	5.6
<b>Subtotal</b>	<b>2,112</b>	<b>24.3</b>
<b>Provincial</b>		
FRBC/SCBC	4,751	52.3
MoF	870	9.5
MoELP	143	1.5
Other	5	0.1
<b>Subtotal</b>	<b>5,769</b>	<b>63.4</b>
<b>Private</b>		
Industry	745	8.2
Other	71	0.8
<b>Subtotal</b>	<b>816</b>	<b>9.0</b>
<b>International</b>	392	4.3
<b>Total</b>	<b>9,089</b>	<b>100</b>

the Faculty of Forestry with endowed chairs in Applied Conservation Biology (two), Forest Hydrology (two, both of which are joint with the Department of Geography), Forest Management and Silviculture. Funding from private sources (industry and other) decreased from \$1,198,000 to \$816,000, and now accounts for 9% of our total extramural funding. Funding from international sources increased by 14% to \$392,000, or 4.3% of funding from external sources. Although research supported by NSERC dropped from 19.2% to approximately 14% of our extramural funding in 1997/98, the Faculty of Forestry still garners a remarkable share of this agency's national investment in targeted research.

We also receive valuable research support from endowments provided by:

- Forest Renewal BC (for the Centre for Advanced Wood Processing);
- Weyerhaeuser and MacMillan Bloedel (for the Chair in Forest Products Biotechnology);
- the Imajo Cedar Management Fund;
- the Kathleen and Sheldon Rothwell Fund for forestry research;
- the Namkoong Family Teaching Exchange and Research Endowment; and
- the Burgess-Lane Lectureship and Schaffer Lectureship endowments.

## EXTRAMURAL FUNDING & SPONSORED RESEARCH

The following list reflects funded research activities between April 1, 1997 and March 31, 1998.

### S.N. Aitken

- Junior Industrial Research Chair in population genetics – *BCMoF/NSERC/Industry/Other* \$172,163
- Genecology and natural selection dynamics in the Sitka x interior spruce introgression zone – *FRBC* \$41,207
- Physiological genetics of coastal Douglas-fir genotypes exhibiting high and low stability – *FRBC* \$32,221
- Genetic relationships among wood quality, growth rates and seedling physiology in interior lodgepole pine – *FRBC* \$68,062

### Y. Alila

- Watershed modeling to assess peak flow assumptions in IWAP – *BCMoF* \$53,514
- Development of a regional frequency approach for estimating low-flows: A B.C. case study – *NSERC* \$17,000
- A regional frequency approach for estimating design floods in British Columbia *FRBC* \$92,270

### S. Avramidis

- Surface emission coefficient of wood in the hygroscopic range – *NSERC* \$21,300
- Manipulation of wood composite structure to enhance performance – *NSERC* \$78,150

### T.M. Ballard

- Forest floor displacement – *FRBC* \$40,000
- Revegetation of natural landslides *FRBC* \$18,270

### J.D. Barrett

- Engineering properties of B.C. species used in Japanese post and beam housing *FRBC/SCBC* \$129,988
- Lot properties of Douglas-fir, hem-fir and spruce-pine-fir dimension lumber *FRBC* \$71,610
- Forest Products Society 'value-added wood products' industry focus session *FRBC* \$58,275
- Reliability of wood-based materials *NSERC* \$17,700

### C.S. Binkley

- Status of forestry and forest products research capacity in Canada and trends in research expenditures since 1980 *NRC* \$50,000

- Application of financial asset pricing models to timberland valuation – *Hancock Timber Resource Group* \$14,082

### C. Breuil

- Junior Chair in Forest Products Biotechnology – *NSERC/Industry* \$57,311
- Sustainable wood: new clean technology methods for the control of fungal stains in wood – *NRC* \$10,280
- Genetic diversity of sapstaining fungi in lumber and logs – *NRC* \$12,000
- Fate and treatment of sterols, steryl esters and waxes in trees, pulps and process effluents – *NSERC* \$89,680
- Sapstain in Canadian lumber: the causal fungi, their mechanism of pigmentation and future control methods – *NSERC* \$39,625
- Developing DNA fingerprinting for identifying specific wood-inhibiting fungi *CFS/NSERC/Forintek* \$58,600
- Identifying the characterizing key enzymes used by sapstaining fungi to grow on wood *NSERC* \$18,000
- Microorganism and enzyme treatments for reducing extractives present in wood chips or pulps – *Noranda/Raisio Chemicals Canada* \$18,000

### F.L. Bunnell

- Taxonomy and biogeography of the tailed frog – *BCMoE* \$9,000
- Effects of forestry on grizzly bear habitat use, population growth, and population persistence – *FRBC* \$88,450
- The influence of forest harvesting on landscape patterns and wildlife habitat in the Nelson Forest Region: SIMFOR case study analyses – *Interior Lumber Manufacturers' Association* \$65,000
- Sustainable forest management planning and practices theme – *NCE* \$51,550
- Persistence of forest-dependent vertebrates in managed forests – *FRBC* \$103,611
- Forest diversity program, habitat conservation plan; Fraser River Basin sustainable management plan – *Environ. Can.* \$13,500
- Contribution 2 to taxonomy and biogeography of the tailed frog – *Columbia Basin Fish and Wildlife* \$5,000
- Late-successional species and cavity nesters *Lignum Sales Ltd.* \$4,600



- Vertebrate relations to late successional stages in coastal western hemlock forests  
*MacMillan Bloedel* \$10,400

### C.P. Chanway

- Soil microorganisms for validating field trials of genetically engineered micro-organisms – *Can. Inst. of Biotech.* \$21,910
- Conifer root associated bacteria: Diversity and influence on seedling growth and competition – *NSERC* \$25,000

### D.H. Cohen

- Assessing the impact of the entry of Chilean radiata pine moulding into the North American market on growth of the B.C. moulding production  
*Weyerhaeuser Canada* \$5,000
- Technology for full exploitation of wood  
*Int'l Environ. Inst.* \$45,803
- B.C. forest industry workshop on current international marketing research initiatives for value-added wood – *FRBC* \$40,549
- Market research in forest products  
*Various companies* \$500

### Y. El-Kassaby

- Adaptation of forest tree populations  
*Pacific Forest Products* \$30,000
- Population variation in adaptive attributes in Sitka alder  
*Pacific Forest Products* \$20,000

### S.C. Ellis

- Influence of initial spacing on wood quality of western hemlock, western red cedar and Douglas-fir – *FRBC* \$30,000
- Characterization of the wood quality of lodgepole pine resources with respect to wood composites – *NSERC* \$20,000
- Development of practical wood working course – *TLEF* \$20,000

### R.J. Fannin

- Geosynthetics for soil stabilization  
*FRBC* \$37,530
- Slope stability analysis – *FRBC* \$18,989
- Design and performance of geotextile filters – *NSERC* \$23,700

### M.C. Feller

- The response of Engelmann spruce sub-alpine fir forest ecosystems to logging-effects of harvesting on nutrient budgets  
*FRBC* \$47,000

- Fire history and ecology of B.C. interior Douglas-fir forests – *FRBC* \$22,234
- Influence of riparian buffer strip width on streamwater quality – *Student Summer Works/Career Placement* \$5,000
- Effects of different harvesting systems on organic matter decomposition and nutrient dynamics in coastal B.C. montane forests  
*FRBC* \$10,000

### S.M. Glenn

- Preparation of new field course to integrate social and natural sciences – *TLEF* \$43,167
- Developing safe learning environments  
*TLEF* \$9,500

### R.D. Guy

- Seasonal ecophysiology of western redcedar under a red alder canopy: sunfleck use efficiency and rhodoxanthin accumulation  
*FRBC* \$1,900
- Alternative thawing regimes and associated handling procedures for freezer-stored plantation stock – *FRBC* \$65,680
- Nitrate and ammonium uptake in forest seedlings — preferences and stress interactions (co-investigator) – *FRBC* \$79,644
- Comparative physiology of stress acclimation in conifers: water-use efficiency and root respiration – *NSERC* \$35,715

### S.G. Hinch

- Responses of cutthroat trout and habitat to riparian logging – *MoELP* \$40,000
- Energetics of anadromous fish  
*NSERC* \$18,000
- Effects of habitat and nutrients on side channel coho – *FRBC* \$90,000
- Responses of rainbow trout to riparian logging – *FRBC* \$90,500

### G. Hoberg

- Limits on Canada's domestic policy sovereignty – *Hampton* \$22,500
- Forest community adjustment  
*UBC-HSS* \$1,400
- Equality, security, and Community (19 co-investigators) – *SSHRC* \$1.8 million

### J.P. Kimmins

- Assessing the controls on soil-N cycling rates and microbial dynamics in CHW ecosystems to develop a computer-based soil model applicable to forest management  
*FRBC* \$49,228

## EXTRAMURAL FUNDING & SPONSORED RESEARCH

## EXTRAMURAL FUNDING & SPONSORED RESEARCH

- Sustaining post fire white spruce forests in Saskatchewan's midboreal ecoregion  
*Mistik Management Ltd.* \$53,380
- Modelling salal and cedar – *FRBC* \$44,925
- Computer-based decision support tools for biosolids recycling/fertilization in forests  
*FRBC* \$54,000
- A decision-support system for evaluation of mixedwood landscape sustainability  
*FRBC* \$98,590
- Computer-based education, extension and gaming tools to support the objectives of FRBC – *FRBC* \$106,827
- Assessment of the sustainability of forest ecosystems and evaluation of indicators of sustainable forest management  
*FRBC* \$190,000
- Calibration, verification, and validation of the stand-level FORECAST and the spatially-explicit, individual tree FORSEE forest ecosystem management models  
*NSERC* \$30,400
- Modelling the effect of natural disturbance and forest management practices on the long-term sustainability of forest ecosystems  
*NSERC* \$90,500
- Development of computer-assisted learning tools in forest ecology – *TLEF* \$20,000
- Data entry, data analysis, and report writing for aspen site index research  
*BCMof* \$17,000
- Trembling aspen site productivity  
*BCMof* \$83,610
- Computer support system for making regeneration cutting and tree species selection in B.C.'s forests – *FRBC* \$65,000
- High elevation site – productivity study  
*FRBC* \$90,000
- Growth-light relationships in tree species  
*NSERC* \$14,700

### F. Lam

- Active control of vibration in wood machining for wood recovery – *NRC* \$30,500
- Performance of floor panel  
*Ainsworth Lumber* \$12,000
- Research and development on nail plate reinforced beams – *Landmark Truss & Lumber Inc.* \$22,093
- Shear strength of structural composite lumber – *Trus Joist MacMillan* \$7,500
- Lateral resistance of wood-based shear wall  
*Structural Board Assoc.* \$20,833

### V.M. LeMay

- Examination of diameter growth models modified for FVSBC – *BCMof* \$38,695
- Evaluation of sampling schemes for quantifying morphological attributes of hybrid spruce crowns – *FRBC* \$28,393
- Efficient methods to localize volume equations – *NSERC* \$14,000

### T. Maness

- Automated production and quality control system for value-added wood products manufacturing – *NSERC* \$13,000
- Evaluation of chop saw optimization and operating strategies in the B.C. value-added sector – *FRBC* \$50,000
- Wood products quality control council of B.C. – *FRBC* \$202,608
- Kiln drying certificate program  
*FRBC* \$22,313
- Workshop on high value recovery manufacturing – *FRBC* \$133,579
- Real time quality control systems  
*Canadian Forest Products* \$8,190

### P.L. Marshall

- Developing a design for collecting data for calibrating the prognosis model  
*BCMof* \$4,215

### K. Klinka

- The V.J. Krajina/B.C. Forest Service Chair in silvics and silviculture  
*BCMof* \$103,906
- General research in silvics and dendrochronology – *B.A. Blackwell & Assoc.* \$20,000
- Development of height-age and site index function for western larch – *BCMof* \$3,000
- Non-forested ecosystems of Coastal B.C./Mountain Hemlock Zone Report  
*BCMof* \$24,000
- Inventory of western hemlock root biomass in closed canopy stands – *BCMof* \$15,000
- TFL37 site index - BEC map unit correlations – *BCMof* \$10,000
- TFL37 operational inventory program, growth and yield – *BCMof* \$40,500
- Ecology and management of cedar-cypress-hemlock forests in coastal B.C.  
*BCMof* \$129,863
- Regeneration and productivity of western larch – *Crestbrook Forest/NSERC/Weyerhaeuser Canada* \$9,000
- Black spruce site productivity  
*BCMof* \$143,000



- Review of the literature in support of a revision to site index  
*Pacific Forest Products* \$6,000
- Growth of uneven-aged interior Douglas-fir stands – *FRBC* \$54,011
- Early tree height growth in mixed-species stands – *FRBC* \$25,000

#### **K. Martin**

- Vancouver Island white-tailed ptarmigan inventory – *BCMoeLP* \$99,000
- Ecology of alpine and forest birds  
*NSERC* \$20,000
- Songbird biodiversity and vegetation management  
*BCCF/Environ. Can.* \$44,000

#### **J.A. McLean**

- Development of the forest entomology image library – *TLEF* \$10,047

#### **S.J. Mitchell**

- Retrospective study of edge windthrow and modelling of windfirming prescriptions  
*FRBC* \$80,000

#### **P.A. Murtha**

- Radar Imaging Natural Systems (RAINS)  
*RADARSAT* \$8,816

#### **L. Nagel**

- Developing new modules for resource conservation field course – *TLEF* \$20,453

#### **G. Namkoong**

- Genecology of Douglas-fir in the sub-maritime seed zone: testing seed transfer guidelines – *BCMof* \$5,750
- Development decision strategy on priorities for conservation and use of forest genetic resources – *CIDA* \$39,900
- Managing forest tree genetic variance for climatic change — field and DNA marker-based testing of a novel system  
*FRBC* \$122,732
- Impact of forest operations on genetic diversity of understorey species  
*FRBC* \$45,000
- Rapid breeding for tracheid characters in interior spruce – *FRBC* \$36,015
- Genetic effects on fiber and structural wood properties in western hemlock  
*FRBC* \$63,315

- Utilization and management of red alder genetic resources in British Columbia  
*FRBC* \$60,000
- Resource use efficiency response in varying environments and its role in maintenance of genetic variance in fitness related traits in lodgepole pine – *FRBC* \$62,500

#### **J.D. Nelson**

- Consequences of alternative management  
*NCE* \$16,075
- The landscape project – *FRBC* \$199,466
- Forest management impacts on hydrological process in watersheds: A modeling study  
*FRBC* \$24,317
- Decision support systems for forest land use planning – *NSERC* \$18,000

#### **L. Paszner**

- Organic solvent-assisted totally chlorine free bleaching of high-yield chemical pulps  
*NSERC* \$19,600

#### **C.E. Prescott**

- Fertilization and vegetation control for improving conifer regeneration in coastal British Columbia – *FRBC* \$162,889
- Literature review and detailed working plan relating to spatial effects of red alder on light and on nutrient availability and options for management of red alder-conifer mixtures – *BCMof* \$19,950
- The influence of soil fauna on ecosystem processes in forests of British Columbia  
*FRBC* \$61,433
- Impact of single conifer species plantations on soil biodiversity and processes  
*FRBC* \$30,722
- Comparative ecology of ericaceous shrubs  
*FRBC* \$13,656
- Long-term effects of salal removal  
*FRBC* \$30,884
- Problem analysis and screening trials  
*FRBC* \$21,315
- Coarse woody debris dynamics in wet and dry ESSF forests – *FRBC* \$1,200
- Partial cutting systems research in the interior cedar-hemlock zone in root disease infected stands — litter input and decomposition component – *FRBC* \$7,885
- Predicting rates of organic matter decomposition in forests and silvicultural systems in B.C. – *FRBC* \$42,000

## EXTRAMURAL FUNDING & SPONSORED RESEARCH

## EXTRAMURAL FUNDING & SPONSORED RESEARCH

- Influence of species mixtures on litter decomposition in forests of British Columbia  
**FRBC \$7,875**

### H.G.L. Prion

- Innovative connections for prefabricated heavy timber connection – **FRBC \$74,000**

### J.S. Richardson

- Tiger salamanders: Effects of cattle grazing, range condition and breeding pond characteristics on the habitat use and population ecology of tiger salamanders (*Ambystoma tigrinum*) in the south Okanagan  
**BCMoeLP \$30,000**
- Stream benthos responses to riparian management – **FRBC \$118,617**
- Ecology of tailed frogs and the effects of forest practices (co-investigator)  
**FRBC \$206,649**

### K. Ritland

- Senior Industrial Research Chair in population genetics – **BCMoeF/NSERC/Industry/Other \$182,588**
- Molecular population genetics of *Mimulus*  
**NSERC \$60,800**
- Heritabilities in natural populations of four B.C. conifer species – **FRBC \$57,750**

### J.N.R. Ruddick

- Industrial Research Chair in wood preservation – **NSERC/various companies \$35,882**
- Wood preservation — factors impacting on the performance of wood preserving chemicals – **Sunpine Forest Products/Lonza Inc./Donation \$59,985**

### J.N. Saddler

- Senior Chair in Forest Products Biotechnology – **NSERC/Industry \$51,509**
- Ethanol Workshop – **BCMoeLP \$4,600**
- Modification of morphological and optical properties of mechanical pulp fibers using enzymes – **MacMillan Bloedel \$67,500**
- Bioconversion of softwoods to ethanol  
**NRC \$160,803**
- Steam explosion of softwoods for ethanol production – **US Dept. of Energy \$130,273**
- Immunoassays to monitor in-mill and waste water streams – **NCE \$31,000**
- The use of enzymes to elucidate the structure and to modify native and recycled paper  
**CFS/NSERC/Weyerhaeuser Canada \$95,500**

- Biotechnology for enhancing pulp properties  
**MacMillan Bloedel \$10,000**
- Enzymatic removal of colour and colour precursors from thermomechanical pulps derived from Douglas-fir and western red cedar – **CFS/NSERC \$46,000**
- Enzymatic and microbial treatment  
**NCE \$55,000**
- Analysis of pulp hydrolysate  
**Alcell Technologies \$5,000**

### S.E. Salcudean

- Medical robots – **IRIS NCE \$45,000**
- Haptic interfaces – **IRIS NCE \$37,000**
- Partial autonomy in mobile machines  
**IRIS NCE \$42,000**
- Controller and haptic interface design for transparent teleoperation  
**NSERC \$31,000**

### D.E.N. Tait

- Sustainable integration – **NCE \$30,000**

### D.B. Tindall

- Measurement of forest values and attitudes toward forest management – **FRBC \$72,230**
- Gender inequality and alternative opportunity structures for affecting social change: Women in the conservation movement and forestry-based communities  
**SSHRC \$20,000**

### B. van der Kamp

- Management of Armillaria root disease by inducing quiescence – **FRBC \$40,000**

### G.C. van Kooten

- The economics of climate change and the role of forestry: The case of Canada  
**SSHRC \$17,000**

### G.F. Weetman

- A comprehensive study of western hemlock nutrition – **FRBC \$124,805**
- Genotypes of western hemlock  
**FRBC \$40,000**
- Criteria for sustainable management  
**NCE \$40,000**
- Forest nutrition and fertilization studies  
**NSERC/Western Forest Products \$26,286**
- Ecological niche for seedling establishment in high elevation forests in wet subzones of the ESSF – **NSERC \$15,000**



**T**HIS list includes documents published between April 1, 1997 and March 31, 1998. Names appearing in **bold-face** type are those of UBC Forestry Faculty members. For further information on any of these publications (many of which are available in libraries), please contact the appropriate Faculty member directly.

- Abraham, L., D. Bradshaw, T. Byrne, P.I. Morris, and **C. Breuil**. 1997. Proteinases as potential targets for new generation anti-sapstain chemicals. *For. Prod. J.* 47:57-62.
- Aitken, S.N.** and W.T. Adams. 1997. Spring cold hardiness under strong genetic control in Oregon populations of *Pseudotsuga menziesii* var. *menziesii*. *Can. J. For. Res.* 27(11):1773-1780.
- Avramidis, S.** 1997. Current research on radio frequency/vacuum drying of wood. Pp. 124-139 in 3<sup>rd</sup> Int'l Conf. on the Development of Forestry and Wood Science/Technology, Belgrade, Yugoslavia. Invited Paper.
- Avramidis, S.** 1997. The basics of sorption. Pp. 1-8 in COST Action E8 - Int'l Conf. on Wood Mechanics. Theme: Wood-Water Relations. European Commission, Copenhagen, Denmark. Invited Paper.
- Awadalla, P. and **K. Ritland**. 1997. Micro-satellite variation in *Mimulus* species of contrasting mating systems. *Molecular Biology and Evolution* 14:1023-1034.
- Awadel, Karim, S.K. Lectere, H. Grondey, S.K. Yatch, M.M. Hazhad, and **L. Paszner**. 1998. Changes in H-bonding of cellulose during solvent purification treatment (acetonation). *Holzforschung* 52(1):67-76.
- Backman, Charles A.** 1997. The forest sector of European Russia. *Polar Geography* 21(4):272-296.
- Bent, E. and **C.P. Chanway**. 1997. PGPR-mediated growth promotion effects on lodgepole pine can be inhibited by the presence of a rhizobacterial competitor. Pp. 233-239 in *Proc. 4<sup>th</sup> Int'l Workshop on PGPR*. Sapporo, Japan.
- Biernacki, J.M., **F. Lam**, and **J.D. Barrett**. 1997. Benefits of improved strength and stiffness prediction of Mel and MSR lumber. *For. Prod. J.* 47(11/12):85-91.
- Binkley, C.S.** 1997. A cross-road in the forest: the path to a sustainable forest sector in British Columbia. *BC Studies* 113:39-61.
- Binkley, C.S.** 1997. B.C. needs a smart forest industry. *Vancouver Sun*, December 13.
- Binkley, C.S.** 1997. Preserving nature through intensive plantation forestry: The case for forestland allocation with illustrations from British Columbia. *For. Chron.* 73:553-559.
- Binkley, C.S.** 1998. A cross-road in the forest: the path to a sustainable forest sector in British Columbia. Chapter 33: 15-35 in R. Hayter (ed.), *Troubles in the Rainforest: British Columbia's Forest Economy in Transition*, Canadian Western Geographical Series. Western Geographical Press, Univ. of Victoria, B.C.
- Binkley, C.S.** 1998. Sustainable forestry, the forestry profession and forestry education: some lessons from North America. *J. Sustainable Forestry* 7(1/2):111-126.
- Binkley, C.S.** and O.L. Forgacs. 1998. Status of forest sector research and development in Canada. *Pulp & Paper Canada*, January 1998: 39-42.
- Binkley, C.S.**, M. Apps, R. Dixon, L.-O. Nilsson, and P. Kauppi. 1997. Sequestering carbon in natural forests. *Critical Reviews in Environmental Science and Technology* 27:S23-S45.
- Bunnell, F.L.** 1997. Operational criteria for sustainable forestry: focusing on the essence. *For. Chron.* 73:679-684.
- Bunnell, F.L.** 1998. Evading paralysis by complexity when establishing operational goals for biodiversity. *J. Sust. For.* 7:145-164.
- Bunnell, F.L.** and **A.C. Chan-McLeod**. 1997. Terrestrial vertebrates. Pp. 103-130 in P.K. Schoonmaker, B. von Hagen, and E.C. Wolf (eds.), *The Rain Forests of Home. Profile of a North American Bioregion*. Island Press, Washington, DC.
- Cai, L. and **S. Avramidis**. 1997. Study on the separation of diffusion and surface emission coefficient of wood. *Drying Technol.* 15(5): 1457-1473.

## FACULTY PUBLICATIONS

## FACULTY PUBLICATIONS

- Cai, L., **S. Avramidis**, and A.A. Enayati. 1997. Moisture sorption and movement in Parallam and TimberStrand. Holz als- Roh und Werkstoff 55:365-369.
- Carey, C, and **K. Martin**. 1997. Physiological ecology of incubation of ptarmigan eggs at high and low altitudes. Wildlife Biology 3/4:211-218.
- Chanway, C.P.**, M. Shishido, S. Jungwirth, J. Nairn, J. Markham, G. Xiao, and F.B. Holl. 1997. Second year growth responses of outplanted conifer seedlings inoculated with PGPR. Pp. 172-176 in Proc. 4<sup>th</sup> Int'l Workshop for PGPR, Sapporo, Japan.
- Chen, H.Y.H.** 1997. Interspecific responses of planted seedlings to light availability in interior British Columbia: survival, growth, allometric patterns, and specific leaf area. Can. J. For. Res. 27:1383-1393.
- Chen, H.Y.H.** and **K. Klinka**. 1997. A height-growth model for trembling aspen (*Populus tremuloides* Michx.) in northern British Columbia. Bull. Ecol. Soc. Amer. 78(4):233.
- Chen, H.Y.H.** and **K. Klinka**. 1998. Survival, growth, and allometry of planted western larch (*Larix occidentalis* Nutt.) seedlings in relation to light availability. For. Ecol. Manage. 106:169-179.
- Chen, H.Y.H.**, **K. Klinka**, and R.D. Kabzems. 1998. Height growth and site index models for trembling aspen (*Populus tremuloides* Michx.) in northern British Columbia. For. Ecol. Manage. 103:157-165.
- Christanty, L., **J.P. Kimmins**, and D. Mailly. 1997. "Without bamboo, the land dies" — a conceptual model of the biogeochemical role of bamboo in an Indonesian agroforestry system. For. Ecol. Manage. 91:83-91.
- Cohen, David H.** and Marco A. Durepos. 1997. Technology, markets and products of saw-mills in the maritime provinces. CAWP WP 97-01. Centre for Advanced Wood Processing, UBC, Vancouver, Canada. 26 pp.
- Cohen, David H.** and **R.A. Kozak**. 1997. Research programs in forest products marketing at UBC. Section 3: 159-162 in Proc. IUFRO Working Unit 5.10.00: International Workshop on Forest Products: Value-Added Marketing for Value-Added Forest Products, Tofino, B.C.
- Cohen, David H.**, Stephen Tolnai, and Bill Wilson. 1997. Assessment of BC opportunities in the US moulding market. Working Paper #97.06.01. Can. For. Serv., Victoria, B.C. 30 pp.
- Collins, S.L. and **S.M. Glenn**. 1997. Effects of organismal and distance scaling on analysis of species distribution and abundance. Ecological Applications 7:543-551
- Collins, S.L. and **S.M. Glenn**. 1997. Intermediate disturbance and its relationship to within- and between-patch dynamics. N.Z. J. Ecol. 21(1):103-110.
- Cox, S.P. and **S.G. Hinch**. 1997. Changes in size at maturity of Fraser River sockeye salmon (*Oncorhynchus nerka*) (1952-1993) and associations with temperature. Can. J. Fish. Aquat. Sci. 54:1159-1165.
- Daniels, L.D., J. Dobry, **K. Klinka**, and **M.C. Feller**. 1997. Determining year of death of logs and snags of *Thuja plicata* in southwestern coastal British Columbia. Can. J. For. Res. 27:1132-1141.
- Davidson, R. and **Y.A. El-Kassaby**. 1997. Genetic diversity and gene conservation of Pacific silver fir (*Abies amabilis*) on Vancouver Island, British Columbia. Forest Genetics 4:85-98.
- Doyle, Aaron, Brian Elliott, and **David Tindall**. 1997. Framing the forests: corporations, the B.C. forest alliance and the media. Pp. 240-268 in William K. Carroll (ed.), Organizing Dissent. Contemporary Social Movements in Theory and Practice. 2<sup>nd</sup> Edition. Garamond Press: Toronto, Ontario.
- Dubois, J. and **J.N.R. Ruddick**. 1997. Aspects of fungal degradation of quaternary ammonium compounds in liquid culture. Int'l Res. Group Wood Preserv. IRG/WP/97-30160.
- Eagen, R., A. Brisson, and **C. Breuil**. 1997. The sapstaining fungus *Ophiostoma piceae* synthesizes different types of melanin in different growth media. Can. J. Microbiol. 43:592-595.
- El-Kassaby, Y.A.** 1997. Clonal-row and random seed orchard designs: comparison of mating pattern and seed yield. Pp. 371-373 in Proc. 24<sup>th</sup> South. For. Tree Improve. Conf., Orlando, Florida.
- El-Kassaby, Y.A.** and G.R. Askew. 1998. Seed orchards and their genetics. Chapter 6: 102-111 in A.K. Mandal and G.L. Gibson (eds.), Forest Genetics and Tree Breeding. CBS Publishers and Distributors. 4596/1 a, 11-Daryaganj, New Delhi-110002.



- El-Kassaby, Y.A. and K. Ritland.** 1998. Isozymes: techniques, interpretation and applications to forest genetics. Chapter 12: 213-226 in A.K. Mandal and G.L. Gibson (eds.), *Forest Genetics and Tree Breeding*. CBS Publishers and Distributors. 4596/1 a, 11-Daryaganj, New Delhi-110002.
- Ells, A., E. Bulte, and **G.C. van Kooten.** 1997. Uncertainty and forest land use allocation in British Columbia: vague priorities and imprecise coefficients. *For. Sci.* 43(4):509-20.
- Fannin, R.J.,** A. Fuller, and T. Ersoy. 1997. On the design of geosynthetic reinforced soil structures. Pp. 320-327 in *Proc. 50<sup>th</sup> Canadian Geotechnical Conf., Ottawa, Ontario.*
- Fannin, R.J.,** M.P. Wise, J.M.T. Wilkinson, B. Thomson, and E.D. Hetherington. 1997. Debris flow hazard assessment in British Columbia. Pp. 197-206 in *Proc. 1<sup>st</sup> Int'l Conf. Debris Flow Hazards Mitigation: Mechanics, Prediction and Assessment, San Francisco, California.*
- Feller, M.C.** 1997. Coarse woody debris in forests – an overview of the coarse woody debris study and coarse woody debris in the Sicamous Creek study area forests. Pp. 134-143 in C. Hollstedt and A. Vyse (eds.), *Sicamous Creek Silvicultural Systems Project: Workshop Proc. BCMoF Working Pap. 24/1997.*
- Feller, M.C.** 1997. Influence of forest harvesting on the nutrient status of ESSFWc2 ecosystems. *Ibid* pp. 121-133.
- Feller, M.C.** 1997. Regeneration of Engelmann spruce and subalpine fir from seed in ESSFWc2 forests. *Ibid* pp. 154-159.
- Fons, J., **K. Klinka,** and **H.Y.H. Chen.** 1997. Chemical and biotic properties of the forest floor across a zonal chronosequence in the coastal Western Hemlock Zone of southwestern British Columbia. *Bull. Ecol. Soc. Amer.* 78(4):247.
- Fu, Y.B.,** D. Charlesworth and **G. Namkoong.** 1997. Point estimation and graphical inference of marginal dominance for two viability loci controlling inbreeding depression. *Gen. Res.* 70:143-153.
- Gregg, D.J. and **J.N. Saddler.** 1997. A review of techno-economic modelling methodology for a wood-to-ethanol process. In *Proc. 18<sup>th</sup> Symp. Biotechnology for Fuels and Chemicals.* Appl. Biochem. Biotechnol. 63/65: 609-623.
- Grout, J.A., C.D. Levings, and **J.S. Richardson.** 1997. Decomposition rates of purple loosestrife (*Lythrum salicaria*) and Lyngbyei's sedge (*Carex lyngbyei*) in the Fraser River estuary. *Estuaries* 20:96-102.
- Harrison, Kathryn and **George Hoberg.** 1997. Setting the environmental agenda in Canada and the United States: The cases of dioxin and radon. Pp. 463-487 in Sheila Jasanoff (ed.), *Comparative Science and Technology Policy.* Edward Elgar, Cheltenham, UK.
- Hartley, I. and **P.L. Marshall.** 1997. Modelling forest dynamics in the Mackenzie Basin under a changing climate. Pp. 146-156 in S.J. Cohen (ed.), *Mackenzie Basin Impact Study: Final Report. Partial Proc. 7<sup>th</sup> Biennial AES/DIAND Meeting on North Climate and Mid Study Workshop of the MacKenzie Basin Impact Study, Yellowknife, NWT.*
- He, M., H. Magnusson, **F. Lam,** and **H.G.L. Prion.** 1997. Cyclic performance of perforated wood shear walls with oversize oriented strand board panels. In *Proc. Int'l Council for Building Research Studies and Documentation Working Commission W18-Timber Structures.* Vancouver, Canada CIB-W18/30-15-1. 16 pp.
- Hoberg, George.** 1997. The war of words in the woods. *Vancouver Sun,* July 12.
- Hoberg, George.** 1998. Foresters, trust and civic science: a new role for the profession? *RPF Forum* 5(1):25.
- Hoberg, George** and Edward Morawski. 1997. Policy change through sector intersection: forest and aboriginal policy in Clayoquot Sound. *Can. Public Admin.* 40(3):387-414.
- Holt, R.F. and **K. Martin.** 1997. Landscape modification and patch selection: the demography of two secondary cavity-nesting species colonizing clear-cuts. *Auk* 114:443-455.
- Jahraus, Michael T. and **David H. Cohen.** 1997. An examination of Japanese distribution systems for imported wood products. *Working Paper 97.01 Can. For. Serv., Victoria, B.C.* 91 pp.
- Jiang, Xiao and **J.N.R. Ruddick.** 1997. A comparison of the leaching resistance of diammine-copper complexes and copper

## FACULTY PUBLICATIONS

- carbonate precipitated in wood. *Int'l Res. Group Wood Preserv.* IRG/WP/97-30158.
- Karlman, M., **B. van der Kamp** and J. Witzell. 1997. Susceptibility of *Pinus sylvestris* to the stem rusts of *Pinus contorta* in western Canada. *Scandinavia J. of For. Res.* 12:168-178.
- Kayahara, G.J., **K. Klinka**, and A.C. Schroff. 1997. The relationship of site index to synoptic estimates of soil moisture and nutrients for western redcedar (*Thuja plicata*) in southern coastal British Columbia. *Northw. Sci.* 71:167-173.
- Kimmins, J.P.** 1998. Predicting sustainability of forest bioenergy production in the face of changing paradigms. *Biomass and Bioenergy* 12:201-212.
- Kozak, A.** 1997. Effects of multicollinearity and autocorrelation on the variable-exponent taper functions. *Can. J. For. Res.* 27:619-629.
- Kozak, R.A.** 1997. How specifiers learn about structural materials: A study in value-added marketing. Pp. 115-123 *in* joint Proc. IUFRO Working Unit 5.10.00 and Forest Products Society 50<sup>th</sup> Annual Meeting: Preparing for the 21<sup>st</sup> Century: Value-Added Marketing for Value-Added Wood Products.
- Kozak, R.A.** and **D.H. Cohen.** 1997. Distributor-supplier partnering relationships: A case in trust. *J. Business Research* 39(1):33-38.
- Kozak, R.A.** and **D.H. Cohen.** 1997. How specifiers learn about structural material. *Wood and Fiber Sci.* 29(4):381-396.
- Lam, F., H. Prion,** and M. He. 1997. Lateral resistance of wood based shear walls with oversized sheathing panels. *J. Structural Engineering. Amer. Soc. Civil Engin.* 123(12):1666-1673.
- Lam, F., H. Yee,** and **J.D. Barrett.** 1997. Shear strength of Canadian softwood structural lumber. *Can. J. Civil Engin.* 24(3):419-430.
- Lau, W., **F. Lam,** and **J.D. Barrett.** 1997. Beam-column formula for specific truss applications. *In* Proc. Int'l Council for Building Research Studies and Documentation Working Commission W18-Timber Structures. Vancouver, Canada CIB-W18/30-2-1. 12 pp.
- Lavallee, Loraine** and Peter Suedfeld. 1997. Conflict in Clayoquot Sound: using thematic content analysis to understand psychological aspects of environmental controversy. *Can. J. Behav. Sci.* 23:194-209.
- Li, M., **S. Avramidis,** L. Oliveira, and I.D. Hartley. 1997. The effect of vertical air gaps, air velocities and fan revolutions on the drying characteristics of thick hemlock. *Holzforschung* 51(4):381-387.
- Li, K., T. Chen, P.A. Bicho, and **J.N. Saddler.** 1997. Factors affecting gas chromatographic analysis of resin acids present in pulp mill effluents. *Toxicological and Environmental Chemistry* 57:1-16.
- Li, D. and **S.E. Salcudean.** 1997. Modeling, simulation and control of a hydraulic Stewart platform. Pp. 3360-3366 *in* Proc. IEEE Int'l Conf. Rob. Aut., Alb., New Mexico.
- Lin, J.-Z. and **K. Ritland.** 1997. Quantitative trait loci differentiating the outbreeding *Mimulus guttatus* from the inbreeding *Mimulus platycalyx*. *Genetics* 146:1115-1121.
- Liss, S.N., P.A. Bicho, P.N. McFarlane, and **J.N. Saddler.** 1997. Microbiology and biodegradation of resin acids in pulp mill effluents: A mini review. *Can. J. Microbiol.* 75:599-611.
- Lu, L. and **S. Avramidis.** 1997. Non-Darcian air flow in wood. Part 1. Specimen length effect. *Holzforschung* 61(6):577-583.
- Luymes, D.** 1997. The fortification of suburbia: investigating the rise of enclave communities. *Landscape and Urban Planning* 39:187-203.
- Luymes, D.** 1998. Trends and issues in the lower Fraser Valley as the A.L.R. celebrates its 25<sup>th</sup> anniversary. *Country Life in BC,* January 1998: 6.
- Luymes, D.** and C. MacDonald. 1997. The village of Yorkville Park: representation and reinvention. *Critique of built works. Landscape Architecture* 4:41-46.
- Mailly, D. and **J.P. Kimmins.** 1997. Growth of *Pseudotsuga menziesii* and *Tsuga heterophylla* seedlings along a light gradient: resource allocation and morphological acclimation. *Can. J. Bot.* 75:1424-1435.
- Mailly, D., L. Christanty, and **J.P. Kimmins.** 1997. "Without bamboo, the land dies" III. Nutrient cycling, and biogeochemistry of a



- Javanese bamboo talun-kebun system. *For. Ecol. Manage.* 92(2/3):155-173.
- Mansfield, S.D., E. de Jong, and **J.N. Saddler**. 1997. The potential of enzymes to selectively modify pulp characteristics. *In Proc. '97 Spring Conf. of CPPA Pacific Coast and Western Branches*, Whistler Paper 3B:1-4.
- Marshall, P.L.** 1997. Review of sustainable forests: global changes and local solutions. *For. Chron.* 73:629.
- Martin, K.** 1997. Bird Life of Woodland and Forest. R.J. Fuller (ed.). *Quarterly Review of Biology* 72:209.
- Martin, K.** 1997. Francis Bain. Biography of American and Canadian Environmentalists. Pp. 42-43 *in* K.B. Stirling, R. Harmond, G. Cevalco, and L. Hammond (eds.). *Greenwood Publishing Group*, Connecticut, USA.
- McIntosh, R.I. and **J.A. McLean**. 1997. Developmental threshold for the striped ambrosia beetle (*Trypodendron lineatum*): A first estimate. *J. Entomol. Soc. B.C.* 94: 19-26.
- Mitchell, S.J.** 1998. A diagnostic framework for windthrow risk estimation. *For. Chron.* 74:100-105.
- Morris, D.M., **J.P. Kimmins**, and D.R. Duckart. 1997. The use of soil organic matter as a criterion of the relative sustainability of forest management alternatives: a modelling approach using FORECAST. *For. Ecol. Manage.* 94:61-78.
- Mousseau, T.A., **K. Ritland**, and D.D. Heath. 1998. A novel method for estimating heritability using molecular markers. *Heredity* 80:218-224.
- Murtha, P.A.** 1997. Radar imaging natural systems (RAINS): stumps and dead trees on RADARSAT. *In Proc. 17<sup>th</sup> Can. Symp. Remote Sens. Pap. No. 238*. On CD Rom.
- Murtha, P.A.** and D.W. Deering. 1997. Vegetation. Chapter 5: 225-255 *in* W. Philipson (ed.), *Manual of Air Photo Interpretation*. Revised Edition. Amer. Soc. Photogramm. and Remote Sens., Bethesda, MD. 689 pp.
- Nagel, L.** and D. Schluter. 1998. Body size, natural selection and speciation in sticklebacks. *Evolution* 52:209-218.
- Namkoong, G.** 1997. A gene conservation plan for loblolly pine. *Can. J. For. Res.* 27:433-437.
- Namkoong, G.** 1998. The place of adaptation and production in genetic improvement programs for sustainable development. *Proc. 6<sup>th</sup> World Symp. in Genetics in Livestock Production* 28:69-80.
- Nelson, J.D.** and L. Price. 1998. Modelling regional land-use plans in British Columbia. Pp. 89-99 *in* Proc., *Forest Scenario Modelling for Ecosystem Management at the Landscape Level*. European Forest Institute, Wageningen, The Netherlands.
- Noguchi, S., T. Tsuboyama, **R.C. Sidle**, and I. Hosoda. 1997. Spatially distributed morphological characteristics of macropores in forest soils of Hitachi Ohta Experimental Watershed. *Japan J. For. Res.* 2(4):207-215.
- Oudjehane, A., F. Lam**, and **S. Avramidis**. 1997. On the process of random and defined structures in wood composites. Pp. 761-762 *in* D. Hui (ed.), *Proc. 4<sup>th</sup> Int'l Conf. on Composites Engineering*, Hawaii.
- Paszner, L.** 1997. Catalysed alcohol organosolv pulping. Pp. 69-100 *in* R.A. Young and M. Akhtale (eds.), *Environmentally Friendly Technologies for the Pulp and Paper Industry*. John Wiley & Sons Inc.
- Patterson, T.B., **R.D. Guy**, and Q.L. Dang. 1997. Whole-plant nitrogen- and water-relations traits, and their associated trade-offs, in adjacent muskeg and upland boreal spruce species. *Oecologia* 110:160-168.
- Perez-Garcia, J., L. Joyce, D.A. Maguire, and **C.S. Binkley**. 1997. Economic impacts of climatic change in the world's forest sector. *Critical Reviews in Environmental Science and Technology* 27:S123-S138.
- Perrin, C.J. and **J.S. Richardson**. 1998. N and P limitation of benthos abundance in the Nechako River, British Columbia. *Can. J. Fish. Aqu. Sci.* 54:2574-2583.
- Peterson, E.B., N.M. Peterson, **G.F. Weetman**, and P.J. Martin. 1997. *Ecology and Management of Sitka Spruce, Emphasizing Its Natural Range in British Columbia*. UBC Press, Vancouver, B.C. 336 pp.
- Prescott, C.E.** 1997. Effects of clearcutting and alternative silvicultural systems on rates of decomposition and nitrogen mineralization in a coastal montane forest. *For. Ecol. Manage.* 95:253-260.

## FACULTY PUBLICATIONS

## FACULTY PUBLICATIONS

- Prescott, C.E.** 1997. Modelling forest management effects on organic matter decomposition in British Columbia. Pp. 221-229 in P. Hakkila, M., Heino, and E. Puranen (eds.), *Forest Management for Bioenergy*. Finnish Forest Research Institute. Res. Pap. 640. 248 pp.
- Prescott, C.E.** and L.M. Zabek. 1997. Growth response and nutrient availability in western red cedar plantations following amendment with fish compost and straw. *Can. J. For. Res.* 27:598-602.
- Proe, M.F., J.C. Dutch, D.G. Pyatt, and **J.P. Kimmins.** 1998. A strategy to develop a guide for whole-tree harvesting of Sitka spruce in Great Britain. *Biomass and Bioenergy* 13:289-299.
- Qian, H. and **K. Klinka.** 1998. Plants of British Columbia: Scientific and Common Names of Vascular Plants, Bryophytes, and Lichens. UBC Press, Vancouver, B.C. 272 pp.
- Qian, H., **K. Klinka,** and B. Sivak. 1997. Diversity of understory vascular vegetation in 40-year old and old-growth stands on Vancouver Island, British Columbia. *J. Veg. Sci.* 8:773-780.
- Raju, D.M. and **R.J. Fannin.** 1997. Monotonic and cyclic pullout resistance of geogrids. *Geotechnique* 47(2):331-337.
- Raju, D.M. and **R.J. Fannin.** 1998. Load-strain displacement response of geosynthetics in monotonic and cyclic pullout. *Can. Geotech. J.* 35(1):183-193.
- Ribas-Carbo, M., L. Giles, **R.D. Guy,** S.A. Robinson, J.N. Siedow, and J.A. Berry. 1997. O<sub>2</sub> isotope fractionation technique for studies on plant mitochondrial respiration. Mini-review. *Int'l Cyber Conference on Analytical BioSciences*, Hiroshima, Japan. [http://neo.pharm.hiroshima-u.ac.jp/ccab/2nd/mini\\_review/mr124/ribas.html](http://neo.pharm.hiroshima-u.ac.jp/ccab/2nd/mini_review/mr124/ribas.html).
- Richardson, J.S.** 1997. Conservation of stream ecosystem dynamics and biodiversity through streamside management. Pp. S-10-17 in *Proc. World River Conf.*, Corfu, Japan.
- Richardson, J.S.** 1997. More life on the edge: amphibians of headwater streams. *Cordillera* 4(1):13-15.
- Ritland, K.** 1997. Review of "Genetic Data Analysis". B.S. Weir (ed.). *EcoScience* 4:247.
- Ruddick, J.N.R.** 1997. Treated wood: a sustainable use of forest resources. *In Proc. Amer. Wood Preserv.* 93:144.
- Salcudean, S.E.** 1997. Control for teleoperation and haptic interfaces. Pp. 50-66 in B. Siciliano and K.P. Valavanis (eds.), *Control Problems in Robotics and Automation*. Springer-Verlag. *Lecture Notes in Control and Information Sciences*, Vol. 230.
- Salcudean, S.E.** and N.R. Parker. 1997. 6-DOF desk-top voice-coil joystick. Pp. 131-137 in 6<sup>th</sup> Ann. Symp. on Haptic Interfaces for Virtual Environments and Teleoperation Systems, Int'l Mech. Eng. Congr. Exp., Dallas, Texas.
- Salcudean, S.E.** and T. Vlaar. 1997. On the emulation of stiff walls and static friction with a magnetically levitated input-output device. *ASME J. Dynamics, Measurement and Control* 119:127-132.
- Salcudean, S.E.,** S. Ku, and G. Bell. 1997. Performance measurement in scaled teleoperation for microsurgery. Pp. 789-798 in J. Troccaz, E. Grimson, and R. Mosges (eds.), *Proc. of CVRMed-MRCAS '97, First Joint Conf. of Computer Vision, Virtual Reality and Robotics in Medicine and Medical Rob. and Computer-Assisted Surgery*. Springer-Verlag *Lecture Notes in Computer Science*, Vol. 1205.
- Salcudean, S.E.,** S. Tafazoli, K. Hashtrudi-Zaad, P.D. Lawrence, and I. Chau. 1997. Impedance control of a teleoperated mini-excavator. *In 8<sup>th</sup> Int'l Conf. on Advanced Robotics*, Monterey, CA.
- Salcudean, S.E.,** S. Tafazoli, K. Hashtrudi-Zaad, P.D. Lawrence, and C. Reboulet. 1997. Evaluation of impedance and teleoperation control of a hydraulic mini-excavator. Pp. 187-198 in 5<sup>th</sup> Int'l Symp. Experimental Robotics V., Barcelona, Catalonia.
- Schermann, N., W.T. Adams, **S.N. Aitken,** and J.C. Bastien. 1997. Genetic parameters of stem form traits in a 9-year-old coastal Douglas-fir progeny test in Washington. *Silvae Genetica* 46(2-3):166-170.
- Shishido, M. and **C.P. Chanway.** 1997. Effect of PGPR and spruce seedlings on forest soil microbial communities. Pp. 431-436 in *Proc. 4<sup>th</sup> Int'l Workshop on PGPR*, Sapporo, Japan.



- Shishido, M. and **C.P. Chanway**. 1998. Forest soil community responses to plant growth-promoting rhizobacteria and spruce seedlings. *Biol. Fert. Soils* 26:179-186.
- Sigurdsson, O. and **R.J. Fannin**. 1997. Construction and performance of a geosynthetic reinforced unpaved road. Pp. 322-328 in *Proc. 3<sup>rd</sup> Int'l Conf. Ground Improvement Geosystems*, London, U.K.
- Slangen, L.H.G., **G.C. van Kooten**, and J-P. P.F. van Rie. 1997. Economics of timber plantations on CO<sub>2</sub> emissions in the Netherlands. *Tijdschrift voor Sociaal Wetenschappelijk Onderzoek van de Landbouw* 12(4):318-33.
- Soluk, D.A. and **J.S. Richardson**. 1997. The role of stoneflies in enhancing growth of trout: A test of the importance of predator-predator facilitation within a stream community. *Oikos* 80:214-219.
- Song, Dongjin and **Simon Ellis**. 1997. Localized properties in flakeboard: a simulation using stacked flakes. *Wood & Fiber Science* 29(4):353-363.
- Stocco, L., **S.E. Salcudean**, and F. Sassani. 1997. Mechanism design for global isotropy with applications to haptic interfaces. Pp. 115-122 in *6<sup>th</sup> Ann. Symp. on Haptic Interfaces for Virtual Environments and Teleoperation Systems*, Int'l Mech. Eng. Congr. Exp., Dallas, Texas.
- Stoehr, M.U. and **Y.A. El-Kassaby**. 1997. Levels of genetic diversity at different stages of the domestication cycle on interior spruce in British Columbia. *Theor. Appl. Genet.* 94:83-90.
- Strain, R.A. and **S.R.J. Sheppard** (eds.). 1997. *In Proc. Tahoe Workshop, Establishing the Worth of Scenic Values*, Stateline, Nevada. <http://www.ceres.ca.gov/trpa>.
- Suedfeld, Peter, **Lorraine Lavellee**, and Jennifer Brough. 1998. Political language in an environmental controversy: integrative complexity and motive imagery in advocacy and the press. Pp. 290-316 in O. Feldman, and C. De Landsheer (eds.), *Politically Speaking: A Worldwide Examination of Language Used in the Public Sphere*. Greenwood Press, Westport, CT.
- Sun, M. and **K. Ritland**. 1998. Mating system parameters of yellow starthistle (*Centaurea solstitialis*), a successful colonizer in North America. *Heredity* 80:225-232.
- Thompson, W.A., **G.C. van Kooten**, and I. Vertinsky. 1997. Assessing timber and non-timber values using a general equilibrium framework. *Critical Reviews in Environmental Science and Technology* 27:S351-364.
- Timler, P., C.E. Ventura, **H.G.L. Prion** and R. Anjam. 1997. Experimental and analytical studies of steel plate shear walls as applied to the design of tall buildings. Pp. 261-275 in *Proc. 4<sup>th</sup> Conf. Tall Buildings in Seismic Regions*, Los Angeles, CA.
- Turner, R.K., P.R. Boudreau, W. Salomons, R. Klein, L. T-McManus, **R.C. Sidle**, P. Burbridge, and I. Lorenzoni. 1997. Summary discussion notes from the workshop on "LOICZ, Guidelines for the Integration of Natural Sciences and Socio-Economic Modelling", Norwich. LOICZ Core Project Office, Texel, The Netherlands. 49 pp.
- van Coller, L. and **G. Namkoong**. 1997. Periodic polymorphisms with density dependent selection. *Gen. Res.* 70:45-51.
- van Kooten, G.C.** 1997. Benefits of improving water quality in southwestern British Columbia: an application of economic valuation methods. Chapter 22: 214-26 in W.A. Wossink, G.C. van Kooten, and G.H. Peters (eds.), *Economics of Agro-Chemicals*. Aldershot, U.K.: Dartmouth Publishing Co. Ltd.
- van Kooten, G.C.** and L.M. Arthur. 1997. Economic development with environmental security: Policy conundrum in rural Canada. *Amer. J. Agric. Econ.* 79(Dec.):1508-14.
- van Kooten, G.C.** and H. Folmer. 1997. Economic instruments and the pasture-crop-forest interface. Chapter 5: 113-128 in W.N. Adger, D. Pettenella, and M. Whitby (eds.), *Climate-change Mitigation and European Land-use Policies*. Wallingford, U.K.: CAB International.
- van Kooten, G.C.**, E. Bulte, and P.I.D. Kinyua. 1997. Game cropping and wildlife conservation in Kenya: A dynamic simulation model with adaptive control. *Agricultural Systems* 54(August):439-62.
- van Kooten, G.C.**, A. Grainger, E. Ley, G. Marland, and B. Solberg. 1997. Conceptual issues related to carbon sequestration: uncertainty and time. *Critical Reviews in Environmental Science and Technology* 27:S65-82.



## FACULTY PUBLICATIONS

- Vlosky, R.P., E.J. Wilson, **D.H. Cohen**, R. Fontenot, W.J. Johnston, **R.A. Kozak**, D. Lawson, J.E. Lewin, D.A. Paun, E.S. Ross, J.T. Simpson, P.M. Smith, T. Smith, and B.M. Wren. 1998. Partnerships versus typical relationships between wood products distributors and their manufacturer suppliers. *For. Prod. J.* 48(3):27-35.
- Wang, S., **G.C. van Kooten**, and I. Vertinsky. 1997. Contractual arrangements in silviculture: The case of Canada's British Columbia. Pp. 173-79 in Y. Murashima (ed.), *Sustainable Management of Small Scale Forestry*. Proc. IUFRO Symp., Kyoto, Japan.
- Wang, Z., R. Leone, and **C. Breuil**. 1997. Why fungal growth is less effective in aspen heartwood than in aspen sapwood? *Material und Organismen* 31:145-155.
- Weetman, G.F.** 1998. A forest management perspective on sustained site productivity. *For. Chron.* 74(1):351-369.
- Weetman, G.F.**, **C.E. Prescott**, F.L. Kohlberger, and R.M. Fournier. 1997. Ten-year response of coastal Douglas-fir to N and S fertilization in an optimum nutrition trial. *Can. J. For. Res.* 27:1478-1482.
- Wei, X., C. Peng, and **J.P. Kimmins**. 1997. Impacts of intensive timber harvesting on sustainability of long-term site productivity. Pp. 393-408 in X. Chen *et al.* (eds.), *Ecological Research and Sustainable Development*. China Environmental Science Press, Beijing. *Ecol. Soc. Chinese Youth*. Vol. 4.
- Wei, X., **J.P. Kimmins**, K. Peel, and O. Steen. 1997. Mass and nutrients in woody debris in harvested and wildfire-killed lodgepole pine forests in the central interior of British Columbia. *Can. J. For. Res.* 27:148-155.
- Wiebe K.L. and **K. Martin**. 1997. Age-specific patterns of reproduction in white-tailed ptarmigan (*Lagopus leucurus*) and willow ptarmigan (*L. lagopus*). *Ibis* 140:14-24.
- Wiebe, K.L. and **K. Martin**. 1997. Effects of predation, body condition and temperature on incubation rhythms of ptarmigan. *Wildl. Biol.* 3/4:219-227.
- Wiebe, K.L. and **K. Martin**. 1998. Seasonal use by birds of stream-side riparian habitat in coniferous forests of northcentral British Columbia. *Ecography* 21:1-11.
- Wong, K.K.Y., L.A. Martin, F.M. Gama, **J.N. Saddler**, and E. de Jong. 1997. Bleach boosting and direct brightening by multiple xylanase treatments during peroxide bleaching of Kraft pulps. *Biotechnol. Bioengin.* 54:312-318.
- Wood, P.M.** 1997. Biodiversity as the source of biological resources: A new look at biodiversity values. *Environmental Values* 6(3):251-268.
- Wood, P.M.** 1997. Conservation of the world's forests: which paradigm should we endorse? *Forests and Culture* 6(1):19-25.
- Wood, P.M.** 1997. Distributing natural resources in a democratic nation. *Aboriginal Times*. June 97: 6-9.
- Wood, P.M.** 1997. Forest health in context: economics, ecology, and ethics. Pp. 24-27 in Proc. 1997 Western Forest Insect Work Conf., Prince George, B.C.
- Wood, P.M.** 1997. Forests in culture and culture in forests. Pp. 75-87 in K.B. Lim (ed.), *The Cultural Meaning of Forests*. Seoul: Eoyul Wha Dang Publishing.
- Wood, P.M.** 1998. Book review: "In a dark wood" by Alston Chase. *Environmental Ethics* 20(2):215-218.
- Wossink, G.A., G.H. Peters, and **G.C. van Kooten**. 1997. Introduction to agro-chemical use. Chapter 1: 1-16 in W.A. Wossink, G.C. van Kooten, and G.H. Peters (eds.), *Economics of Agro-Chemicals*. Aldershot, U.K.: Dartmouth Publishing Co. Ltd.
- Wu, W. and **R.C. Sidle**. 1997. Application of a distributed shallow landslide analysis model (DSLAM) to managed forested catchments in coastal Oregon. In Proc. 5<sup>th</sup> Sci. Assem. of IAHS, Human Impact on Erosion and Sedimentation, Wallingford, U.K. IAHS Publ. 245:213-221.
- Yawalata, D. and **L. Paszner**. 1997. NAEM-catalysed ALPULP organosolv pulping of sugarcane rind. *Taiwan Sugar J.* 8-13.
- Zhang, L., **S. Avramidis**, and S.G. Hatzikiriakos. 1997. Moisture flow characteristics during radio frequency/vacuum drying of thick lumber. *Wood Sci. Technol.* 31(4):265-277.
- Zhang, Y., P.A. Bicho, **C. Breuil**, **J.N. Saddler**, and S.N. Liss. 1997. Resin acid degradation by bacterial strains grown on CTMP effluent. *Water Sci. Tech.* 35:33-39.





**Madeleine MacIvor**  
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**F**IRST Nations Forestry initiatives continue to gain momentum and interest within the Faculty through four major activity areas:

1. Increasing the participation of First Nations students in the Faculty.
2. Providing support services to First Nations students.
3. Incorporating First Nations perspectives and issues within the Forestry curriculum.
4. Creating awareness within the University and the wider community about First Nations perspectives and issues in Forestry.

These activities build on initiatives undertaken by Gordon Prest who left the Faculty to return to Nicola Valley Institute of Technology.

Currently there are fifteen self-identified First Nations students in the Faculty. Of these, twelve are enrolled in the undergraduate programs, two students are completing R.P.F. requirements, and one student is studying at the Masters level. These students come from the following First Nations:

- |                  |                |
|------------------|----------------|
| • Kwakwaka'wakw  | • Sto:lo       |
| • Nisga'a        | • Tsimshian    |
| • Nlak'pamux     | • Wet'suwet'en |
| • Nuu-chah-nulth | • Ojibwa       |
| • Nuxalk         | • Cree         |

Meetings with students over the year have highlighted a number of areas where stronger support is necessary including: funding, tutorial assistance, first-year transition, networking, and employment. First Nations Forestry students have supported recruitment and promotional initiatives, including a presentation to UBC's President Martha Piper. A number of students have expressed an interest in curriculum development.

A strong relationship continues between the Faculty and the First Nations Professional Sciences Access Program (FNPSAP). Two current First Nations Forestry students gained entrance to the Faculty through this program. This year there are five students in the FNPSAP who are Forestry bound.

Pamela Perreault, a Masters student from Garden River First Nations was awarded the *Michael and Sonja Koerner First Nations Fellowship*. Two alumni, Angus Dickie from the Fort Nelson First Nation and Keith Atkinson from the Nanaimo First Nation recently became Registered Professional Foresters and were featured in the NAFA Newsletter (Fall, 1997).

In June 1997, some 150 people participated in an international gathering, *Indigenous Perspectives in Forestry Education Workshop*. This workshop, hosted by UBC, was an opportunity to reflect upon the relationship between culture, curriculum and forestry. The workshop report is available on the web at [www.forestry.ubc.ca/firstnat/workshop.html](http://www.forestry.ubc.ca/firstnat/workshop.html).

Work has begun on incorporating First Nations content into the new B.S.F. curriculum. In collaboration with the Forestry Continuing Studies Network, the Faculty is developing a workshop for forestry practitioners on First Nations and forest lands.

## FIRST NATIONS FORESTRY PROGRAMS

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### ACHIEVEMENTS IN 1997-98

- Increased First Nations student enrolment (from 8 to 15).
- Hosted the *Indigenous Perspectives in Forestry Education Workshop*, June 15-18, 1997.
- Initiated incorporation of First Nations content into the new B.S.F. curriculum.
- Began development of a First Nations and forest lands workshop for forestry practitioners.
- Incorporation of First Nations content into Natural Resources Conservation curriculum.

### PLANS FOR 1998-99

- Increase the number of First Nations students in the Faculty.
- Strengthen support services for First Nations students in the Faculty.
- Continue to incorporate First Nations perspectives and issues within the existing and developing curricula.
- Continue to work with the community colleges to facilitate access for First Nations into the Faculty.



## INTERNATIONAL FORESTRY PROGRAMS

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**T**HIS past year has been one of change and excitement for International Programs (IP) and we are looking forward to strengthening current activities and beginning the expansion into new project areas. Late last year an external review committee was called in to assess our progress. Their report concluded that the current programs were of great benefit to both the students and the faculty and recommended an expansion of international forestry programs within the university.

The review committee also recommended that IP disseminate information on the wide variety of research projects the faculty participates in internationally. The new IP page in the Annual Report will now begin to reflect this change.

International Programs also wishes its former Director, Dr. Andrew Howard well as he leaves the university to concentrate fully on international forestry issues within industry. His energy and commitment to promoting international forestry opportunities was greatly appreciated.

### ■ International Exchange and Internships

The student exchange and work internship programs continue to grow. We had 17 students away on exchange in 97/98, and for 98/99 we will have a record 19 students on exchange both in Canada and internationally. Exchange students participate in university programs in the United Kingdom, the United States, Australia, New Zealand, Sweden, Finland, Costa Rica, Germany, and Austria. With 9% of our third-year students experiencing international study, Forestry student involvement in international exchange is well above the 5% average for UBC as a whole.

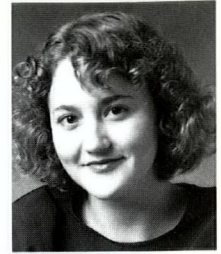
The work internship program continues to expand and has provided international work opportunities for 10 students in countries such as Finland, Germany, the United Kingdom, Indonesia, Mexico and Argentina. Both students and recent graduates benefit from the program.

### ■ International Faculty Research and Projects

Many of our faculty are involved in international research initiatives. Some highlights:

- The Food and Agriculture Organization of the United Nations project on Forest Concessions on Public Forest Land was recently completed. (Research conducted by Andrew Howard, Patrick Matakala, and Peter Pearse.)
- Interdisciplinary research projects are underway on behalf of the Winter Research Institute-Fuyusoken in Hokkaido, Japan. Projects include an analysis of roofing forms

**Sandra Schinnerl**  
Associate Director



and systems with heavy snow loads, and market and technical implications of full utilization of wood in construction. (Research conducted by Helmut Prion, Linda Brock, David Cohen and Dave Barrett.)

- Joint research with the New Zealand Forest Research Institute on entomology studies including the relative abundance of *Vespula vulgaris* compared with other insect groups in the Granville Beech Forest, Westlund. (Research conducted by John McLean.)
- Participation on the advisory panel for the Centre for International Forestry (CIFOR) Criteria and Indicators for Sustainable Forestry – Genetics Project and the CIDA/IPGRI Project on the priorities for Genetic Conservation. (Participation by Gene Namkoong.)
- Economics of Tropical Deforestation, Forest Policy: International Comparisons and Trade in Endangered Species. (Research by Casey van Kooten.)

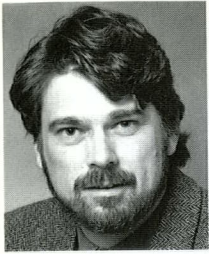
### ■ New Undergraduate International Forestry Specialization

This year also brings the addition of a new international forestry specialization to both the Forest Science and the Forest Management undergraduate programs. This specialization allows students to fulfill the core requirements of their main degree program, while learning a new language, developing knowledge of a specific region, and participating in either an international study or work experience. The objective is to educate students on international forestry issues and better understand Canada's role in the international arena. We hoped that the program can expand to both the Natural Resources Conservation and Wood Products Processing Programs.

### ■ Future Events and Projects

There are a number of exciting new projects for international programs on the horizon, including plans for an "International Forestry Institute" and new professional programs. We will continue to be involved in coordinating international events including a conference on Global Markets in Forestry in June 1999.





**Thomas Maness**  
Director

**T**HE goal of the Centre for Advanced Wood Processing (CAWP) is to improve Canada's capabilities in the high-tech secondary wood products manufacturing sector. Successful competition in this global market requires specialized knowledge, innovation, and a highly skilled workforce. We contribute to this in four ways: with an innovative undergraduate program designed to produce specialists targeted for this industry; with an applied research and graduate education program aimed at advancing new technologies; with continuing education programs for upgrading the skills of current employees; and, with extension services providing immediate assistance to Canadian firms.

Managed as a business unit, CAWP is a national centre of excellence, funded through industry membership fees, cost recovery on services, and endowment grants from Forest Renewal BC and the Federal Government.

### ■ Education Programs

Our main activity in 1997 was developing curriculum and teaching in the Faculty's undergraduate Wood Products Processing program. Faculty and staff housed in CAWP developed and taught ten new undergraduate courses. These courses form the advanced woodworking technology core of the new program.

The Centre also manages the Wood Products Processing Cooperative Education program. In 1997 the coop program again enjoyed a 100% placement rate. Students were placed across Canada, the United States and Japan. We will continue to emphasize international placements to increase the awareness and experience base of our graduates.

### ■ Continuing Education

Continuing education is a strong priority at the Centre. New certificate programs are being developed that contain 150 hours of instruction and are offered in two- and three-day modules and night classes. Examples are:

- **Lumber Drying Certificate.** A four-week program to certify kiln operators.
- **Wood Products Quality Assurance Certificate.** A program to upgrade personnel

with the knowledge and skills to develop quality plans, statistical process control, and customer feedback systems.

- **Secondary Manufacturing for New Managers.** A program to quickly bring new managers from other industries up to speed on wood products manufacturing.

The Centre also organizes international conferences. This year we created and hosted the highly successful International Value-added Wood Processing Conference. It will now be offered on an annual basis. In 1998 three new conferences will be offered: Advanced Wood Finishing, Tooling and Machining for Secondary Manufacturing, and Automated Wood Construction.

### ■ Extension

The focal point of our extension program is the Wood Products Quality Council of Canada. The council is organized by six faculty and staff members, is directed by a industry advisory board, and consists of a growing number of member companies. In 1997 the council developed member certification criteria, offered industry workshops, and provided custom on-site training and support. The council also conducts market research into consumer preferences and perception in product quality. In 1998 we will develop product testing capability.

The Centre also offers extension support in Tooling and Machining, Machine Design and Engineering, Marketing and Market Research, Product Construction and Design, Lumber Drying, Wood Finishing, and Production Planning and Control.

### ■ Applied Research

Applied research at the Centre is conducted by an interdisciplinary group of UBC faculty associates, and other national and international researchers. Three new faculty members in Industrial Engineering, Wood Finishing, and Secondary Wood Processing will be added to our staff, greatly increasing our research capability. Examples of projects in 1997 are:

- Japanese consumer preferences in product quality.
- An evaluation of shared-use facilities for secondary wood products manufacturing.
- Real-time statistical process control technologies using computer vision.
- Advanced algorithms for optimizing chop saws and field studies of chop saw systems.
- Requirements for furniture testing in the Canadian furniture manufacturing industry.

## CENTRE FOR ADVANCED WOOD PROCESSING

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Quality Assurance Specialist

**FOLEY, Dallas**  
Computer Software Engineer

**FORGET, Christine**  
Cooperative Education Coordinator

**GOUDIE, Derek**  
Curriculum Design/Wood Products  
Manufacturing

**GRAHAM, Peggy**  
Secretary

**HERDEG, Kai**  
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Development

**JOHNSTON, Wendy**  
Program Coordinator

**SICAD, Noli**  
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Cramond, Pat  
Ellis, Simon  
Kozak, Rob  
Lawrence, Peter  
Schajer, Gary  
Yellowley, Ian  
Troczyński, Tom



# CENTRE FOR APPLIED CONSERVATION BIOLOGY

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**T**HE Centre for Applied Conservation Biology in the Faculty of Forestry promotes conservation of biological diversity while maintaining economic development. This Centre is unique in its incorporation of a novel undergraduate program, broad definition of educational targets, close links between basic and applied disciplines, and focus on forested ecosystems where conflicts between biological diversity and economic activities are most contentious.

## ■ Education

Our educational program has three elements: an affiliated undergraduate program, a rapidly growing graduate program, and short courses for target audiences such as professional foresters, resource managers, the public and the public media. Our teaching staff continues to grow.

We are closely linked to the Faculty's undergraduate B.Sc. (Natural Resources Conservation) program. That program includes a core of natural science courses in forest, plant, and animal ecology, conservation biology and landscape ecology, and a suite of social science and management courses in economics, political science and philosophy to translate natural process into human values.

The "*Seminar in Biological Conservation*" series combines graduate level instruction and public lectures on important conservation issues. (See Special Lectures section in this report.)

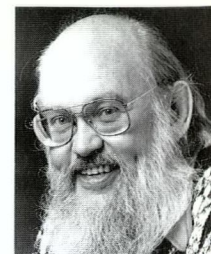
## Centre Associates

Sally Aitken	Laurie Kremsater	John Richardson
Philip Burton	Kathy Martin	Kermit Ritland
Susan Glenn	Bruce McLellan	Jim Rochelle
Alton Harestad	Laura Nagel	Geoffrey Scudder
Scott Hinch	Gene Namkoong	David Shackleton
Walter Klenner	John Nelson	James Smith
Brian Klinkenberg	Michael Pitt	David Tait
Pamela Krannitz		

## ■ Extension

Outreach employs a variety of approaches. Centre personnel worked closely with the Enhanced Forest Management Pilot Projects and Innovative Forest Practices Agreements. That work is intended to develop credible ways of sustaining biological diversity in managed forests. The pamphlet series was changed from 8-panel pamphlets to single pages to encompass more topics; again with support from the Canadian Wildlife Service. More than 50 talks were given by Centre members to professional groups in North America and Europe. Contact with First Nations was sustained by having graduate students on-site in First Nations

**Fred L. Bunnell**  
Director



communities. Centre members are intimately involved in refining those aspects of the B.C. Forest Practices Code and Oregon Forest Practices Act that are creating unintended consequences for biological diversity.

## ■ Research

Interdisciplinary, cooperative research is the key to answering the broad questions of conservation biology. The Centre brings together scholars from the university, the province and internationally. We are testing conservation biology theories in the context of forested ecosystems and intend to apply this knowledge to managed forests, parks and natural areas. Among the larger projects currently underway are:

- Leadership within the Sustainable Forest Management Network of Centres of Excellence, a national research program focussed on Canada's boreal forests (Drs. F. Bunnell and D. Tait).
- Inventory and research on the ecology and genetics of tailed frog and Pacific giant salamander populations as these are influenced by forest practices (Drs. F. Bunnell, J. Richardson and K. Ritland).
- A decision-support tool evaluating economic and biological consequences of forest planning at the landscape level, including a system for enhancing community participation in land and resource planning (Drs. F. Bunnell and J. Nelson).
- Definition and analysis of effectiveness of corridors (Drs. S. Glenn and A. Chan-McLeod).
- Physiological and behavioural response of resident stream salmonids to riparian logging practices (Dr. S. Hinch).
- A comparative study of cavity nesters in a variety of forest types that is intended to develop approaches to sustaining cavity nesters in managed forests (Drs. K. Martin and F. Bunnell).
- Metapopulation dynamics and biodiversity of high elevation ecosystems (Dr. K. Martin).





**Patricia Plackett**  
Executive Director

**T**HIS year has been a time of major change for the Forestry Continuing Studies Network.

Early in 1997 a new board of directors with broader stakeholder representation was put into place. The first meeting of the new board was held in February. Two subcommittees were established – one to look at structural options for the organization and the other to look at financial matters. The KPMG review of the organization completed in October 1996 had recommended a comprehensive review of structural options. As of the beginning of the 1997/98 fiscal year the Ministry of Forests was no longer in a position to provide any financial support for the provincial coordination work (provincial databases, catalogues, information services, etc.) of the FCS Network.

In June, board members decided that the FCS Network should incorporate as a society. This decision was undertaken to provide more efficient delivery of services by the organization's six offices and to potentially open up new funding opportunities.

With incorporation the advisory board has become a directing board with a strong focus on improving the financial viability of the organization.

The logo has been modernized, in part to promote the new short version of the organization's name.



In July, a Strategic Planning Workshop was held to refine the mission of the organization and focus on organizational improvements. There has been subsequent planning within the organization with a view to sharpening the focus of the organization to deal with the changes that are taking place in B.C.'s forest sector.

The intent is to retain the two key areas of service provided by the FCS Network:

- Training delivery services.
- Province-wide communication services on training opportunities.

Over the past year the FCS Network has provided training for a total of over 1600 training days. The number of conferences and workshops has increased each year. Network offices are also

being given more opportunities to contribute to training-related projects.

The Delivery Centres have continued to deliver training related to the Enhanced Forestry Program, Watershed Restoration Program and Resources Inventory Program. One new initiative was the "Channel Conditions and Prescriptions Assessment" course. Repeated activities included the "How to determine site index in silviculture" course and the "Windthrow Management" workshops.

In addition, some interesting events were held in conjunction with the FCS Network host institutions, such as the *Forest Hydrology Symposium*, the *Indigenous Perspectives in Forestry Education Workshop* and the *Multi Species Initial Spacing Trials Workshop*, events related to UBC Faculty of Forestry initiatives.

Two priorities over the past year have been to identify alternative funding for the provincial communication services and to work with stakeholder groups to find better ways of identifying training needs.

#### Board of Directors

- Fred Baxter**, Regional Manager,  
Kamloops Forest Region, Ministry of Forests
- Bronwen Beedle**, Deputy Chief Forester,  
Ministry of Forests
- Clark Binkley**, Dean, Faculty of Forestry,  
University of British Columbia
- Jim Burbee**, Chief Forester,  
Northwood Pulp & Paper Ltd.
- Linda Kaivanto**, Program Coordinator,  
Ministry of Advanced Education, Training and Technology
- Les Kiss**, General Manager,  
Coast Forest & Lumber Association
- Garry Mancell**, Partner, Davis & Co.
- Art Shortreid**, Project Officer,  
First Nations Forestry, Natural Resources Canada
- Van Scofield**, Executive Director,  
Association of BC Professional Foresters
- Ralph Torney**, President, RFT Industries
- Randy Trerise**, Forest Practices Forester,  
Pope & Talbot Limited
- Dave Wilford**, Research Hydrologist,  
Ministry of Forests
- Nancy Wilkin**, Director, Resource Stewardship  
Branch, Ministry of Environment, Lands & Parks

## FORESTRY CONTINUING STUDIES NETWORK

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## PLANS FOR 1998-99

- To seek alternatives to classroom-based training delivery in order to increase access to the training that we currently deliver.
- To undertake a more "pro active" role in the development of courses, workshops and seminars in order to enhance our ability to meet training needs in a timely and effective manner.



# SILVICULTURE INSTITUTE OF BRITISH COLUMBIA

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Silviculture Institute of BC  
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**T**HE Silviculture Institute of British Columbia (SIBC) was established in 1985 to raise the level of forest practices in British Columbia through continuing education. We offer the following programs:

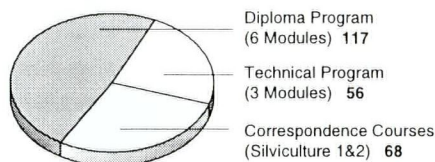
- **UBC Diploma in Forestry (Advanced Silviculture)** – for Registered Professional Foresters.
- **Technical Module Program** – for forest technologists and technicians.
- **Silviculture 1&2 Correspondence Courses** – for Foresters-in-Training and Pupils.

The professional diploma program consists of 12 weeks of advanced silviculture education delivered to practising professional foresters employed by industry, consulting and government from all parts of the province. Instructors, many of whom volunteer time to the Institute, are drawn from academia, government, industry and consulting. We are grateful to the following individuals from the UBC Faculty of Forestry for their involvement and support:

G. Baskerville, C. Binkley, D. Cohen, K. Day, H. Driscoll, M. Feller, J.P. Kimmins, K. Klinka, A. Kozak, D. Lavender (professor emeritus), S. Mitchell, J.A. McLean, P.L. Marshall, J. Nelson, C. Power, P. Sanders, B. Seely, B. van der Kamp, G. Weetman and P. Wood.

We acknowledge the financial support of Forest Renewal BC and thank all our volunteers and other supporters from UBC, the Ministry of Forests, the forest industry, UNBC and the Canadian Forest Service for helping us to achieve our 12th year of excellence.

## ACHIEVEMENTS IN 1997-98

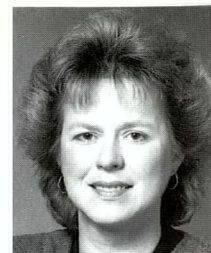


### SIBC registrants by program 1997 – 1998

Our alumni now total 198 professional graduates and 20 technical graduates.

The new Institute of Forest Engineering of BC (IFEBC) was off to a flying start in 1997-98 with the launch of our new professional program in forest engineering. A full class of 25 students attended the inaugural offerings of Module 1 in May and Module 2 in November. The class included a broad cross-section of professional foresters, engineers and geoscientists from

**Candace E.B. Parsons**  
Executive Director



across B.C. representing industry, consulting and government. The entire program consists of six, two-week modules based on the SIBC model. The UBC Senate approved our proposal for diploma status on January 21, 1998 creating the new **"Diploma in Forest Engineering"** co-sponsored by the Faculties of Forestry and Applied Science (Civil Engineering).

### SIBC Board of Directors

<i>Directors (Alternates):</i>	<i>Representing:</i>
<b>G.E. Lester*</b> , Chair (M.D. Larock)*	Students & graduates
<b>G.F. Weetman</b> (C.S. Binkley)	University of B.C.
<b>P.L. Marshall</b> (E. Van Scofield)	Association of BC Professional Foresters
<b>R.E. Carter</b> (R.A. Willis)	Forest industry
<b>A. Dickinson</b>	Canadian Forest Service
<b>C. Opio</b> (W. Kessler)	University of Northern B.C.
<b>J.D. Sutherland*</b> (L.R. Bedford)	Ministry of Forests

\*SIBC graduates.

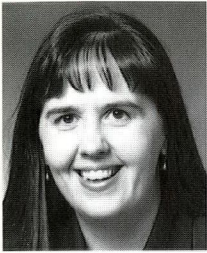
## PLANS FOR 1998-99

SIBC plans to re-examine all current curriculae in light of changing client needs and demographics, and enhance our marketing efforts to continue to attract new students. IFEBC plans to continue to develop and deliver the new diploma program.

### IFEBC Board of Directors

<i>Directors (Alternates):</i>	<i>Representing:</i>
<b>W.E. Dumont</b> , Chair (D.R. Yochim)	Association of BC Professional Foresters
<b>J.G. Chittick</b> (W. Cowlard)	Forest Industry
<b>B. Chow</b> (R. Neden)	Div. of Engineers & Geoscientists in the Forest Sector
<b>P.W. Clarke</b> (B. Bentley)	APEGBC
<b>R. Davis</b> (Y. Mirza)	Ministry of Forests
<b>D.A. Dobson</b>	Consulting Engineers & Geoscientists
<b>R.J. Fannin</b> (A. Russell)	University Civil Engineering Education
<b>J.N. MacFarlane</b> (P.R. Blanchard)	Consulting Foresters
<b>J. Nelson</b> (G. Baskerville)	University Forestry Education
<b>A.W.J. Sinclair</b> (M.L. Clark)	Forest Engineering Research





**Tara Scott MacKenzie**  
Development Officer

**T**HE forest sector in British Columbia is in the midst of a profound transition. Yet despite the challenges and uncertainty – or perhaps in large part because of them – alumni, corporations, individuals, foundations, faculty members and students continued their strong support for the Faculty of Forestry this year.

Forest conservation, forest management and wood processing require specialized levels of knowledge to ensure efficiency and wise use of our forests. Private sector donations help us generate innovative and effective solutions to forest issues and prepare our students for careers in forestry and forest-related professions.

We extend our sincere appreciation to all those who contributed their time and resources to help us ensure that UBC remains a world leader in forestry education.

#### ■ Designated Areas of Support

Private sector contributions to the faculty totalled \$830,859 and were primarily directed to the following areas:

Area of designation	\$ raised	% of total \$ raised
Forest Sciences Centre	505,300	60.8
Scholarships & Bursaries	162,257	19.5
National Education Initiative for the CAWP	93,875	11.3
Endowments	67,166	8.1
Class Act	2,261	.3
<b>Total donations</b>	<b>\$830,859</b>	

#### ■ Forestry Alumni Are Number One

Forestry continues to have the highest alumni participation rate of all the faculties on campus. This year, Alumni contributed \$124,466 toward Faculty priorities. Our sincere thanks go to campaign co-chairs Russ Clinton and Charlie Johnson, and their dedicated team of volunteers for organizing the successful Alumni Campaign.

Through the Alumni Telepledge Campaign, volunteers phoned classmates and friends to say hello and encourage their support of forestry education. Our fundraising efforts were aided by

“satellite” callers in Duncan, Prince George, Kelowna and Victoria. We are grateful to everyone who participated and responded.

The Faculty added a new stewardship program this year. A group of Forestry students – all winners of scholarships funded by Alumni and friends of UBC – joined Dean Clark Binkley to volunteer for the First Annual, Donor Appreciation Phonathon. Our students called hundreds of our alumni donors to say “*Thanks*,” and to express their appreciation for the tremendous support students receive from graduates each year.

The Donor Appreciation Phonathon was received very well by alumni, and other faculties are planning to follow Forestry’s lead with similar programs.

#### ■ Class Act Program

Our future foresters are also committing their support to the Faculty. Seventy-seven per cent of this year’s graduating class contributed to the Class Act Program, raising in excess of \$2,200 for the class project: a specially commissioned mural for the new Forest Sciences Centre.

#### ■ NEI Fundraising Program

The National Education Initiative continued to partner with the Centre for Advanced Wood Products and the Wood Products Processing Degree Programs, to raise scholarship and operating funds for the programs. This partnership also ensures that programs are aligned with the educational and training needs of industry, and that industry funds provide maximum benefit through CAWP and WPP Programs.

### PLANS FOR 1998–99

- Recognize donors to the Forest Sciences Centre, opening September 1998.
- Provide enhanced reports to donors on the use of gifts.
- Develop additional opportunities for alumni, donors and friends to interact with our Faculty and students.
- Expand the “thank you” calling program to encompass all donors and alumni.
- Secure necessary funding for projects addressing priority issues in forestry.
- Continue to develop funding support for projects addressing priority issues in forestry.

## FACULTY DEVELOPMENT PROGRAM

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## SPECIAL LECTURES

### H.R. MACMILLAN LECTURES AND COURSE SPONSORSHIP

#### ■ Conservation Biology Lectures

We invited internationally known members of the scientific community to UBC to participate in Conservation 500, a graduate seminar course in conservation biology. Dr. K. Martin organized the lecture series and taught the course. The Lecture Series is made possible by a grant from the H.R. MacMillan Family Fund. The following scientists gave public lectures:

##### **Len Thomas**

University of St. Andrews, Scotland

- *Population monitoring for conservation.*

##### **Mark Brigham**

University of Regina, Saskatchewan

- *Effects of forest harvesting on the conservation of bats.*

##### **Susan Hannon**

University of Alberta, Edmonton

- *Patch and larger-scale perspectives of boreal forest fragmentation: a bird's eye view.*

##### **Ilse Storch**

Munich Wildlife Society, Germany

- *The big and the beautiful: Flagship species as a tool in international conservation activities.*

##### **Malcolm Hunter**

University of Maine, Orono, Maine

- *Managing forest ecosystems to maintain biodiversity.*

##### **Jeff Hayward**

University of British Columbia

- *Advancing forest conservation through certification: Who determines what is a well-managed forest?*

##### **Rosemary Gillespie**

University of Hawaii, Honolulu

- *Insular conservation: The Hawaiian Islands as an extreme case.*

##### **Walter Koenig**

University of California, Berkeley

- *Spatial autocorrelation in California birds.*

##### **Daniel Simberloff**

University of Tennessee, Knoxville

- *Why and how should we manage forests for biodiversity?*

##### **Enrique Jordal**

University of Guadalajara, Mexico

- *Community-based conservation and sustainable forestry in western Mexico.*

##### **Kathryn Freemark**

Canadian Wildlife Service, Ottawa

- *Conserving biodiversity: Linkages among ecological and geopolitical scales.*

#### ■ Conservation 451 (Integrated Field School)

During the fall term, a new 15-credit integrated field course was organized by Laura Nagel (our new Instructor in Conservation Biology) in collaboration with Profs. Michael Feller, Susan Glenn, Scott Hinch and David Tindall.

The course, taught for the first time this past fall, consists of several modules focussing on different ecosystems in B.C. The innovative format is part of an attempt to teach students about the complex issues surrounding conservation more effectively than through traditional learning from textbook examples. Over 80 speakers participated in both classroom and field activities. These speakers ranged from internationally known experts on science and environmental policy to representatives from all levels of government, workers in resource-based fields, First Nations groups and a broad range of NGO's as well as interested individuals.

The participation of these speakers was made possible by a grant to the Faculty of Forestry from the H.R. MacMillan Family Fund. Course set up cost were sponsored by the UBC Teaching and Learning Enhancement Fund.

### THE SCHAFFER LECTURE

The Leslie L. Schaffer Lectureship in Forest Sciences was established in 1981 in the memory of Leslie L. Schaffer, D.Sc., former Executive Vice-President of Western Plywood Co. Ltd. The fund was established by Mrs. Leslie L. Schaffer to finance lectures and publications by visiting forest scientists at the Faculty of Forestry, UBC.

On November 3, nearly 200 people attended this year's lecture by Dr. Daniel Botkin, President of the Center for the Study of the Environment, Santa Barbara, CA, and Professor of Biology, George Mason University, Fairfax, VA.

Copies of Dr. Botkin's talk "*Getting the paradigm right: The essential ecological foundation for the conservation and sustainable management of B.C.'s forests*" are available from the Department of Forest Sciences at UBC.



## STUDENTS FOR FORESTRY AWARENESS

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### Public Lecture Series

Students for Forestry Awareness (SFA) is an independent, student organization that has been in existence at UBC for over ten years. Through periodic symposia and a continuing speaker series the SFA introduces a variety of philosophical, academic, environmental, and industrial perspectives on forestry related issues to students, faculty and the general public. Further endeavours include developing career week for undergraduates and a mentorship program between professional foresters and prospective students. All of the projects emphasize the critical importance of awareness and foster this aspect into their mandate. Speakers and topics during the 1997/98 academic year included:

#### Martha Piper

President, University of British Columbia

- *What's your opinion!*

#### John Davis

UBC Forestry Undergraduate

- *BCFS fire fighting.*

#### Sergio Paone

Friends of Clayquot Sound

- *Resolving land use conflicts in Clayquot Sound.*

#### Tony Hamilton

Biologist with the Ministry of Environment

- *Black bear habitat implications on forest management in B.C.*

#### Dave Haggart

President, International Workers Association

- *The role of the IWA in B.C.'s forest industry.*

#### Cliff White

National Park Warden

- *Applying ecological sciences to the central Rocky Mountain ecosystem.*

#### Lorraine MacLauchlan

Council Member, Association of British Columbia Professional Foresters

- *The state of forest health in the B.C. interior.*

#### Gilbert Paillé

President & CEO, Forest Engineering Research Institute of Canada

- *Community forestry and the history of Quebec forestry.*

#### David Haley (moderator)

Michael M'Gonigle, Patrick Moore and

Sandy Peel (speakers)

- *Tenure Reform Panel Discussion.*

#### Garry Merkel

Owner/Manager, Forest Innovations, Kimberley, B.C.

- *Land ethics in forest management.*

#### Clark Binkley

Dean, UBC Faculty of Forestry

- *Forestry in the next millennium.*

#### April Hayward

Third year Conservation Student.

- *Project Guyana, youth challenge international.*

## SPECIAL LECTURES

#### PRODUCTION INFORMATION

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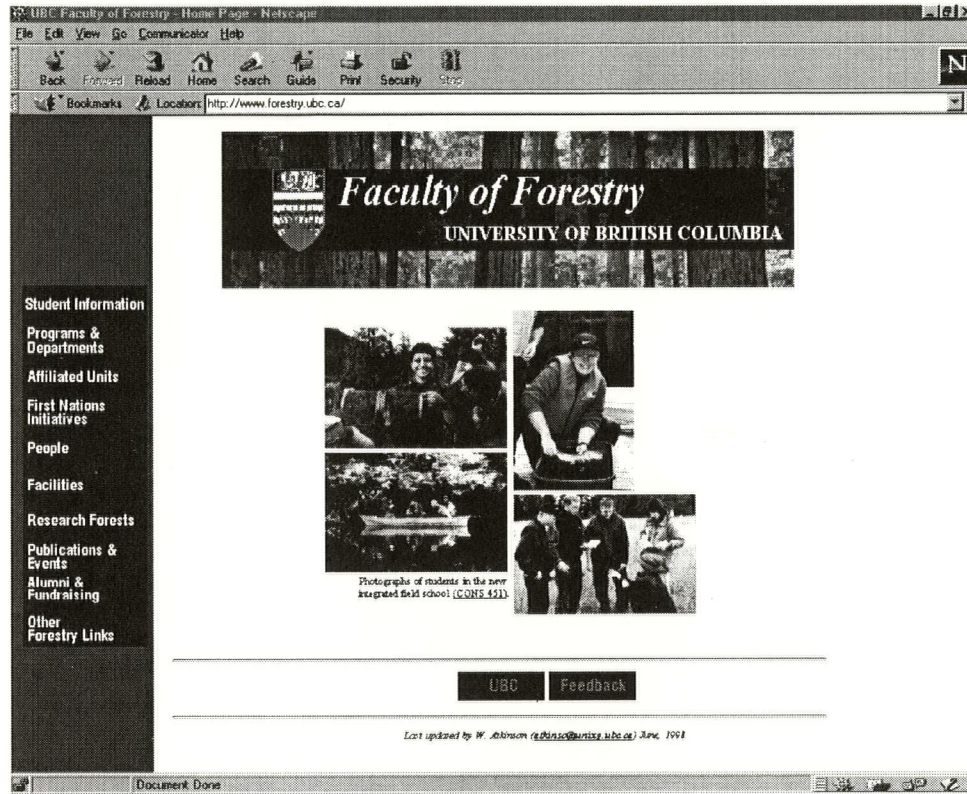
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# UBC Faculty of Forestry Home Page

Location:

<http://www.forestry.ubc.ca>



The Faculty of Forestry **World Wide Web** site features:

- academic program details;
- profiles of Faculty members;
- department and allied program descriptions;
- online Faculty newsletters and special event announcements.

Any comments or suggestions about our **World Wide Web** site can be addressed to Wendy Atkinson, Web Administrator, at (604) 822-2176 or e-mail [atkinso@unixg.ubc.ca](mailto:atkinso@unixg.ubc.ca).





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