VIEWPOINT

Tenure Reform

Improving Partial Cutting Practices on the Coast

World Heritage Sites in the Upper Fraser River Watershed?
Celebrate your forest pride and nominate your community to be the 2011 Forest Capital of BC

The Forest Capital Program
Each year, the ABCFP selects one community to be the Forest Capital of BC. This program, established in 1988, is an important opportunity to celebrate the central role forests play in shaping our unique BC experience.

Make 2011 the year to celebrate forests in your community
The Forest Capital designation is an excellent way to get your whole community involved in a celebration of the important contributions forests have made to your community’s heritage. Communities named the Forest Capital host a full year of forest-themed events such as art competitions, interpretive forest walks and logger sports shows.

Nominate your community today
Every community in BC is eligible to be nominated. The nomination process is outlined in the Forest Capital Nomination Package available on the ABCFP website: www.abcfp.ca.

Nomination Deadline: November 12, 2010
The ABCFP will evaluate nominations based on the community’s relationship to its surrounding forests and the strength of the bid proposal. The winning community will be announced in December 2010 and will carry the Forest Capital of BC title from January 1 to December 31, 2011.

Visit www.abcfp.ca for more information
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Forestry and Fires

In response to Colin Buss’s comments on fires and professional forestry in the January/February issue of BC Forest Professional:

I agree with Colin that protection is an integral part of the profession, since the planning end of fires seems to be more of an afterthought when it should be identified up front as fire mitigation planning through fireguard planning, viewscape planning, interaction with towns and cities, and other land tenures, and GIS/mapping.

The planning for fire control and fire area reductions should be part of fire training at universities and part of the province’s plans. Fire planning uses a whole set of different skills than fire suppression and fire planning is hard to do when a fire is moving at 10 km/hr or more! Fire planning involves the front-end harvest planning (select, partial, patch or designed harvest), and post harvest/burn tree planting and silviculture.

RPFs and RFTs should be involved in planning on a quicker schedule (emergency wood) with a quicker review and comment timeframe rather than five-year plans. Reduced harvesting around towns, cities and roads should be reviewed as all viewscapes are burnable. We should also be protecting high-quality forests from fire outbreaks (MPB wood). Forest fire planning should incorporate firebreaks along roads, opening up beautiful BC viewscape and high fire hazard areas close to towns and cities. The priority planning areas should be the hottest areas of BC, such as the Fraser Valley, Okanagan and MPB affected areas since, with the climate warming, BC forests are getting drier.

REGAN DICKINSON, BSc (Forestry), RPF
Dawson Creek

Users of US Crown Fire Modelling Software Beware!

I enjoyed reading the articles on “Fire in BC” in the March/April issue of BC Forest Professional. In this regard, I’d like to issue a cautionary note to your readership.

First, a little history. In his 1972 publication “A Mathematical Model for Predicting Fire Spread in Wildland Fuels” (USDA Forest Service Research Paper INT-115), Richard Rothermel acknowledged that his model was not applicable to predicting the spread rate of crown fires in conifer forests. The 1988 Yellowstone fires really highlighted the need for developing a method of predicting crown fire behaviour. The result was the publication of “Predicting Behavior and Size of Crown Fires in Northern Rocky Mountains” (USDA Forest Service Research Paper INT-438), by Rothermel in 1991. In this paper, he emphasized that the method was a “first approximation.”

In recent years, various US fire modelling systems like BehavePlus, NEXUS, FFE-FVS, FARSITE, FMAPlus®, and FlamMap have coupled Rothermel’s surface and crown fire rate of spread models with crown fire initiation and propagation models developed by the Canadian Forest Service. These systems are now the basis for operational prediction of crown fire behaviour, judging the effectiveness of fuel treatments and in simulations associated with other fire research studies in the US. They are also increasingly being used in BC.

A paper will soon be published in the International Journal of Wildland Fire entitled “Assessing Crown Fire Potential in Coniferous Forests of Western North America: A Critique of Current Approaches and Recent Simulation Studies.” In this review article, Dr. Miguel Cruz (CSIRO Bushfire Dynamics and Applications, Australia) and I emphatically show that these modelling systems are underpredicting onset of crowning and the spread rate of active crown fires by factors of 2.5 to 3. The implications for wildland firefighter safety and community wildfire protection for example should be obvious.

MARTIN E. ALEXANDER, PhD, RPF
ADJUNCT PROFESSOR OF WILDLAND FIRE SCIENCE AND MANAGEMENT
UNIVERSITY OF ALBERTA
Taking a Walk in the Forest

When I started down the road that led me to become an RPF, I was fresh out of university and, even though I had a degree, I really didn’t know very much. Yes, I had the book learning. Yes, I recognized that memorization wasn’t knowledge, but that sometimes you still had to memorize things. Yes, I understood that I had to gather information and synthesize it. And I also knew that to grow a good tree you needed good soil. But I had no real experience. There was still so much more to learn.

Over the years, I have been taught by a host of people: road builders, loggers, scalers, biologists, archaeologists, technologists, activists, retirees, students, professors, foresters, camp managers, vice-presidents, auditors, inspectors, LSO 3s and STO 4s, fireline bosses, helicopter pilots, fallers, owner operators, friends, family and children. It was only through discussions and time spent with these people that I came to truly understand that the best way to air and reconcile differences was to take a walk in the forest with others. I finally understood the connection between our natural resources and our way of life. And I learned that a tree is not just a tree, that there are many definitions of a good tree and that good soil can be a metaphor for much more than the medium in which we grow a forest.

When our profession first started out, we were seedlings, planted in an “era of timber management”—the soil that allowed forest management to put down its roots. I believe we then moved into an “era of bureaucratic forestry”—which was necessary as our profession grew and we spread our forest management branches. As a profession, we came to realize that the tree is more than the timber in its trunk and the forest is much more than the trees.

Now, I see indications of another change—an evolution. In my metaphor, we no longer think of our profession as a tree, but as a forest. This is what I hope will be an “era of true forestry,” where we are implementing all that we have learned, and where we are recognizing that the forest profession applies across the landscape, and is more than what we originally thought it to be.

In this era of true forestry, I see forest professionals fulfilling multiple roles across the landscape, synthesizing options and opportunities within the three environments: the physical environment, the cultural environment and the economic environment.

I see us at the heart of a cultural renaissance, where the forest is part of our day-to-day culture. Not a distinct and separate forest, as was so mystically and strikingly portrayed at the Olympic opening ceremonies, but a forest that is part of our everyday life and part of the foundation of how we define ourselves.

I see a greater understanding and implementation of professional reliance and the balancing of innovation and risk. I see us leading the way past forest-based management to land-based management. I see us back in our boots—out in the forest, kicking the dirt, having great discussions, exchanging ideas and making decisions, right there, right then.

And I see society valuing us, the forest professionals, more.
Ah annual dues … You hate paying them and we hate charging them. So what exactly does the ABCFP staff do and why does it always seem to cost so much? It’s always helpful to start with some background about what we do—and why we do it.

As you know, the Association of BC Forest Professionals was created by the Foresters Act. In simplest terms, the Foresters Act defines the practice of professional forestry, stipulates that one must be a member of the ABCFP to engage in the practice of professional forestry, establishes the ABCFP, charges it with the administration of the Foresters Act and vests authority to govern the association in its council.

The Foresters Act and the process to refine it are owned by the government of BC, not by the association or its members. A draft Foresters Act was first introduced in the BC Legislature in 1945 and subsequently went into effect in April 1947. Over the ensuing years, the Foresters Act was revised on a number of occasions.

The most recent version of the Foresters Act came into force on June 20, 2003 and marked some of the biggest changes to the forestry profession in more than fifty years. Some of those changes include:

• A strengthened definition of the practice of professional forestry.
• New duties and objects of the association spelled out, including explicit recognition of a limited advocacy mandate and a requirement to uphold stewardship for forests.
• A new category of membership created for Registered Forest Technologists.
• Authority given to establish voluntary certification for technical forestry specialties.
• Inclusion of alternate dispute resolution mechanisms.
• Increased investigative powers.
• A whistle-blower clause was added making it an offense to take punitive action against a member who exercises professional obligations of independent practice or against a member who, in good faith, makes a complaint against another member.

So what does all this have to do with fees? The Act dictates what the association must do. In addition to including RFTs in the association (and thus increasing our fee revenue), the revised Act also gave the ABCFP more to do. For example, a new model of ensuring competency was required and a new structure was created that required the association to focus on forest stewardship. The changes to the Foresters Act (2003) were made to support a developing, results-based system. When FRPA was introduced, it used a greater reliance on the judgment of forest professionals than the previous legislative regime. In order to support professionals and the concept of professional reliance under FRPA, the association had to respond in a number of ways, one was the need for more guidance papers for members.

Adding to the financial pressure on the association is that the last non-inflationary increase to fees took place in 1992. In that year, members voted to accept two $30 increases to be implemented in 1993 and 1994. In 2001, the ABCFP once again asked members for an increase. At that time, we needed a 66% majority to ratify the increase – we received 63% so the increase was not implemented.

You can see from the pie chart where your fees are being spent but here are some more details. Under the guidance of Randy Trerise, RPF, the registration team handles the records of 5,500 members. While the majority of members do not need registration assistance, there are a significant number who need to change their status each year. Enrolled members and people applying to the ABCFP require intensive assistance – in many cases, staff have to work on a case by case basis to review academic and experiential credentials. Restricting entry to the profession to only those who demonstrate a minimum level of competence is the first obligation for the association and a primary protection of the public interest.

In addition to the registration issues, Randy also deals with the complaints process. In 2009, the complaints area was completely revamped to make it much easier to lodge a complaint. Due to the implementation of professional reliance, the ABCFP is seeing more complaints than ever before. In the past, the majority of complaints were not serious and didn’t require an investigation. Today, the complaints are serious concerns about the practice of forestry and many require detailed investigations. Investigations are conducted by dedicated volunteers, but they still cost $3,000–$5,000 for travel and other expenses.

Where Your Members Dollars are Spent

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<th>Category</th>
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<tr>
<td>Governance</td>
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<td>Professional Development</td>
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<td>Professional Practice</td>
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<td>Act Compliance</td>
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<td>Registration/Admissions</td>
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So Where Do Your Member Dollars Go?
Mike Larock, RPF, does all of our professional practice and forest stewardship work. He and his committee deal with a huge number of practice issues brought about by the move to professional reliance. For example, staff with the assistance of the Practice Advisory Service and others answer about 200 calls a year—not all of them turn into formal inquiries but they still have to be dealt with on an almost daily basis. In addition, the ABCFP has created a large number of guidance papers over the past few years. These papers take many hours to produce and often involve outside organizations. We think it is extremely important for our members that we provide professional practice guidance to not only guide members in the best direction for practice but to also establish the standard of professional practice. Professional reliance success requires sufficient guidance for members.

Our member relations area is run by Brian Robinson, RPF. Brian’s role is to ensure members are competent to practise forestry and the three-part continuing competency program (self-assessments, peer reviews and practice reviews) has now been fully implemented. When it was conceived, the plan was to hire a consultant to conduct the practice reviews after the pilot year. Unfortunately, we cannot afford to hire a consultant so Brian is conducting all the practice reviews in addition to his other duties.

Brian is also in charge of most of the workshops—both online and in-person—as well as creating new technical occupations, accreditation programs and scopes of practice through the Forest Measurements Board for associate members. He and his committee set the entrance requirements for cruisers last year and are currently working on application requirements for silviculture surveyors and accreditation requirements for waste assessors.

The communications team is led by Amanda Brittain, MA, and is responsible for every piece of communication that leaves the ABCFP. The website is an especially labour intensive communication vehicle as it requires constant maintenance and updating to ensure members have access to the latest information quickly. The BC Forest Professional magazine is much beloved by the membership and fills a needed professional development role as well as a communications one. In the past year, the communications team has added social media to its arsenal by establishing a Facebook page, Twitter account and YouTube channel. Social media works in combination with career fairs and brochures to recruit young people to our profession.

The work mentioned above is just a sampling of the activities taking place at the ABCFP. Of course, we have a finance team that ensures all finance, human resources and IT issues are taken care of for the benefit of both staff and members.

If you’re wondering where we spend your annual dues—this is it…
Add the ABCFP to Your Safe Senders List
If you know someone who is not regularly receiving the Increment or other e-communications from the ABCFP, please pass on the following information. Some spam filters accidently label ABCFP messages as spam for a number of reasons. You can stop this from happening by simply adding @abcfp to your “safe senders” list. Most people will be able to adjust their safe sender lists in their e-mail program (such as Outlook or Thunderbird). If you work in a large organization, you may need to ask your IT department to make the change for you.

Annual Report Now Available
The 2009 ABCFP Annual Report is now available on the website. The annual report includes the association’s consolidated financial statements but you can see the full financial statements on the website in the Publications & Forms section.

ExpoFor 2010 a Success!
More than 225 delegates came to Kelowna to take part in ExpoFor 2010. Every panel and breakout session was well attended and delegates also enjoyed the opportunity to chat with friends and colleagues. Photos and speaker presentations will be posted on the ExpoFor website shortly and the July/August issue of BC Forest Professional magazine will include a special feature on the conference. Until then, here are a few comments from attendees:

- I listen to many talks in many places around the world, and I really appreciated the efforts that each speaker made to provide a professional talk, and to each session organizer for getting an excellent mixture of diversity of speakers on each topic. I didn’t agree with all that was said, and that made me think about conditions under which I might agree, and where I think we should go with forest management in BC.
- We would like to take this opportunity to thank you for the wonderful conference and trade show as well as for inviting us to speak at one of the sessions. It was obvious to us that you had put great time and effort into making this event such a big success.

ABCFP Online Courses Now Available
The ABCFP is also pleased to offer two courses online. Working Effectively with Aboriginal Peoples (presented by Indigenous Corporate Training) and Professional Reliance are currently available on our website. The ABCFP will have Professional Ethics and Obligations as well as the Best Exam Possible workshops available online in 2010.

Correction
In the last issue of BC Forest Professional, we failed to credit Sandy McKellar for the photos of ABCFP’s senior staff used on pages eight and nine. We apologize to Sandy for this oversight.

Meet Baljinder and Ruxandra:
The ABCFP’s Registration Coordinators
Planning to write the exam? Want to go on a leave of absence? Need to clarify an ABCFP membership policy? Baljinder and Ruxandra are the people to talk to about these questions. They’re the registration department’s coordinators and they respond to an average of 100 enquiries a week.

One of Ruxandra and Bal’s big jobs is the exam cycle. To many of us, the exam is just one day, but to them, it’s a year-long endeavour. It starts with sending the eligibility notices and is followed by organizing all the exam venues and finding invigilators for each location. Once the applications are received they are reviewed to ensure that the applicants have met the work experience and academic requirements to write the exam.

Organizing the exam is a complex process which they have mastered over the last several years. Last year there were approximately 400 examinees at over 30 locations around BC. Some of the exam related tasks include finalizing the examinee lists, preparing the exam packages, checking the calculations for each exam and releasing the marks.

While the exam takes up a lot of their time, Bal and Ruxandra do many other things including the membership statistics for the Board of Examiners and Council. They administrate member movement – people joining, retiring, taking a leave of absence, reinstating, resigning and being given life membership. They also work to keep the registration sections of both our website and our database up-to-date.

Both Ruxandra and Bal are involved in developing, reviewing and updating policies with the rest of the registration team. These policies refer to the requirements for becoming an ABCFP member, the rules around articling and the change of status requirements. They also deal with variance to policy—trying to accommodate current and prospective members who need special consideration.

“We’re here to help and we encourage members to contact us if they have any questions about their membership or ABCFP’s policies,” said Bal and Ruxandra.
Tenure reform is back in the centre of many forestry discussions these days. With this in mind, we decided to dedicate an issue to the tumultuous topic. You can’t be sure of much in this life, but you can be sure that every forest professional in BC has an opinion on tenure reform.

Bill Bourgeois, PhD, RPF, starts us off with a fiery article about how he thinks tenure reform should be instituted and what he thinks is holding BC back. David Haley, PhD, RPF (Ret), follows this up with an article on how tenure reform could be restructured to accommodate sustainable forest management.

Breaking away from what could happen, Jennifer Gunter, MSc, talks about what is happening in her article, “Community Forests: The Farmers’ Market of the Forest Sector.” Community forests are a relatively new tenure that create local jobs and manage local resources to meet community needs, values and priorities. Brain McNaughton, RPF, follows with his article on how woodlot licenses are putting the forest back in local hands and what more can be done to support woodlots through tenure reform. At the very end of the Viewpoint section, Minister Pat Bell outlines the recent changes in tenure reform to accommodate bioenergy.

Moving back again to what future changes should be made, Kerry McGourlick, RPF, outlines how forest tenures can be made more attractive to tenure holders and investors. Then Harry Nelson, PhD, provides details on two existing options—corporatization and privatization—and explains how they could both affect tenure reform.

We hope this breadth of perspectives allows our readers to learn something new and examine their own opinions on tenure reform.

As a final note, we worked hard to secure an article specifically addressing tenure reform as it affects BC’s Aboriginal Peoples but we were unsuccessful. We will continue working on this and will print an article on this topic in a future issue.
We need a tenure system that allows for balancing the public’s social and environmental demands with the public and shareholders’ financial expectations. Today’s public insists BC forests be managed to provide many things over the long term, including:

- timber,
- non-timber forest products,
- tourism and recreation opportunities,
- fish and wildlife habitat,
- clean water and, more recently,
- bio-energy and carbon sequestration/storage, etc.

This cannot be done on every hectare but, if we are strategic and organized we can do it on a province-wide basis. They also want these values to continue over the long term.

Does the current tenure system and priority actions by government and the forest industry deliver on what is expected by the public? I would argue they do not and I would further argue that decision makers have no interest in modifying the system.

The Ministry of Forests and Range (MFR) has been given the responsibility, through the Forest Act, of managing the Crown forest resources. They have chosen to do this through a tenure system consisting of ~75% of the forest land base in volume based tenures (Forest Licenses or FLs) with the responsibility of management, other than reforestation, remaining with the MFR. Most of the remaining 25% is in Tree Farm Licenses (TFL) with the contracted management responsibility, including reforestation, residing with the forest companies.

The forest industry has structured itself such that the responsibilities in both the TFL and FL are driven by the performance measures of the mill managers. These measures are short term in nature and result in a focus on reducing the ‘cost of the log’ which is best accomplished by doing only the minimum required forest management and harvesting close to the mill. This has been de facto supported by government as part of the overall objective of increasing industry global competitiveness. Three examples of actions to help the industry in this regard include:

- the introduction of Forest Stewardship Plans which resulted in corporate lawyers advising companies to only commit to the minimum requirements,
- the extension of TFL Management Plans updating for up to an additional 10 years, and
- the directive to encourage actions that will increase industry competitiveness.
We must change the tenure system and associated forest management! Some of the priority requirements of the new system should include:

**Integrate forest management and economics**
A new tenure system will have to integrate forest management with forestry economics. Currently, forest management focuses on short-term political and economic objectives. This is not a strategy to maintain the ‘forest infrastructure asset’ for future benefits. We must remember forest companies, governments and the public benefit financially from BC’s forests over the short and long-term. Consequently, all parties have a responsibility to share in the SFM costs and benefits. This sharing must include provisions under long-term legal contractual commitments and assurances to justify investments. Government must not be allowed to withdraw a portion or the entire timber or forest resource asset of a tenure without adequate compensation as determined by a judge. Also, forest companies have to be held accountable for their commitments with the loss of tenure as a real consequence.

**Ensure MFR is a regulator and not a forest manager**
The government system does not lend itself to sustainable forest management. (Four year political terms with the potentially strong influence of a manufacturing focused forest industry reduces the government’s ability to plan for the long term.) Consequently, the forest land base is under a tenure system that will not be able to deliver on the public’s expectations and the MFR requirement to “manage, protect and conserve forest and range resources for immediate and long term economic and social benefits.” MFR containing BC Timber Sales (BCTS) is in conflict of interest as a regulator and forest manager.

**Ensure tenures are area-based utilizing watershed boundaries**
Regarding the future design of the tenure system, I believe there is agreement among a wide range of interests that tenures should be area-based. Forest resources exist due to the ecological processes and services within each watershed. Consequently, human interventions must be structured on this basis to ensure these processes are not irreparably affected. Having two or more managers in the watershed with different corporate philosophies, objectives and priorities has the potential for adversely impacting ecological integrity. Forest companies are competitors and do not “play well together in the sandbox.” Therefore, we should give each their own watershed so the objectives, activities and responsibilities are easily monitored.

**Establish a BC forest ethic and contractual requirements to guide forest management on the tenure**
Tenure requirements must include forest management that balances the maintenance of ecological integrity with social and economic expectations on each economically viable and sustainable management unit without actions that will irreparably damage one or more of the values. This will require forest management flexibility to both allow individual woodlands managers to identify the appropriate mix of products for management over the long term to fit the ecological, geographical, social and economic conditions that apply, and be accountable for, the appropriate practices using a results-based approach. The application of ecosystem-based management (EBM) principles within the concept of SFM can be a solution. This requires the adoption of EBM as a concept for all forest tenures, something the forest industry and MFR have resisted with a passion.

**Ensure full value from each log**
The tenure system must contain provisions to encourage full economic utilization of the fibre resource and receiving full value from each log. The consolidation of the forest industry over the last decade has been in response to global competition and has undermined the creation of a true log market. The new tenure agreements should include a clause that the sum of a woodlands company’s fibre agreements with conversion companies cannot exceed 50% of the AAC. This would result in at least 50% of the logs being sold on the open market without a BCTS. It is my view this would have the added benefit of encouraging innovation in the mills.

It is very discouraging to experience the situation regarding forest management in BC after spending 35 years promoting improved forest management. The tenure system and actions by government and industry are the key causes. Without a serious change to the tenure system, maybe it is time for people like me to move on to other issues as I see only frustration in the near future.

*Bill Bourgeois, PhD, RPF, is president of New Direction Resource Management Ltd. and has invested over 35 years in improving forest land management in BC working in the forest industry, the CORE process and consulting on strategic issues.*
TODAY’S FOREST TENURE SYSTEM IS, TO A LARGE extent, anachronistic. It was originally designed to satisfy three main goals. The first was to ensure the orderly liquidation of old-growth and its replacement with new stands, often plantations, to be managed in perpetuity on a sustained basis. The second was to attract private capital to fuel the province’s economic development by opening up vast primary timber resources. The third and final was to create stable income and employment in timber dependent communities.

Through to the late 1970s, the tenure system was successful, by and large, in realizing its objectives. However, during the 1980s, forests became the focus of environmental concerns. In 1987, the term ‘sustainable development’ was coined and quickly captured the public’s imagination and galvanized the efforts of the environmental movement worldwide. By the dawn of the new millennium, ‘sustainable forest management’ (SFM) had become the overriding goal of provincial governments across Canada.

Sustainable forest management embodies environmental, economic and social sustainability.

• Environmental sustainability implies that the structures of forest ecosystems are maintained to allow desired combinations of goods and services to be produced over time.

• Policies designed to further economic sustainability ensure that forests maintain, and ideally enhance, their contributions to local, provincial and national incomes and employment.

• Social sustainability is concerned with the fair distribution of wealth created by forests among individuals, groups and regions. In BC, meeting the aspirations of Aboriginal Peoples is of particular importance.

BC governments have not risen to the challenges of SFM by developing new innovative tenure arrangements. Notwithstanding the important changes that were made to BC’s tenure policies under the 2003 Forest Revitalization Program, most of the trappings of the traditional tenure system remain. Although lip-service is paid to SFM, sustained yield remains entrenched as a fundamental policy objective. Harvest volumes are regulated by allowable annual cuts and periodic yield controls. The maximum impact environmental constraints can have on allowable annual cuts is enshrined in policy.

To accommodate changing policy imperatives, a complex regulatory framework has been introduced that greatly increases the responsibilities tenure holders must assume in order to exercise their timber harvesting rights and dramatically increases the costs of timber production. There has been a marked shift of responsibilities from the government to the private sector resulting in decreasing reliance on incentives and market forces and increasing reliance on coercive regulations as means of achieving public objectives. These trends have had a negative impact on the sustainability of the forest industry and, many would claim, have failed to adequately promote environmental and social sustainability. If public forests are to realize their full potential as a source of socioeconomic benefits for the people of BC, it is time that fundamental reforms to the existing tenure system are seriously considered.

Restructuring Tenure for Sustainable Forest Management: Is Real Action Possible?

First Nations’ support and stakeholders’ support at local and regional levels.

• The system must be sufficiently flexible to accommodate changing economic circumstances and social preferences.

• Tenure arrangements must be transparent; understandable to all licensees and public employees and free of ambiguities. Particularly, they should be clear concerning the division of rights and responsibilities between licensees and the public sector.

• The system should rely, where possible, on incentives, both market and statutory, rather than broadly based regulations and penalties. Where regulations are necessary, compliance costs should be at a minimum commensurate with overall objectives.

• The system must be diverse. That is, it must provide licenses of different sizes and purposes that are held by a variety of industrial and non-industrial holders.

Restructuring Tenure for Sustainable Forest Management: Is Real Action Possible?

By David Haley PhD, RPF (Ret)
The advantages of diversity are many. They include greater security for forest dependent regions that become less dependent on a small number of employers and a rise in the volume of timber produced by non-integrated firms thus strengthening regional, competitive stumpage and log markets. It also generates a more diverse flow of forest products as individuals, communities, First Nations and small and large companies will likely manage their licenses to meet a broad range of outcomes.

Major restructuring of British Columbia’s forest tenure system is clearly required and many would say long overdue. However, fundamental institutional changes are difficult to implement and are fraught with political uncertainty for any government attempting them for the following reasons:

• There is no consensus on how the tenure system should be restructured.
• Different groups of stakeholders have very divergent opinions on the nature and direction of such reforms.
• Governments perceive, probably correctly, that the end result might be to please no one—a recipe for political disaster.
• Even if agreement on the nature of reforms could be reached, outcomes are difficult to predict and present considerable risk. Theories on the impacts of various tenure models abound but empirical evidence is difficult to find.
• Any restructuring of the province’s forest tenure system would generate enormous opposition from those groups with vested interests in the status quo including large segments of the forest industry, both private and public sector unions and many of those public employees who manage forests and other related natural resources.

In spite of these many difficulties, I believe that the time for action is now. The forest sector is on its knees but could recover to become once again a vital component of British Columbia’s economy and social fabric. Tenure reform that recognizes the social and economic realities of the 21st century should be regarded as an essential component of the recovery process.

David Haley, PhD, RPF (Ret) is professor emeritus of forest economics in the Department of Forest Resources Management at the University of British Columbia. He was educated in forestry at the University of Aberdeen, Scotland and in forestry and economics at the University of British Columbia. For many years, his main interests have been the institutional and public policy environments in which forestry is practiced. In addition to his academic pursuits, David has worked extensively as a consultant to governments and the private sector both domestically and internationally.
Anyone who has been involved in a Community Forest Agreement (CFA), be they a forest professional, elementary school teacher or local business owner, knows that there are challenges with this new model. Community-based decision making is hard work and takes perseverance. The economic and ecological changes facing the forest sector do not make things any easier. So why would a community or the government look to expand the Community Forest Program? There are many reasons.

**Consumer Demand**
Consumers want to connect with nature and want to know the story behind their purchases. Strong environmental practices and personal stories will be important marketing tools. Community forests can tell the public the story of the product from the tree to the finished product and how selling the product affects their community and the environment.

**Increased Productivity and Utilization**
Experience shows that once a community is given a finite land base to manage for the long-term, the incentive is there to realize maximum utilization of every available stand and hectare of forest land. Forest companies are focused on harvesting the species and log types that best meet their mill requirements. Community forests are focused on marketing the full range of species and logs that they have available and marketing these products to a range of manufacturers.

**Value Added Development**
Access to fibre has been a limiting factor in the creation of a vibrant and diverse wood manufacturing sector, especially for small to medium sized companies. Small companies do not have the capacity nor the need to manage a forest tenure. However, they do need a reliable and stable source of raw material which long-term, community based tenures can provide. Community forests have the ability to deliver products to all user groups, whether it be a major 2x4 dimension lumber mill or the smallest artisan. They are the farmers’ market of the forest sector. By delinking the woodlands from the major manufacturers you ensure that each log finds its best market and end use.

**Forest Stewardship**
Research has shown that communities that are able to play a meaningful role in management have developed ways to prevent over-exploitation of local resources. In community forestry, management decisions are made by those who have to live them and the feedback can be immediate. With a meaningful, area-based tenure, community members become the stewards of their local forests.

**Community Economic Development**
Community forests have demonstrated their ability to provide for diversification and economic stability. By increasing the number of CFAs throughout the province, government can provide a mechanism whereby a portion of the benefits generated by forest resources remain in the communities where they are generated, without having to bring back appurtenancy. They have long been recognized as an important tool for community economic development with financial returns being leveraged over and over again to create community benefits such as community halls, libraries, trails and tourism development, even a new ambulance.

In the spring of 2009, the Working Roundtable on Forestry reached consensus on 29 recommendations aimed at achieving “a vibrant, sustainable, globally competitive forest industry that provides enormous benefits for current and future generations and for strong communities.” Recommendation #23 was to “expand the Community Forest Agreement Tenure Program.” In order to expand the program, three key success factors must be met:
**Size:** CFAs must be large enough to be efficient, economically viable and able to provide the maximum benefit to local economies. In several cases around the province, the small size of CFAs hampers these initiatives. Depending upon the profile, sufficient volumes of species and forest products must be available to support the manufacturing diversification sought. This is especially important for the more remote communities, where the cost of transportation to distant manufacturing facilities can be prohibitive.

**Availability:** While the number of CFAs has increased rapidly in the last decade, they still only represent 1.5% of the provincial annual allowable cut. The Minister of Forests and Range has committed to expanding the program, but the challenge is to find a way to allocate more volume and area to CFAs. One potential solution is to develop a mechanism whereby CFAs could provide data to marked pricing system, thereby performing the role currently filled by BCTS.

**Pricing:** A stable pricing mechanism must be maintained. The change of community forest pricing to a reduced, tabular rate was the single most important decision the provincial government has made in support of community forests. By shifting the benefit and revenue risk to the community, government has allowed for true market pricing to take effect.

Ten years after this innovative tenure was piloted, community forests are demonstrating their ability to create jobs and manage local resources to meet community needs, values and priorities. They are positioned to meet the needs of the value-added sector, so critical to the future or our industry. Local and international markets are seeking products that are produced in an environmentally and socially conscious manner. Community forests are delivering this product now. In the midst of the current challenges facing BC forestry and forest dependent communities, community forests are a unique tool to help create and maintain more resilient and self-reliant communities.

Jennifer Gunter, MSc, is the executive director of the British Columbia Community Forest Association. Jennifer holds a master’s degree in Natural Resource and Environmental Management from Simon Fraser University, and is the editor of the Community Forestry Guidebook: Tools and Techniques for Communities in British Columbia.
Woodlot licenses, BC’s smallest replaceable tenure, tend to be located near settlement areas and in transportation corridors—areas where there is considerable interaction with the public. Through these interactions, the Federation of BC Woodlot Associations (FBWCA) has developed its understanding of the public expectations around how the forest resources are managed and what they expect in return for the use of their forests.

The FBWCA believes that the public wants local people to work the land, grow trees and make a decent living from the forest. The public wants confidence in knowing that their forests are being well managed on a sustainable basis. However, a shift is occurring whereby ecosystem health and resiliency are becoming more important than adhering to stereotypical forest management regimes. The public expect more wood and other forest products to be grown on a land base that is shrinking due to land alienation for settlements, preservation and conservation. In a nutshell, they want to have their cake and to eat it too!

With respect to the forest sector, the public wants more control over local resources so more of the economic, social and environmental benefits accrue directly to them. Corporate control over public resources is becoming a societal issue. The public expects greater returns from the use of their forests and sees the emergence of new products such as non-timbered forest products, food (agro-forestry), environmental goods and services, and carbon and bio-energy as opportunities worth pursuing. Deriving more value from wood—value added products—will continue to be a priority.

In order for this increased public control to occur, tenure reform which addresses three key issues is needed.

Redistribution of the Allowable Annual Cut (AAC)
There needs to be a redistribution of volume (AAC) which provides for a better mix of small, medium and large tenure holders. A more diverse sector will create opportunities for new business start-ups to produce and sell a wider array of forest products. The emergence of community-based forestry businesses is seen as a means to help strengthen BC’s forest sector and encourage the pursuit of new products and niche markets.

Expanding Tenure Rights to Include Other Products
Rights under certain tenures need to be expanded to include agro-forestry, non-timbered forest products, sequestered carbon and

Putting the Forests Back in Local Hands: Tenure Reform in BC

In addition of managing his woodlot, Rod Krimmer runs a small sawmill. Sawmills create the opportunity for a woodlot owner to increase his/her income by producing lumber. Rod’s woodlot was certified by the FSC (Forest Stewardship Council) in 2001. Sales of certified wood have been slow but over time sale prospects are expected to improve. (Forest Life: British Columbia Woodlots, 2009) Photo and cutline: Wim Tewinkel

Viewpoints
By Brian McNaughton, RPF

See TENURE REFORM IN BC on Page 29
It’s Time to Make Forest Tenures More Attractive to Tenure Holders and Investors

next three decades helped attract investment, spurred economic development and employment and filled government coffers. It also led to improved forest practices and, with prodding from environmental groups, the public and First Nations, a broader view of sustainability and cultural values.

Today BC’s forest sector is in the middle of another crisis and possibly faces its greatest challenge. In the near term, it is struggling to adjust to the deepest economic recession since the Great Depression. In the longer term, it is challenged to adapt to both the real and the anticipated impacts of climate change as well as to find ways to contribute solutions.

The economic challenge is not new. Many analysts suggest that while the pressure to achieve social and environmental goals has never dropped, the same is not true for economic goals and that as a result the forest sector has been faltering for decades. They point to an inability to compete throughout the business cycle, a lack of sustained profitability and an inability to either generate or attract the capital needed to remain competitive.

Contributing to this decline has been the ‘baggage’ that the tenure system and existing tenures have accumulated over time. Some has been externally imposed by the landlord in the form of complicated practices regimes, limits on free market tools and public expectations while others have been self imposed in the form of labour agreements and fiber supply commitments. All have reduced flexibility and narrowed the scope available for fundamental change.

It would be naïve to think that tenure reform could make everything right as the challenges are much broader. However, tenure reform could contribute to solutions. It is time to test drive some new approaches, either in the form of new tenures which could be launched with less ‘baggage’ or through changes to existing tenures to improve their economic viability.

Here are a few suggestions to make investments in sustainable forest management and forest tenures more attractive to both tenure holders and the investment community:

- New replaceable tenures should be area based and when practicable volume-based tenure holders should have an opportunity to convert their tenures.
- Extend replaceable tenure terms to encourage private investment in forests in addition to traditional manufacturing and infrastructure.
- Broaden the suite of economic resources available under an area-based tenure (e.g. carbon and other non-timber forest products) to encourage partnerships with interested third parties.
- Ensure that the pricing system allows a tenure holder to share in a significant portion of the benefits that flow from business efficiencies, market improvements and new forest based products.
- Free new tenures from market constraints, be they requirements to use defined service providers or restrictions on exports, with similar relaxation considered for existing tenures.
- Regulate maximum harvest levels and profile performance but recognize poor market conditions and allow area based tenures to retain uncut volume in their forest inventory to support future harvest levels.
- Utilize zoning to identify tenures or management areas within tenures where the operating land base and investments are shielded from spatial takings for non-forestry purposes as well as regulatory requirements that unreasonably impact economic goals.
- Should a higher and better use (non-forestry development, specific environmental or social need) be identified for a tenured area, ensure fair and timely compensation is provided for lost investments and lost economic opportunities.

Regulate area-based tenures at the management unit rather than the site level with monitoring through sustainable forest management and environmental management system linked audit protocols.

The current recession will end. When it does, world markets will be looking for forest products and logs from suppliers who are competitive, dependable and environmentally conscious. Investment dollars will flow to areas which provide investment security and a competitive return. The forest sector will help address the global challenge of climate change through sequestration of carbon in new forests, providing materials with a friendly carbon footprint and contributing to green energy supplies.

It is in all of our best interests to see British Columbia positioned to supply those markets, attract that investment capital and contribute climate change solutions. But that will not happen unless we are willing to accept change. The time for that change is now.

Kerry McGourlick, RPF, is a graduate of the UBC Resource Management program. Starting with Rayonier Canada in 1977, he worked in a variety of coastal locations from Port McNeill to Sewell Inlet in Haida Gwaii. He is currently chief forester for Western Forest Products in Campbell River.
Tenure reform is not a new idea in British Columbia. Given its history, it’s not surprising that two approaches raised as possible options in the current discussion—corporatization and privatization—are not new ideas.

Oftentimes opposition to these approaches, especially privatization, is based on either ideological grounds or preconceived notions of what is being suggested rather than on the merits of any specific proposal. In order to better understand what is being proposed, it is important to review what these concepts mean, how they work, how they differ and why they are being proposed.

What Does Corporatization Mean?
Corporatization involves retaining public ownership of forestland but placing it under the authority of a public corporation. In Canada this is often called a Crown corporation. Such organizations are autonomous in their business strategies and are mandated to maximize commercial returns within the constraints of the broader public interest. They have the authority to raise funds in capital markets but cannot sell equity.

The History of Corporatization in BC
In 1991, the BC Forest Resources Commission (the Peel Commission) recommended that approximately one-third of the province’s forestland be managed by a Crown corporation, another third in long-term Crown forest tenures and the final third in small tenures held by individuals, communities and First Nations (British Columbia Forest Resources Commission 1991). These recommendations were intended to create market driven incentives for efficiency in timber production, diversify the tenure system and help create viable competitive timber markets.

In the 2003 policy changes, the province subsequently adopted some aspects of those recommendations. The government developed BC Timber Sales (BCTS), a quasi-autonomous profit centre in the Ministry of Forests and Range. The BC government committed to direct public management of a substantial area of Crown forestland accounting for about 20% of the provincial annual allowable cut or over 14 million m³ per annum.

How is Corporatization Used Elsewhere?
In Quebec, the government has proposed a similar type of agency, charged with overseeing competitive sales, as part of its broader goal of breaking the link between forest management and forest product manufacturers. Under those changes, timber would be made available to those manufacturers that previously held those timber rights through a mix of long-term supply agreements managed by forest management authorities and short-term timber sales through an entity similar to BCTS.

Other jurisdictions involved in the use of corporatized state entities operating on public forestland include Sweden and most of the different state authorities in Australia.

What Does Privatization Mean?
Privatization involves the transfer of some form of ownership rights from government to private interests. What is transferred and who receives it are key questions. In British Columbia, we have experience with various forms of land alienation. In the past, this included the outright granting of Crown land and the use of long-term timber leases. Subsequently, the forms of tenure we are familiar with today were established including volume and area-based tenures and renewable, short-term or long-term (Community Forest Agreements) leases.

A popular misconception is that privatization involves alienating public land or selling forests and their many important nonmarket attributes to private interests. Oftentimes, it is also assumed that privatization will involve relinquishing the safeguards of public control and that ownership will necessarily involve private firms. However, this is not necessarily the case. While privatization does involve the transfer of some form of ownership rights from government to other interests, it need not necessarily involve outright land sales.

The History of Privatization in BC
The issue of whether or not a portion of Crown land should be transferred to private parties was discussed at the Royal Inquiry conducted by Commissioner Sloan in 1945 (Mahood and Drushka 1990). Commissioner Sloan subsequently proposed two types of management units. The first had private working circles that combined private land with Crown land. These subsequently formed the basis for TFLs. The second had different kinds of public working circles based on public land. These units would provide timber either to the market or to firms with management rights within these units. They both would be formed based on ensuring that they could be managed on a sustained yield basis. (Sloan had concluded underlying ownership of the land did not matter in achieving this outcome.)

How is Privatization Used Elsewhere?
In New Zealand, the government privatized its state forests but it retained ownership of the land. It sold the rights to the standing timber plus rights to the productivity of the land itself for a defined period of time. However, the owners of those timber rights must maintain public access to their lands for recreational purposes. A similar approach has been followed in South Africa. Nordic countries with private forestland have protected public access for a range of purposes through common law (Saastamoinen 1999).

In the United States, as well as in other jurisdictions with private forestland, there are regulations that govern forestry practices and are designed to ensure that sustainable forest management is practiced. In these cases, privatization doesn’t diminish the right to regulation.

How Would These Approaches Work?
Both corporatization and privatization have a common objective—the desire to improve the economic return from Crown forests. Under
corporatization, government is potentially able to generate higher returns from timber sales that then flow to government coffers. Under privatization, governments seek to realize the returns from selling whatever rights are offered, as well as indirectly through the increased value generated through taxes, land rents, etc.

Both approaches are designed to reduce political intervention within the tenure system. Corporatization restructures the political relationship in a more transparent and predictable fashion and develops a more commercially focused organization. Privatization removes government directly from decisions over how to allocate and utilize the forest resource.

In both approaches, the public interest in the important social and environmental aspects of Crown forests must be recognized. Under corporatization this means the appropriate regulatory relationships have to be established between the corporatized agency and the regulatory body that resides elsewhere in government. Under privatization government has to ensure that the appropriate safeguards will be in place as it will lack direct oversight.

Both approaches also require government to ensure these changes yield the appropriate benefits. In addition to protecting social and environmental values, government also has to establish the appropriate safeguards to protect competition. Competition is ultimately what drives the efficiency gains and realization of higher economic values under both systems.

**How Would These Approaches Differ?**

Government ownership means that even under corporatization there is still the potential shadow of government intervention. Governance, how the organization is structured and managed, is key if the efficiency gains are to be realized. This is particularly important as the discipline imposed on private firms by shareholders is lacking.

Privatization reduces the risks of political intervention. However, it also raises legitimate concerns over whether private interests begin to supersede public interests when ownership rights are transferred. Privatization may help unlock private capital—a key ingredient in sustaining the resource as well as the industry that relies upon it. However, it may not be sufficient to overcome the limitations imposed by resource conditions, productivity or market access. It can help enable a healthy industry but it can not ensure one.

Each of these options has to be considered in the context of what problem we’re trying to solve. They should not be considered as the only options or even as exclusive options. They can coexist with other models and approaches. We should note that one of the main changes in forest policy in BC in recent years—the diversification of ownership and shift of decision-making authority to local authorities and First Nations—is not incompatible with these options. Indeed, if one steps back from the discussion of whether or not either of these approaches might be politically acceptable to the public, we can see that we are already making these kind of changes. There is no theoretical difference between privatization and the settlement of treaties where First Nations receive ownership rights over land and resources.

**Harry Nelson, PhD, is an assistant professor within the Department of Forest Resources Management at UBC. His long-term research interest is in analyzing natural and environmental resource policy with an emphasis on forestry and in developing new policy options that can help enhance the long run sustainability of Canadian forests and the communities and businesses that rely upon them.**
Since becoming Minister of Forests and Range in June 2008, I’ve been focusing on four key areas: improving utilization, growing trees, promoting Wood First and expanding markets into China.

As a former logger, I’ve always thought that there was too much waste being left behind in the bush from logging operations. While some wood residue is necessary for biodiversity reasons, for the most part, wood waste is a wasted opportunity.

To promote bioenergy opportunities, in March 2008, government amended the Forest Act to allow the Minister of Forests and Range to offer non-replaceable forest licences to holders of energy contracts with BC Hydro.

And in September 2008, BC Timber Sales started offering a new form of licence—an innovative timber sale licence, or lump-sum sale—primarily to encourage increased utilization of beetle-attacked timber. By setting the price for the whole stand of trees instead of by the cubic metre, licensees have a bigger incentive to extract the most value from each tree. The new licence has been successful. In 2009, over 3.5 million cubic metres of timber were sold under innovative timber sale licences (or lump-sum sales).

Smaller operators like Pine Star logging in Prince George and Trace Resources in Merritt are taking advantage of these licences as well as forestry licences to cut. They are grinding waste for use in cogeneration and pellet plants.

This summer, the ministry and Interior licensees operating in beetle-attacked areas will be moving to stand as a whole pricing and cruise-based billing.

Under stand-as-a-whole pricing and cruise-based billing all timber in a stand will be priced for a total amount based on the market value of the entire stand. Cruise-based billing will eliminate the need for scaling, since the amount to be charged for the stand will already have been determined based on the cruised volume of timber in the stand.

Since licensees are paying for a whole stand of trees, there is also no need for grading, and licensees are more inclined to use all fibre in the stand. Therefore waste levels are expected to decrease.

Another way to provide bioenergy suppliers with security of fibre they need and to encourage business relationships between primary forest tenure holders and bioenergy producers is through the use of a receiving licence.

The receiving licence concept involves a cut control credit. This will incent fibre to flow from long-term tenure holders to any holder of a receiving licence, including independent power producers, pellet plants, and other users of waste wood and low-quality timber.

The receiving licence is basically an update of the pulpwood agreement first introduced about 50 years ago by Ray Williston and W.A.C. Bennett.

Major licensees in the Interior are primarily using their licences for sawlogs. However, bioenergy producers are primarily interested in lower-quality fibre. Under a receiving licence, the primary licence holder can transfer some of his cut allocation to a bioenergy producer. It’s a classic win-win situation.

The Working Roundtable on Forestry recommended actions to “advance bioenergy and biofuel projects by creating competitive tenure and pricing frameworks to attract private sector investment.”

Through shifts to innovative timber sale licences, ability to award non-replaceable forest licences to energy producers, moving to stand as whole pricing and offering receiving licences, the Ministry of Forests and Range is making the necessary changes to support emerging opportunities in the new forest economy.

Although there are many challenges being caused by the economic downturn, we’ve also been providing the opportunity to re-invent the forest sector and position it for future success.

Pat Bell was re-appointed Minister of Forests and Range and appointed Minister Responsible for the Integrated Land Management Bureau on June 10, 2009. He was re-elected as MLA for Prince George-Mackenzie on May 12, 2009.

Prior to becoming an MLA, Minister Bell owned a trucking company and co-owned a logging company. He owns two Wendy’s restaurants in Prince George.
Designing and reviewing complex silvicultural systems requires a forest professional to balance multiple, often competing goals and objectives and have a thorough understanding of the impacts of these decisions. This means it’s important that forest professionals practise in their areas of expertise, be adequately trained and have experience designing silvicultural systems in complex stands prior to developing or implementing partial cutting prescriptions.

To ensure this happens, the Coastal Silviculture Working Group (CSWG) was established by the Coast Region FRPA Implementation Team (CRIT). Composed of government and industry forest professionals, the working group reviews matters associated with silviculture within the Coast Forest Region.

In May 2006, the CSWG published a discussion paper titled *Silvicultural System and Partial Cutting Issues in the Coast Forest Region*. The paper discussed forest management issues associated with partial cutting where high levels of dispersed over-story retention were prescribed. During this same time frame, the Forest Practices Board conducted a special investigation into high retention harvesting on the BC coast.

Prior to the discussion paper, concerns regarding species shift, insufficient growing space for regeneration and forest health were noted in some complex silvicultural system prescriptions. Since the release of the discussion paper, the CSWG has conducted reviews of complex silvicultural systems and evaluated the work against the elements and guiding principles within the discussion paper. These reviews provide feedback to prescribing foresters and have improved the quality of both prescription development and implementation associated with partial cutting.

Monitoring results from 2008 indicate plausible prescriptions with predictable outcomes are being developed. Prescribing foresters have incorporated the elements and principles from the discussion paper into the planning and implementation phases of partial-cut blocks. For example, small openings are being created by concentrating the residual dispersed stems in aggregates versus an even distribution of residual stems allowing foresters to replenish stocking with similar species in these small openings.

Improvements in partial cutting prescriptions and practices have been demonstrated by:
- Improved prescription development through consideration of sustainability issues.
- Improved implementation of prescriptions through better communication.
- No high grading on blocks harvested after the discussion paper was released in May 2006.
- A reduction in the number of blocks with an over-story species shift.
- Increased use of an aggregate retention strategy.
- A reduction in identified forest health concerns through better dwarf hemlock mistletoe sanitation practices.
- Increased number of blocks planted with desirable species.

Looking forward, the Forest Practices Board revised their report, *High Retention Harvesting and Timber Sustainability on the British Columbia Coast*, in January 2009 to address inaccuracies identified by industry. This revision will further assist professionals in working with partial cutting silvicultural systems. The CSWG has also developed a stocking standard framework to support the use of the retention silvicultural system where over-story residual trees contribute towards meeting the silviculture obligation. This new discussion paper was released by CRIT in November 2009 and provides an alternative stocking standard option for forest professionals to consider when prescribing the retention silvicultural system.

The CSWG demonstrates the collaborative success of professionals working together to improve silvicultural practices on the coast.

Craig Wickland, RPF, is the regional silviculture forester for the Coast Forest Region of the Ministry of Forests and Range and has nearly 20 years experience in the area of silviculture. He is also the chair of Coast Region FRPA Implementation Team (CRIT) silviculture working group composed of industry and government professionals with expertise in the field of silviculture.
**World Heritage Sites in the Upper Fraser River Watershed? Legislation not Guidance Needed to Help Forest Professionals Protect These Sites**

The opportunity to designate a new World Heritage site may be sitting on our doorstep in the very old wet cedar stands in the upper Fraser river watershed.

Researchers at the University of Northern British Columbia have examined these stands in the 132,000-ha very wet cool Interior Cedar-Hemlock (ICH) biogeoclimatic subzone of the upper Fraser River watershed. They found an internationally significant canopy lichen assemblage in the oldest forests, particularly in sites with wet soil moisture conditions. Giant cedars in these stands are rarely touched by fire and can reach 1,000 years in age or more. These stands are typically found in water-receiving ‘toe-slope’ positions at the base of mountains. Younger stands (<250 years) and drier stands, in contrast, are relatively species poor.

Concurrent studies by European scientists suggest that ancient cedar stands in BC’s Interior contain many lichen species yet unknown to science. Tony Sribille, a lichenologist who recently described eight new species from wet ICH cedar stands (and is working on descriptions for more than 30 other new ICH species), suggests that very old wet ICH forests are a “major centre of lichen diversity at a global level that we haven’t even begun to fathom or explain.”

These results, recently published in international journals such as *Forest Ecology and Management* and *Botany*, have been raising eyebrows in the scientific community and have major implications for forest managers. Recent shifts in forest management policy in BC place a much greater reliance on professional standards and practice. Although changes to legislative and regulatory standards can take many years to reflect emerging science, forest professionals do not have this luxury. They must use best available information to guide day-to-day decisions.

One of the likely consequences of the mountain pine beetle outbreak will be mills in the central Interior looking increasingly to the interior wetbelt for their wood supply. The Interior wetbelt, especially the ICH zone, supports some of the most productive stands in the Interior. However, their management is complex, sharing many issues with wet coastal forests. Unlike lodgepole pine stands, where fire was a common natural disturbance agent, forests of the northern ICH burned infrequently, leading to landscapes that historically were dominated by old forests.

Although old forests are still common in the wet ICH, logging has had a disproportionate impact on old forest stands in ‘toe-slope’ positions, places where roads and railroads were first built. As a consequence, very old stands in wet sites (>250 years) are now found in only 8% of the upper Fraser landscape. Wet cedar stands with large old trees are even more rare. Mapping by BC’s Integrated Land Management Bureau (ILMB) indicates that they now occupy only 3.5% of the upper Fraser. Our findings suggest that very old forests in water-receiving sites should now be regarded as an endangered ecosystem within the upper Fraser.

Concern about the cumulative impacts of forest harvesting on old-growth cedar stands was a major factor behind the 2007 complaint to the Forest Practices Board (FPB) by community members from Dome Creek. The FPB investigation concluded that “there is a gap in the ability to manage for, and maintain, old growth values because government’s ‘old forest’ targets can currently be met without conserving any forest older than 140 years. Biodiversity targets need to be representative of the ecosystem but the current targets are not refined enough to capture old forest stands that have specific moisture regimes and slope positions.”

The Integrated Land Management Bureau’s response to the Forest Practices Board Report was to designate ‘guidance’ Old-Growth Management Areas (OGMAs) in 4,770 ha in the upper Fraser. Although this measure has some merit, ‘guidance’ is just that: a designation with no legal standing. The subsequent FPB response in 2009 was highly critical of this approach: “The Board concluded that there were inherent weaknesses in the reliance on guidance alone. To be effective, the reliance on professionals needs to be based on a clear planning framework supported by legislation ... As the guidance policy is non-binding and the monitoring would only show damage after the fact, our concern is that ICH values represented in the draft OGMAs are now rare and cannot be recovered if lost.”

The future of the very old wet cedar stands in the upper Fraser is now very much in the public eye. The biodiversity value of these sites approaches that of Australian and New Zealand wet temperate rainforest stands, which have largely been designated as World
The Ancient Forest Trail east of Prince George has become a major destination for tourists visiting central-interior BC, with close to 10,000 visits in 2009.

Photo: Darwyn Coxon
Heritage sites. The Gondwana Rainforests of Australia may serve as a valuable role model, with a network of widely dispersed stands having been given a common World Heritage site listing.

The growing cultural values associated with very old wet cedar stands in the upper Fraser can be seen at the Ancient Forest trail, east of Prince George. The trail attracted almost 10,000 visitors in 2009, on a site that was basically unknown three years earlier. Visitor comments are evocative: “I’ve lived in Prince George for 36 years and never knew this place existed!! Amazing to see such a spectacle with my friends.” (Prince George); “I thought I walked through a shrine of trees expressing eternity. What a wonderful trail!” (Germany); “A truly beautiful and sacred spot on the globe, I sincerely hope we are successful in preserving this wilderness” (Austria).

Very old wet cedar stands in the upper Fraser must now be regarded in a new light. Like archaeological sites, each remaining stand has been mapped. Also, like archaeological sites, once disturbed, their defining biological and cultural values are essentially lost, at least on any meaningful human time-scale. They simultaneously represent a forestry resource, an internationally significant biodiversity repository and a major cultural legacy. In today’s world global recognition of these legacy values is a potent economic tool. Managed properly, it can encourage the development of new economies in BC’s central-interior region.

Darwyn Coxson is a professor in the Ecosystem Science and Management Program at the University of Northern British Columbia. A major theme of his research examines conservation biology of wet temperate rainforests in BC and worldwide. He is a co-author of the soon to be released UBC Press book entitled British Columbia's Inland Rainforest: Ecology, Conservation, and Management. For further information see: http://wetbelt.unbc.ca/biography-coxson.htm

Growth of ancient western redcedars, shown here from alongside the Ancient Forest Trail near Dome Creek, is supported in only a few remaining locations in the upper Fraser River watershed.
**Mountain Timber**

The Comox Logging Company in the Vancouver Island Mountains

By Richard Somerset Mackie

SonoNis Press. 2009

320 pp, 350+ b/w photos & maps


This profusely illustrated sequel to the author's earlier book, *Island Timber*, tells the story of the Comox Logging Company through the first half of the last century. Three threads are intimately interwoven: developments in timber harvesting as logging moved from easily-accessible valley bottom lands to smaller timber on more challenging adjacent slopes; the lives of loggers and their families; and, a lesser topic, the inner workings of the company.

A long introduction is, in effect, a précis of the book with amplification in subsequent chapters fleshed out by instructive and entertaining side bars which recount personal reminiscences and events, including the 1939-45 war years. This results, perhaps inevitably, in some repetition, and the occasional lists of names will be of real interest only to readers with a personal stake in this region of Vancouver Island. The several diagrams and maps are clear and informative although some maps lack a direction arrow. Someone ought to have told the author or editor that Douglas-fir should be hyphenated.

Nevertheless, this very readable account is a valuable addition to the literature on BC’s forest industry, its history and changing logging technology through the years 1910 to 1950. I look forward to the third volume of the promised trilogy.

Reviewed by Roy Strang, RPF (Ret)

**Ranking: 4.5 out of 5 cones**
Prepare for your exam with a course designed by those who have been there!

The registered professional forester and registered forest technician exam preparation courses have one simple objective: Helping candidates pass the RPF and RFT registration exams!

- Obtain exposure to up-to-date core requirements of professional practice with a strong emphasis on ethical implications of scenarios. Some issues such as timber supply, valuation and tenure structure, as well as strategic and operational planning are of perpetual importance and are prominent in the course material.
- Hot topics such as safety and bioenergy are also included.
- Strongly emphasized are good exam preparation and writing skills. Students may have excellent knowledge of the practice of professional forestry, but if they cannot properly answer the questions on the exam, they will not achieve their goal of registration.
- Students are encouraged to participate in online discussions, where the focus is on different issues each week. Students complete weekly quizzes and assignments. Most importantly, they take three two-hour practice exams that are marked in full. These help the students hone their skills before facing the ‘real deal.’ There is a recommended course schedule but there is plenty of opportunity for the student to set their own pace.
- Feedback from students has been very positive. Keeping the courses current is a priority. Instructors strive to improve the course delivery each year and relevant student feedback is incorporated into course curriculum. Students taking these programs have been on the lists of successful exam candidates. Our students have been chosen as valedictorians for five years in a row. On that note, congratulations to Karen Schwalm, RFT, for representing the RFT inductees this year!

The idea for the exam preparation courses started with Ben Wilson, RPF, who created the first version in 2004. Wilson’s vision was to create a course that would be cost-effective and fit well into the lives and work schedules of aspiring RPFs. He chose online delivery for its flexibility and much lower total cost compared to classroom courses with a fixed location. The College of New Caledonia Lakes District Campus recognized the value of this approach and took over online delivery of the courses in 2006.

The original seven-week RPF exam preparation course has been joined by RFT exam preparation courses in both five-week and three-week (condensed) formats. The students for these courses represent a full diversity of geography, areas of practice and employment types. To date, about 400 students have been through the courses.

If you think one of these programs may be suitable for you, your colleagues or your employees, please refer them to the College of New Caledonia, Lakes District Campus. Our contact information is to the right.
Put in Your Two Cents

The BC Forest Professional letters' section is intended primarily for feedback on recent articles and for brief statements about current association, professional or forestry issues. The editor reserves the right to edit and condense letters and encourages readers to keep letters to 300 words. Anonymous letters are not accepted.

Send letters to:
Editor, BC Forest Professional
Association of BC Forest Professionals
330 – 321 Water Street
Vancouver, BC V6B 1B8
Fax: 604.687.3264
editor@abcfp.ca

Please refer to our website for guidelines to help make sure your submission gets published in BC Forest Professional.
Improving Road Safety in Merritt TSA

Two major licensees and the Ministry of Forests and Range (MFR) combined efforts in the spring of 2009 to improve safety on the Pimainus Forest Service Road (FSR) west of Merritt, BC. Since safety is a priority of all the parties involved, this work was completed despite the dire economic conditions that were prevalent throughout the industry at the time.

In the last two years, the Pimainus plateau area had become heavily infested with mountain pine beetle (MPB). As a result, both Tolko Industries Ltd. and Aspen Planers Ltd. ramped up harvesting in the area in an attempt to salvage some of the timber value. With the increased level of harvesting, the haul traffic also increased to the point where the existing mainline was inadequate to allow safe logging activities. In addition to the industrial use, this FSR is utilized extensively year round by the public to access the many lakes in the area. This public use, in concert with heavy logging traffic, made for numerous close calls and a few accidents. Forest professionals from both companies and the MFR recognized the increasing risk and decided to take action.

The road was widened and resurfaced, additional pullouts were created and dust suppressants were used in high traffic areas. As well, signs were installed at half kilometre intervals and additional right-of-way timber was removed along the road to eliminate the risk of dead pine trees hitting vehicles.

The result has been a safer road with fewer incidents between loggers and the public, despite a significant increase in traffic levels.

Project Team
Aspen Planers Ltd: Rob Scott, RFT
FP Innovations: Darcy Moshenko, RPF
Ministry of Forests & Range: Ken Conway-Brown, RFT
Tolko Industries Ltd: Ryan Potter, RPF
VSA Road Maintenance: Blair Barr, RPF

Contact
Ryan Potter, RPF Ph: 250.378.1208 E-mail: ryan.potter@tolko.com

Canadian Institute of Forestry Cariboo Section

The Cariboo Section of the Canadian Institute of Forestry is one of 18 sections representing 2,400 members across Canada. It includes 158 members in 56 communities outside of Vancouver and Vancouver Island. There are 14 dedicated members who serve as volunteers on the section’s council.

The Cariboo Section was very active during 2008-2009. Some highlights included the section AGM dinner in Prince George and screening of the movie The Green Chain. In September 2008, for National Forest Week, the section organized its annual Walk in the Woods school tours. Thirty-three volunteers were recruited in collaboration with the ABCFP Network of Forest Professionals and 625 students participated. Unfortunately, 900 students were turned away from this event. Thanks to BC’s Minister of Forests and Range, the Honourable Pat Bell; Jeff Bennett; Federation of BC Woodlots; Industrial Forestry Services, COFI and employers for their support of the annual school tours.

In November 2008, approximately 145 people attended the Robert Bateman lecture titled “Thinking Like a Mountain”. All proceeds of this event went to five local charities.

February 2009 brought the CIF Silver Ring ceremony for University of Northern British Columbia and College of New Caledonia students. It was held in Prince George and 130 students, forest professionals, government representative and other stakeholders attended.

Cariboo Section council has more activities planned for 2010. They strive to raise awareness of the forestry profession in their communities and among other natural resource professionals.

Project Team (Council and Executive)
Lisa Bourdages, TFT; Phil Burton; Francis Donnelly; Chris Elden, RPF; Peter Forsythe, RPF; Steve Henderson, RPF; Leanne Kaupp, RPF; Patrick McMechan, FIT; Ed Morrice, RPF; Stacy Perkins, RPF; Som Pun, RPF; David Radies; Scott Scholefield, RPF; Mike Trepanier, RPF; Alan Vyse, RPF; Tana Woodward

Contact
Scott Scholefield, RPF National Director, Cariboo Section CIF E-mail: cariboo@cif-ifc.org
environmental goods and services. The broadening of tenure rights will allow the sector to look beyond traditional wood products and pursue emerging opportunities in new forest based products such as foodstuffs, medicines, carbon and so on. Many of these new opportunities are well suited to local, small, cottage-style businesses.

Changing the Stumpage System to Reward Investment
The current tenure and stumpage system was designed at a time when BC’s forests were considered endless and all we were looking to achieve was to grant harvesting rights and charge stumpage. It really doesn’t reward those who manage forests to increase the productivity of the land base or grow better quality trees. In fact, one could argue that the current system penalizes those who try. A positive change would be to incent tenure holders to work hard and encourage investments in land, forests and new forest products. One idea that has been discussed for woodlot licenses is land rent instead of stumpage. Assuming rent remained static then the revenue for growing more volume or better quality trees would accrue directly to the licensee!

In summary, BC’s tenure system needs to evolve. The current tenure system is old and tired. It needs to align with and deliver upon the public’s expectations around diversifying and rejuvenating BC’s forest sector. The public is making it very clear that it wants a greater say and more involvement in forest management decisions, more direct returns of economic and environmental benefits to local communities, more small- and medium-sized milling and manufacturing businesses, and a wider array of forest products from BC’s forests. The federation’s viewpoint is that any attempts at tenure reform must acknowledge that cumulative contributions of numerous small- and medium-sized tenure holders and businesses are significant, especially to forest dependent, rural communities.

Brian McNaughton, RPF, is the general manager for the Federation of BC Woodlot Associations which is the umbrella organization for the 23 woodlot associations which represents the interests of the more than 840 woodlot licensees and many private forest landowners throughout BC. Brian owns Lone Tree Consulting Ltd., a professional forestry consulting business based in Williams Lake, BC. Prior to becoming a consultant, Brian was with the BC Ministry of Forests and Range for 20 years, including 10 years as district manager of the Williams Lake Forest District and 10 years working in silviculture in the ‘old’ Cariboo and Nelson forest regions.

In Memoriam
It is very important to many members to receive word of the passing of a colleague. Members have the opportunity to publish their memories by sending photos and obituaries to BC Forest Professional. The association sends condolences to the family and friends of the following member:

Arthur Francis Shortreid
RPF #1023
1950 - 2010

It is with deep sadness that our family, friends, relatives and church family announce that Art suddenly went to be with his Lord on March 5th, 2010. We will all miss him greatly.

Art was a wonderful husband to Sue, devoted father to Drew, Ian, Leah and Matt; adoring grandfather to Autumn; brother to Jim and son to Frank and Jean. His warm and supportive heart held love for in-laws, cousins, nieces and nephews too numerous to count. Art’s life journey involved many health challenges but his positive outlook on life, persevering nature and strong faith were what enabled him to raise his family lovingly and passionately.

Art was born into a forestry tradition and grew up in forest communities. A strong communicator with an infectious enthusiasm for good forestry, he built strong and lasting personal bonds with colleagues industry wide. He earned the respect of his peers as an intelligent, experienced innovator, one who drew on insight and thoughtful study to attain a clear vision of what was right in the difficult balance of economy, environment and community. Selfless and honorable, Art was extremely fond of sharing his knowledge and experiences with all who had the privilege of spending time with him. A natural teacher with a sense of history and the ability to capture the heart of things, he helped many to lead richer lives. For those of us close to him, perhaps the best way to say it is that he set a great example of how to be a good person.
A Moment in Forestry

This is one of few images of bald eagles I capture each year in the winter months in the Cariboo. This image is of two mature eagles and of a juvenile near 100 Mile House squabbling over a perch.

For more wildlife images please visit my web page at: http://photo.net/photos/bruckner

Submitted by George Bruckner, RFT, 100 Mile House

Submit your moment in forestry to Brenda Martin at: editor@abcfp.ca
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