

# BC

# Forest PROFESSIONAL

FALL 2024

Solutions for Addressing Public  
Interests in Managed Forests

**Redefining Values  
Beyond Timber**

Opinion: We are All in This Together

**Mitigating Risk of  
Unlawful Practice**

Optimizing the Credential  
Assessment Process

**Out of the Ashes: A Living Aquatic Biodiversity Lab**

*Scientists Study eDNA, Wood in Streams After Massive Wildfires in Oregon*



## Renew Your Registration by November 30, 2024

The *Professional Governance Act* (PGA) and Forest Professionals British Columbia Bylaw 5 require all registrants to complete registration renewal requirements by November 30, 2024.

If you fail to meet the November 30 deadline, your registration will be suspended on December 1. If you are a practising RPF or RFT, suspension of your registration means you are no longer legally allowed to practise professional forestry and your registration status with Forest Professionals British Columbia (FPBC) will be listed as “suspended – failure to renew” in the online directory of forest professionals.

Registrants who fail to complete their registration renewal by November 30 may resume practice by paying a late fee and completing their registration renewal between December 1 and January 31.

If you do not complete the steps by January 31, 2025, your registration will be cancelled and you must apply for reinstatement in order to resume practice.

### Easily and Quickly Renew Online

To renew your FPBC registration, go to [fpbc.in1touch.org](http://fpbc.in1touch.org).

Enter your username; unless you have changed your username during previous renewal period, it will be the email address you previously identified as your preferred method of contact with FPBC and where you receive emails from FPBC.

Enter your password. If you have forgotten your password, you can reset it using the Forgot Password link underneath the log-in box.

If you have changed employers and have a different preferred email address, please contact the FPBC registration department at [admissions@fpbc.ca](mailto:admissions@fpbc.ca).

### Steps to Renew Your Registration

#### **Step 1: Update your contact info**

Ensure your contact information (email and mailing address) is correct. If you changed employers in the past year, be sure to update your employer information. Employer information is required under the PGA and is displayed in the public registry of forest professionals.

#### **Step 2: Identify your practice areas**

Practising registrants must list their professional practice areas. This information is required under the PGA and is displayed on the public registry of forest professionals.



#### **Step 3: Complete your competence declaration**

The competence declaration is mandatory for all registrants, except those who are retired registrants, or trainees (ASFIT, FIT, ASTFT, TFT, TNRP).

#### **Step 4: Submit your indictable offence declaration**

All registrants are required to disclose if they have been convicted of an indictable offence.

#### **Step 5: Pay your fees**

Your registration will not be renewed until you have completed the above steps and paid all applicable and outstanding fees.

Note: if your employer pays your fees on your behalf, it is still your responsibility to ensure your fees are paid by the November 30 deadline.

### Continuing Professional Development Requirements

All practising RPF and RFT registrants are required to undertake and report to FPBC 30 hours of continuing professional development (CPD) each year. If you have not reported 30 hours of CPD, you will be assessed a late fee on December 1, as per Bylaw 10-2. If late fees and CPD reporting requirements are not rectified within seven calendar days, the Registrar may take further action that affects your practising status.

### Do Not Let Your Registration Lapse

If you are planning to retire or leave the profession of forestry, you must apply to FPBC to change your registration category to “Retired” or “Resigned.” Letting your registration lapse by failing to renew or change your registration category means you are not leaving the profession in good standing and your registration will be cancelled.

More information about renewing your FPBC registration along with a selection of how-to videos are available on the FPBC website at [www.fpbc.ca/practice-resources/renew-your-registration](http://www.fpbc.ca/practice-resources/renew-your-registration).



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Group ride with Mosaic staff and Nanaimo Mountain Bike Club executive on the Doumont Trails, located on Mosaic private land. Photo credit: Morgan Deno **12**

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Forest Professionals British Columbia recognizes that our business and the work of our registrants occurs on lands that Indigenous People have occupied and been responsible for since time immemorial.

We are committed to supporting reconciliation through inclusion, awareness, and providing ongoing education and training opportunities to our registrants on the culture, history, and rights of Indigenous People.

# SAVE THE DATE: February 5-7, 2025

## FPBC 2025 Forestry Conference Victoria Conference Centre, Victoria

Register for in-person or virtual  
[evoque.swoogo.com/fpbc2025](https://evoque.swoogo.com/fpbc2025)

# Write us!

The BC Forest Professional letters section is for readers responding to recent articles and for brief statements about current FPBC, professional, or forestry issues. The editor reserves the right to edit and condense letters. Letters must adhere to standards of fairness, accuracy, legality, and civility. Anonymous letters are not accepted. (Maximum word count: 300.)

For detailed submission guidelines, please visit [fpbc.ca](https://fpbc.ca) for more information.  
Email letters to: [editor@fpbc.ca](mailto:editor@fpbc.ca)



**Networking With Local Governments at UBCM**

FPBC board members and staff met with elected officials from local governments at the Union of BC Municipalities (UBCM) annual conference, September 18 and 19, in Vancouver.

The UBCM conference is a major gathering of mayors and councillors from communities across BC.

FPBC participated in the UBCM trade show with a booth highlighting our message regarding the importance of municipalities hiring registered forest professionals. Board members and staff also took time to educate elected officials on exactly what a registered forest professional does, explaining that forestry is a registered profession just like engineering, dentistry, accounting, and law.

You can find examples of the materials handed out to elected officials on the FPBC website at [www.fpbc.ca/public-interest/professional-forestry-explained](http://www.fpbc.ca/public-interest/professional-forestry-explained).

**New FPBC Video Explains the Importance of Hiring Registered Forest Professionals**

In August, FPBC launched a series of new videos explaining the importance of hiring registered forest professionals.

The videos are part of an online campaign primarily run through LinkedIn and The Municipal Information Network. The campaign is targeted at decisionmakers working for municipalities or other large organizations working on the forested land base such as Crown corporations and mining companies.

In the videos, FPBC registrants explain what is professional forestry, as well as the risk to municipalities if they don't use registered forest professionals.

You can see the full video on the FPBC website at [www.fpbc.ca/public-interest/why-hire-a-forest-professional](http://www.fpbc.ca/public-interest/why-hire-a-forest-professional) or on Vimeo at [vimeo.com/962630428](https://vimeo.com/962630428).

Like and share the videos with your online social network to help amplify the campaign.

**FPBC Recognition Program Revised**

Changes are coming to the FPBC awards program, which will now be known as a recognition program, to better align with FPBC's responsibilities as a regulator under the *Professional Governance Act* (PGA). The new program now has four recognition categories:

- Distinguished Forest Professional, recognizing significant contributions to the betterment of forestry over a substantial period or throughout the recipient's career;
- Forest Professional of the Year, recognizing an individual in any registrant category for outstanding service within the past one to five years to the profession of forestry and for furthering the principles of FPBC;
- Jim Rodney Memorial Volunteer of the Year, recognizing an individual for outstanding volunteer service to FPBC and the profession; and
- *BC Forest Professional Magazine* Best Article of the Year, recognizing an individual who has written an outstanding article for publication in *BC Forest Professional* (BCFP) magazine.

Find out how to nominate someone for recognition at [www.fpbc.ca/public-interest/recognition](http://www.fpbc.ca/public-interest/recognition).

**Save the Date: FPBC 2025 Forestry Conference and AGM, February 5-7**

The FPBC forestry conference and AGM is scheduled for Victoria, February 5-7, 2025 at the Victoria Conference Centre. Be sure to save this date in your calendar. As we did this year, the 2025 conference will be a hybrid event with both in-person attendance and virtual participation available. A volunteer group of forest professionals, chaired by Norah White, RPF, BC's deputy chief forester, is hard at work creating a program that will challenge and engage forest professionals from across BC.

Program and registration details are available at [evoque.swoogo.com/fpbc2025](http://evoque.swoogo.com/fpbc2025). Keep an eye on *The Increment* and [fpbc.ca](http://fpbc.ca) for more updates.

**Never Too Late to Celebrate National Forest Week**

September 22-28 was National Forest Week and while the event has passed, the BC National Forest Week Coalition can always use volunteers to help spread the word about the value of our forests.

The BC NFW coalition regularly receives requests from teachers to help with field trips into the forest. Topics requested emphasize forest ecology, but teachers are often open to other aspects of forest management.

If you are willing to spend part of a day talking about the aspects of your job, fill out and submit a request form or contact Bill Bourgeois, RPF(Ret), NFW-BC Coalition executive director. Visit [www.bcnfw.ca](http://www.bcnfw.ca) for more information.



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# What Does it Mean to be a Professional?

**I feel fortunate to have found the profession of forestry and to spend my career in and around the tremendous forests and ecosystems of British Columbia. The work I do gives me a sense of pride and confidence in the skills and abilities I bring to the table and the contributions I make towards protecting the public interest.**



With the full implementation of the *Professional Governance Act*, forest professionals across BC have transitioned from an association of members to registrants of a regulatory body. As such, the autonomy of self-regulation that once existed under the *Foresters Act* (repealed) is now overseen by the Office of the Superintendent of Professional Governance (OSPG). Our fundamental principles of reserved practice rights and reserved titles are maintained and it bears repeating that we need to

act at all times, as a professional.

What does working as a professional mean to you? FPBC's *Code of Ethical and Professional Conduct* Bylaw 9 clearly defines all of our collective obligations, and I believe it is important to carefully review the *Guidelines for Interpretation: Code of Ethical and Professional Conduct* regularly — specifically, Standard 8 – Professionalism.<sup>1</sup>

At one time or another, I'm sure we have all found ourselves in disagreement with other professionals — whether or not they are registrants of FPBC or other professional organizations. *"Any registrant's work, opinions and judgments must be given consideration and respect. A significant amount of professional work deals with a level of subjectivity and variation in scientific literature. What's critical is following valid processes, achieving desired results, and conducting yourself with dignity and honor."* (From page 38 of the *Guidelines for Interpretation*.) Ensuring respectful regard to differing opinions and seeking clarity for a fulsome understanding is paramount to maintaining dignified conversation and professional conduct.

As professionals, we need to be careful about not purposefully engaging in dialogue that seeks to undermine another professional by way of intimidating questions that seek to demean or cause embarrassment. Due to the anonymity available via social media, this behavior has become more prevalent. We should, at all times, be cognizant when dealing with others that we are truthful and accurate in our information, such that we do not mistakenly discredit ourselves or others, our profession, our regulatory agency, or our employer. An easy way to check yourself is by asking, *"Would I proudly sign this with my name, designation, and employer?"*

It may surprise some to know that FPBC staff have been subjected

to undignified and intimidating communications by some registrants. We all have a right to a psychologically and physically safe worksite. This undignified and intimidating communication triggered the need to add additional wording to Standard 8, which reminds us that registrants should cooperate with and demonstrate respect for the regulatory processes of FPBC (and in turn, the OSPG), and not, by their words or actions, threaten, intimidate or harass any complainant, witness or other person involved in a regulatory process of FPBC, or any board member, committee member, officer, employee, contractor or other person acting on behalf of FPBC.

Presently, there is also considerable confusion regarding stating opinions publicly as a retired or former forest professional. There are differences between personal opinions and professional opinions. Personal opinions are not necessarily based on facts but are subjective and can be influenced by personal experiences, while professional opinions are derived from very specific education, knowledge, and relevant experience backed by evidence, facts and research.

If a retired or former registrant wants to participate in discussions that engages their specialized knowledge, they must maintain their practising status. Unlawful practice occurs regardless of whether remuneration is provided or not. In an illustration provided to the board, the FPBC registrar offered an excellent example: for the same reasons a retired doctor can no longer give medical advice, a retired forester cannot provide professional advice. As a retired or former registrant, there are no requirements to maintain competencies, therefore there is a high level of risk to safety of the public and protection of the environment by continuing to provide advice without an assurance of valid competence.

This is not a heavy-handed approach coming from within FPBC, but a requirement of the *Forest Professionals Regulation* under the *Professional Governance Act*. All registrants would be advised to continually familiarize themselves with all aspects of this legislation and the duties of our regulatory body to oversee the conduct of those of us practising within the regulated and reserved practice of forestry.

Our individual behaviors can affect the overall perception of our profession. Let's continue our practice of professional forestry with a high level of pride, the openness to recognize the varying experiences and skills of our fellow registrants, and conduct ourselves in a manner that follows the good old golden rule — treat others as one would want to be treated by them. ✖

#### REFERENCE

1. Forest Professionals British Columbia, *Guidelines for Interpretation: Code of Ethical and Professional Conduct*, March 2021. Online at [www.fpbc.ca/practice-resources/standards-practice-guidelines/standards-of-ethical-professional-conduct/](http://www.fpbc.ca/practice-resources/standards-practice-guidelines/standards-of-ethical-professional-conduct/)

# A Voice for Forests

**It stings a little every time I read an article or comment online** that mischaracterizes forest management in BC or the role of forest professionals. I imagine many forest professionals likely feel a similar way, because a career in forest management is not just a job; what we feel for the forest is both personal and professional — and those feelings have deep roots.



For many, choosing a career in forest management began with a connection to the forest. Connections may have formed in childhood while exploring, playing, and camping in the forest, or from experiencing the restorative power of a walk under a forest canopy, or bird watching or hunting with family. Perhaps that deep connection was cultivated growing up in a forestry-dependant community, experiencing first-hand the economic

benefit well-managed forests generate, such as jobs for individuals and benefits for their families and the community at large.

Whatever the inspiration for our forest education and careers as forest professionals — years spent working in forestry only deepens our connection on both a personal and professional level. No wonder most forest professionals feel a deep sense of responsibility to defend and speak out about forests.

As a result of this passion, the hundreds of comments submitted in the recent registrant survey came as no surprise to me: many forest professionals are concerned about misinformation about forests and forest management. Many respondents expressed a desire to see FPBC combat misinformation and provide unbiased information on areas of public concern. Registrants also suggested public education campaigns about the state of the forest, forest management practices, and the role of forest professionals; and they suggested looking for ways for forest professionals to be engaged in respectful, informed debate about forest management policies and practices.

I couldn't agree more. FPBC is working on these things, just not at the scale I believe many desire. There are clear limitations about how and what FPBC can advocate for, and there are practical limitations based on our staff size and budget; however, we will continue to have a voice in forests and there are ways we can work together to amplify it.

The *Professional Governance Act* (PGA) limits the advocacy scope of FPBC, but the PGA did not take FPBC's voice, or the voice of its registrants.

It is true that FPBC cannot advocate in ways that compromise its neutrality and oversight as a regulator — in other words, FPBC cannot advocate for interests and positions that directly benefit its registrants. For example, FPBC cannot advocate for the salary and compensation of forest professionals. FPBC cannot advocate for how government

chooses to allocate timber rights, or the role of the forest industry in the economy (there are other forest industry-related organizations that focus their advocacy efforts on this already).

What FPBC can advocate for is supporting the profession and public interest in professional forestry.

**Public Awareness and Education:** Promoting public understanding of the forest profession's standards, forest management and professional practices, and the value it brings to society. FPBC delivers a public campaign each year, primarily online, to best leverage a small budget for the largest possible impact.

**Support for Professional Standards:** Advocating for the adoption and enforcement of best practices and ethical standards within the profession to improve quality and protect the public. This is foundational to our regulatory work, and a sustained business priority and focus for staff.

**Forest Policy and Practice Recommendations:** Providing evidence-based, impartial and objective recommendations to policymakers to improve regulations and management practices for the care of the forest, based on the expertise and experience of its registrants. FPBC makes progress in this area and aspires to find even more ways to foster more frequent, deep engagement.

**Professional Development:** Advocating for and supporting continuing professional development and training opportunities to ensure forest professionals maintain high standards of competence and stay updated with advancements in the field. FPBC efforts in this area are established with a well subscribed annual conference each year and its annual series of webinars.

Combatting misinformation about forests and forestry professionals in online spaces, media, and public forums was identified by many survey respondents as a way for the forest profession to build greater public trust. FPBC's efforts in this area are primarily proactive, including occasional advertorials, editorials, and other outreach. However, with a small staff and broad regulatory duties, FPBC cannot feasibly respond to individual media articles or online commentary, and the subject matter is often constrained by the PGA.

In contrast, the thousands of individual forest professionals regulated by FPBC are not bound by the same advocacy limitations. Code Standard 8, Professionalism, encourages forest professionals to promote public knowledge with truthful, accurate information on forestry matters.

I urge all practising forest professionals to use their expertise and voice to help combat misinformation about forests and forest professionals today, and join the ongoing efforts of FPBC to grow our collective impact. ✪



**WEBINAR** The Practice of Professional Forestry  
**WHEN** October 16, 2024, 1:00 PM – 2:30 PM  
**PRESENTERS** Bruce Blackwell, MSc, RPF, RPBio and  
Tara Bergeson, MSc, RPF, ISA Cert. Arb.  
**REGISTRATION** [www.fpbc.ca/event/the-professional-practice-of-urban-forestry/](http://www.fpbc.ca/event/the-professional-practice-of-urban-forestry/)

## What is the Professional Practice of Urban Forestry?

With an increase in interest — by both registrants and the public — in the management of our urban forests, there exists a simultaneous need to have a broader discussion about the regulated and reserved aspects of the professional practice of urban forestry. Urban forestry, though a relatively newly defined practice area, has existed in practice for many years. As such, there are many individuals in the field who have built a tremendous amount of knowledge through experience — and perhaps certification through other bodies like the International Society of Arboriculture (ISA), and others who are just entering the field as FITs or RPFs through new options in secondary education. Regardless of entry, it's important to parse out what is and isn't reserved practice within urban forestry in order for registrants to fully comprehend their professional obligations and in what context.

Regulated practice is defined as advice or services offered related to trees, forests, forest lands, forest resources, forest transportation systems, or forest ecosystems. Regulated practice defines the broad area of practice where Forest Professionals British Columbia (FPBC) must regulate registrants. Within the realm of urban forestry, all services performed by certified arborists and tree-related services and advice provided by positions such as urban forestry managers or supervisors, tree risk assessors, groundspersons, and landscapers all fall under the umbrella of regulated practice.

Reserved practice is a subset of regulated practice, defined by whether the public or environment could be put at risk if the advice or services is done improperly, and if the risk could be mitigated by the experience or knowledge of a forest professional. If the answers are both yes, then the activity falls under reserved practice, which can only be provided by a forest professional registered and licensed with FPBC.

Through this lens, we can consider common situations that arise within the practice of urban forestry. For example, if a complaint was received about the failing health of a single tree in a park setting, the certifications of

Certified Arborist and Tree Risk Assessment Qualification (TRAQ) through the ISA would be acceptable credentials for an attending person to hold in assessing its risk of failure and associated mitigation options. However, if that tree's health was failing due to broader biotic or abiotic causes that foreseeably could contribute to the failure of surrounding trees and would not be routinely captured in the activities of an arborist, then it becomes a matter of reserved practice for a forest professional. Similarly, in the event of a wildfire interaction with a community — where fire has impacted urban street, park, or residential trees — danger tree assessment of these trees prior to re-entry by community members may not be effectively captured through the TRAQ assessment process. Therefore, management of assessing and removals shifts from regulated to reserved practice due to both the high risk posed to the public and the nature and agent of damage.

The caveat to both situations is that the forest professional holds the adequate knowledge, experience, and competencies through which to apply their professional discretion and obligation, similar to any other practice area. The uniqueness of urban forestry is in the high level of public scrutiny, the reduced timeframe in which to make decisions (due to the attached risk to life, safety, or infrastructure) and the often myriad options that exist in an urban environment that don't exist on the forested land base. These factors drive what is often reactive management to external circumstances, whether it be disease, weather events, insects, vandalism, or other unforeseen situations. Some communities have supporting policy or other best management practice guidelines to support decisions and actions for these events; however, many don't. The engaged forest professionals may or may not be familiar with the community and will need to ensure they are meeting local legislative requirements, in addition to provincial and federal legislation as applicable (including the *Forest and Range Practices Act* and the *Wildfire Act*).

FPBC is working on developing definitions for all practice areas, which will help in making a clearer distinction between regulated and reserved practice, especially for the practice areas where several certifications exist, like urban forestry and wildland fire. Keep an eye out for invitations to join communities of practice and other supporting subject matter expert panels to lend your expertise on these definitions and development of practice standards. And as always, with any questions related to professional practice, please reach out to [practice@fpbc.ca](mailto:practice@fpbc.ca). ✉

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*Tara Bergeson, MSc, RPF, is the deputy director of competence and practice with Forest Professionals British Columbia. She focuses on the development and oversight of continuing professional development and the audit program to support the quality of registrants' professional practice. Previous to this role, she was the urban forester with the City of Kelowna, and is passionate about connecting people and nature.*





# Use of Open Fires and Liability for Fire Control Costs of Government

**The limits placed on the provincial government's authority to recover wildfire control costs the Ministry of Forests incurs as a result of a person's use of open fire in contravention of the *Wildfire Act* (the "Act") has generated considerable legal controversy in recent years.**

If the Ministry of Forests determines that a person contravened the Act or the *Wildfire Regulation* (the "Regulation"), and further determines that a wildfire resulted "directly or indirectly" from the contravention, the Ministry may (among other things) order the person to pay the government's fire control costs incurred in relation to the wildfire. An exception to this potential liability exists under Section 29 of the Regulation for holders of forest tenure agreements under the *Forest Act* (the "Section 29 Exception"). A forest tenure holder does not have to pay government's wildfire control costs that result from the tenure holder's contravention of the Act or Regulation if the tenure holder is current with its annual rent payments, the fire resulted from one of the various listed activities (timber harvesting, silviculture treatments, road construction, road maintenance, or road deactivation), and the forest tenure holder did not willfully cause or contribute to the start or spread of the wildfire.

The policy basis for the Section 29 Exception relates to a "fire preparedness levy" included in the annual rent payments under Crown forest tenures. A fire preparedness levy was included to the amount otherwise payable to the Crown as annual rent under forest tenure agreements; in exchange, government would not pursue tenure holders for firefighting costs related to the tenure holder's operations (even if the wildfire at issue was the tenure holder's fault), so long as the tenure holder did not willfully cause and contribute to the start or spread of the wildfire. Effectively, the fire preparedness levy combined with the Section 29 Exception is a form of liability insurance for forest tenure holders.

In recent years, the Ministry has challenged the applicability of the Section 29 Exception to

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*Jeff Waatainen has served as an adjunct professor of law at UBC, practised law in the forest sector for over 25 years, and works with the Forestry Law Practice Group of DLA Piper (Canada) LLP's Vancouver offices. This column is in the nature of general commentary only, and is not in the nature of legal advice or opinion.*

the consequences of open fires used to dispose of logging debris generated through timber harvesting operations. Government took the position that the exception should not apply to contraventions of the Act and Regulation resulting from the use of open fires to dispose of logging debris piles and that result in wildfire control costs to government. Numerous participants in the forest industry challenged the Ministry's position on the applicability of the Section 29 Exception through the commencement of appeals to the Forest Appeals Commission and the courts. The Ministry and various appellants advanced arguments as to whether intentional ignition of an open fire for pile burning constituted intentional ignition of a subsequent wildfire, and whether the use of an open fire to dispose of logging debris piles was part of a "timber harvesting operation" or "silviculture treatments" (as required for the Section 29 exception to apply).

Ultimately, the provincial government used its legislative hammer to ensure the Ministry's approach prevailed moving forward. In April of 2023, the provincial cabinet prescribed BC Regulation 110/2023 under the authority of the Act to amend Section 29 of the Regulation so that it now explicitly states the use of open fire was not a part of what constitutes timber harvesting, silviculture treatments, road construction, road maintenance or road deactivation for purposes of the Section 29 Exception. Since the Section 29 Exception is only available in relation to wildfire that results from one of these activities, it is no longer available to protect the holder of a forest tenure from liability for government's fire control costs resulting from contraventions related to the use of open fire. Now, a forest tenure holder faced with a wildfire cost recovery order from the Ministry due to an alleged contravention that relates to the use of open fire must successfully challenge the alleged contravention that the cost recovery order is based upon, or challenge the Ministry's theory of causation and argue that the Ministry has failed to establish the alleged contraventions have anything do with the wildfire that resulted in the Ministry's fire control costs. ❌



# We are All in

**NOTE TO READER:** This is an opinion piece steeped in my forest industry experience. I manage a company that works in forest resource analysis, forest operations, forest engineering and layout, and wildfire planning. It is wholly my opinion and not that of FPBC. My opinions come from an honest place of compassion, empathy, and loving awareness for our industry, forests, and the professionals working therein.

*“Let your impulse to act and your action have as their goal the service of the human community, because that, for you, is in conformity with your nature.”*

Marcus Aurelius, Meditations 9.31

**Mycorrhizal associations with trees are cool. These two individual organisms work together to form a symbiotic relationship.** Mutualistically, they share resources in spite of being separate organisms from different phylogenetic kingdoms. The fungal hyphae and mycelia create a sheath around the fine roots of the tree and extend out into the surrounding soil. This greatly increases the surface area for nutrient and water absorption which is transferred to the tree roots. In return for this, the roots of the tree provide the fungus with organic compounds, namely sugars. Under optimal site conditions, this symbiotic flow goes unhampered, and both the tree and mycorrhizae prosper. If environmental influences negatively impact the health of either symbiont, both are compromised.

Thus, it is with licensees, government, and the consulting community. Licensees and government (the trees) provide the consultants with contract opportunities (sugars). The consulting community (the fungal hyphae) provides expert advice, a training ground for professionals and provision of services and deliverables (nutrients and water). Together, our dynamic creates a similar form of mutualism. If the consulting community provides poor services, licensees and government are disadvantaged. When licensees or government restrict the ability of a consultant to complete the work, the consulting community is compromised. This has a cascade effect and negatively affects important aspects of our practice — professional reliance, social licence, and sound forest stewardship. If we collectively recognize

the current labour market challenges and enhance our mutualistic dynamic, we will come out stronger and more resilient.

## Current Situation

With certain clients, recognition of this symbiosis yields benefits that compound over time. The client grows the type and the number of opportunities it retains from the consultant. This relationship grows, the goodwill grows, the bond is strengthened. The consultant is able to attract and retain good people and grow its business offerings. The mutualistic dynamic is enhanced to a point of true symbiosis. Innovative ideas begin to flow as the team/symbiont works as one to tackle issues such as cut control or forest health outbreaks. Challenges are seen by the team as opportunities, and both parties work together to tackle them. The flow of resources between the client and consultant is fluid, yielding success for both parties. However, in certain situations with certain clients, this is not the case, and the current labour market is one example of this.

There is a provincial shortage of qualified, experienced professionals to do all the work in BC. This affects both the client and the consultant. This needs to be recognized and measures need to be put in place to make it easier for consultants to do the work and for their clients to get their services and products. The shortage of working professionals is further challenged by turnover as early career professionals move from consulting to government or licensee jobs.

The trend over the last few years is concerning. In her column in the summer edition of *BC Forest Professional*, FPBC CEO Christine Gelowitz, RPF, wrote about the growing number of forest professionals retiring from the profession: “Within the forestry profession, the percentage of retired registrants grew to more than 16 per cent by the end of 2023 from less than 10 per cent in 2015.” Gelowitz also noted: “In BC, the segment of the population 65 years and older is growing sub-

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*Kyle Broome, RPF, is just a guy. He started his career in forestry as a tree planter and worked his way up to foreman. Now he does his best to protect communities from wildfire. Kyle is a certified rad-dad who loves to mountain bike and ski.*





# This Together

*stantially faster than the province's younger, working-age population. The 65-plus population grew to 19.6 per cent in 2023 from 17.7 per cent in 2017 and is projected to reach 25 per cent by 2041.*

Save for the Central Okanagan, most of the Interior of BC is seeing net zero population growth, with many regions in decline. This combination of an aging population and increased level of retiring forest professionals results in what some would say is a perfect storm. This does not help anybody — especially the consulting community, where most of the boots on the ground forestry is practised.

Further compromising the labour shortage are contract requirements such as restrictive key personnel minimums. We often find that there are significant inconsistencies between business areas and the experiential requirements are not commensurate with the work. For example, some contracts are “clean up” contracts where small spatial edits are needed to change a package of previously developed cutblocks due to enhanced protection of biodiversity values (often old growth deferral area amendments). These spatial edits are easier and less risky than laying out a new timber sales licence (TSL) or cutting permit from scratch, and yet the contract requirements for key personnel are the same as for a full multiphase contract.

## What Happens When We Don't Work Together?

When sharing knowledge, expertise, and labour becomes compromised, the client and the consultant both falter. When the labour challenges are viewed collectively and resources are shared, both parties are stronger. The best training ground for a well-rounded forest professional is multiphase development. You learn about policy, operations, planning, and professional practice. Consultants are and will continue to be incubators for young forest professionals entering into government and licensee positions.

Many consultants are also willing to work with and assist with the training of clients' new staff. Over the years, many of the practice foresters I know and have worked with were new to the profession. I and the many consultants I've known throughout my career have always respectfully and collaboratively worked with a client's new staff in a professional manner to allow for mutual success.

There is also an ethical component to this conversation. Forest professionals are bound by a *Code of Ethical and Professional Conduct* (FBPC Bylaw 9, Schedule A). Standard 8b states that all forest professionals must “...refrain from unfairly criticizing the work of other registrants or attempting to injure the professional reputation or business of another registrant.”

This is relevant for both parties. Licensees and the government must ensure their contract management practices do not compromise the consultant's business and vice versa. The

consultants must not “injure” their clients' operations through shoddy services. Standard 8d is also relevant: “...be conscientious in providing professional services.”

I can safely say, as forest professionals, we all care about our practice. We all want to be diligent in our respective work. We all believe in professional reliance, due care, due diligence, and professionalism. The longevity of our forests matter and I've spent many years witnessing the skill and pride with which forest professionals apply their craft. However, all parties can become tangled in the contractual minutiae — to the point where we cease to see the forest for the trees. We cease to see that despite different places of employment, we need to work together more conscientiously.

## What Happens When We Work Together

One attempt to tackle some of these industry challenges comes in the form of the BC Timber Sales Contract Advisory Committee, which works with consultants. Capacity, contract management, and procurement are just some of the issues the advisory committee tries to address in partnership with consultants. One of the great successes of this advisory committee was the creation of the Silviculture Contract Rating System. This change in the procurement process for silviculture contractors provided an alternative to “lowest price wins.” Contractors that performed well would be rewarded with a higher score and allowed a competitive advantage. BCTS was rewarded with consistency and higher quality services. An excellent example of mutualism in action.

## Thoughts on Enhancing Our Mutualistic Dynamic

Much like the successes of the Silviculture Contract Rating System, a similar model could work in multiphase layout and development. Whether contracts are tendered via a “price per point” request for proposal or invitation to tender, it really does come down to price. Little recognition is given to a consultant's quality or length of service in a specific business area. The goodwill piece of the puzzle always seems to be lacking.

The time is nigh to work together to deal with these challenges; to foster a community of mutual respect and collaboration; and to recognize the risks we collectively face as forest professionals. Let's make each other's lives easier, not harder.

Increased recognition of our mutualistic symbiosis will lead to resiliency in our profession; more, better-trained forest professionals across the province. This will lead to enhanced stewardship of our forest resources and thus, in a perfect world, more resilient forest ecosystems. I truly believe in my practice, my profession, and my community of forest professionals. I love what I do. We are all in this together. ✪



# Systematic Solutions for Addressing

**Due to the size of British Columbia and its relatively small population,** much of the work forest professionals perform in BC is in remote areas — places the public might visit for a hunting or fishing trip, but not where the public actively recreates on a daily basis.

More uncommon are situations where forest operations are right on the fringe of communities, which is the case for much of Mosaic Forest Management's private managed forest lands. Our managed forests are located near several Vancouver Island communities, and consequently, activities are often in the view-shed of a large population. Some of these forests are places where the public regularly recreates, or they may also be a source of community drinking water. As a result, there are numerous local expectations and values to consider, ranging from someone's favourite dog walking trail to a popular local swimming hole.

## The Challenges

Mosaic manages Crown tenure in the northern part of Vancouver Island and Johnstone Strait, where the *Forest and Range Practices Act* and related provincial strategies like visual quality objectives (VQOs) and special management zones (SMZs) apply. In its southerly holdings, most of the land is privately owned managed forest, where the *Private Managed Forest Land Act* (PMFLA) is the primary legislation governing forest practices. Private owners managing under a forest management plan must address five key public environmental values: soil productivity, drinking water, fish habitat, critical wildlife habitat, and reforestation. Public values like recreation and visual landscapes are managed by private landowners voluntarily, or like Mosaic, under the requirements of voluntary third-party environmental certification programs.

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*Pam Jorgenson, RPF, is Manager of Community Initiatives and Certifications at Mosaic Forest Management. She has worked in the forest sector on the BC Coast and the Interior for over 20 years and has experience working for industry, consulting, academic, and safety organizations.*

For decades, our forest professionals and managers working on private land have been identifying special forest values by meeting with staff and elected community officials, First Nations, and local public to understand local interests and potential concerns in interface areas. Detailed notes about these meetings are stored in block files, and staff have always shared information about past practices. But what happens when the person who led the relationships and community conversations retires? Who will know to look for old meeting minutes or remember the names of the local representatives that were engaged 20 years ago?

It wasn't long ago this situation occurred. Several senior leaders were close to retirement and were sharing some of the long-term commitments they'd made with community leaders. There were some very specific, measurable things, like extended riparian buffers on important fish streams and no harvest zones in certain unique stands — not requirements under the legislation, but voluntary measures they had put in place to consider community interests. These commitments were made decades ago to city representatives and had been upheld by staff through this long period. We realized that moving forward, we needed a better way to track and record these historic commitments and engagements — a system that would allow a new staff forester to identify non-standard commitments as well as other local considerations in their regular planning process without having to comb through old files and meeting minutes.

## The Solution

Our solution has been to create a GIS layer that identifies areas of public interest. We call it the social values layer. It is a spatial layer that is updated as interests and commitments change. For example, when we sign a new mountain bike trail management agreement with an organized group, we add a polygon into the system so the geographic area is visible on maps, and we record tabular information about the commitment, as well as the local contacts.

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**Concludes page 20**





*Group ride with Mosaic staff and Nanaimo Mountain Bike Club executive on the Doumont Trails, located on Mosaic private land. Photo credit: Morgan Deno (Nanaimo Mountain Bike Club).*

# Public Interests in Managed Forests



*Colin Koszman, RPF, one of Mosaic's land use foresters at a recently installed slab bench on a trail system managed by the Cowichan Lake Trailblazers on Mosaic private land. Photo credit: Pam Jorgenson, RPF.*



# Proactive Forest Management Redefining Values Beyond Timber

## Lil'wat Forestry Ventures Ltd., the forestry division of Lil'wat

First Nation, started work on a proactive, transformative fuels management project earlier this spring. The project has deep roots in Indigenous values, the principles of FireSmart, and showcases a proactive approach to wildfire risk reduction through strategic forest thinning across a 70-hectare area. The project area is located above X-Stream Road in Mount Currie, British Columbia — an area located close to homes and heavily used recreationally.

The Forest Fuels Management Project's goals were to mitigate wildfire risks while enhancing the forest's multifunctional values for ecological, cultural, and recreational purposes. To undertake this project, a local contractor was hired whose crews worked diligently, even through weekends, to complete the work in two months. This was achieved by strategically removing approximately 14,000 cubic meters of timber, equating to roughly half the trees in the designated area. Tree felling was carried out using a feller buncher, followed by skidding and chucking to transport the logs to the landings. Processors then prepared the logs for shipment. Throughout the operation, staff were on-site to prevent public access to the work area and to address any questions from the community.

It is important to note that this second-growth stand was dense, much like other stands in the Lil'wat traditional territory and across BC. Originally, the stand had a density of around 500 stems per hectare (sph), which we reduced to 250 sph to improve the stand's overall health and sustainability.

By the end of July 2024, the first phase was successfully concluded; however, the scope of the project extends far beyond traditional forestry management and the focus on harvesting timber.

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*Klay Tindall, RPF, is the General Manager of Forest Operations for Lil'wat Forestry, where he oversees forestry activities, ensuring safety, environmental leadership, and the alignment of operations with Indigenous rights. He has a Bachelor of Forestry from UBC and a Certificate in Advanced Leadership from UBC Sauder School of Business.*

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*Jordon Gabriel, a Forestry Technician with the Lil'wat Nation, plays a key role in ensuring the sustainable management of the Nation's forests and the preservation of its cultural values. With 14 years at Lil'wat Forestry Ventures and 20 years of experience with BC Wildfire Services, Jordon supports the general manager in researching and implementing culturally informed forestry practices.*

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## A holistic approach to fuel management and its benefits

The Forest Fuels Management Project is about more than mitigating wildfire risks; it's shifting how forests are perceived and valued. Instead of a traditional focus on timber as the primary forest resource, we're adopting a model where the forest is managed for multiple benefits right from the get-go to ensure ecological, cultural, and/or community needs. Some of the benefits we are already witnessing are:

### 1. Revived Biodiversity

The thinning process has led to significant ecological and cultural benefits, including the revival of a lost-to-time berry in the region. The soopolallie berry, also known as the buffaloberry or xusum in Ucwalmícwts, was historically abundant in the area and picked by the community on various hillsides within Lil'wat territory. However, due to changes in forest management practices and cultural restrictions imposed in the past, these berries became scarce. Without proper management, the overgrowth of forests led to the crowding out of these important cultural plants. From historical accounts dating back to 1969, as well as discussions with Elders, it was evident the community deeply felt the loss of these resources, as they were integral not only to their diet, but also to their cultural practices. Recently, a turning point came during a routine brushing activity for this project, when crews noticed the berry and, recognizing its significance, were immediately asked to preserve the plants. Moreover, by reducing forest density, more sunlight reaches the forest floor, which enhances the growth conditions for various other common berry-producing plants and understory vegetation crucial for local wildlife and the community's use.

### 2. Enhanced Community Safety

Not only is the project helping to reduce wildfire risk to the community — which includes homes, a school, and a grocery store — it is also enhancing community safety by increasing visibility within the forest, allowing residents to observe and react to the presence of local wildlife such as wolves, bears, and cougars. This visibility is important to ensure the safety of families living near these areas, as well as those using the area for recreational purposes.

### 3. Direct Community Benefits

Approximately 30 truckloads of firewood, equating to 2,000 cubic meters, are being distributed among the community's Elders, seniors, and those with physical disabilities. This provision of firewood is not solely about managing the forest sustainably; it directly supports community members,

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*Soopolallie berry, also known as buffaloberry.*



# Out of the Ashes: A Living Aquatic Biodiversity Lab

Scientists Study eDNA, Wood in Streams After Massive Wildfires in Oregon

*Laura Hauck, a biological science technician with the Pacific Northwest Research Station, works with eDNA samples in the Corvallis Forestry Sciences Laboratory. Photo credit: Rich Cronn, USDA Forest Service.*

The 2020 Labor Day fires in western Oregon were unprecedented not only in the area burned — more than 404,686 hectares — but also in their ferocity. Hot, dry east winds swept across the state, causing small fires to rapidly explode into megafires of 40,469 hectares or more within hours. In addition to five megafires, 12 other fires either started or expanded rapidly on September 7 and 8, 2020. These fires destroyed more than 6,000 homes, businesses, and structures. They also killed or damaged trees that could have produced an estimated 15 billion board feet of lumber.

Although deemed catastrophic in many respects, the fires offer scientists an unparalleled opportunity to study the impacts on streams and fish. With funding from the National Council for Air and Stream Improvement Inc. (NCASI), Weyerhaeuser, and the US Forest Service's Pacific Northwest Research Station, a team of scientists with these and other organizations set out to examine the impacts to riparian-zone vegetation and aquatic biodiversity. A conservation grant from the Sustainable Forestry Initiative (SFI) funded the analysis of environmental DNA (eDNA), collected from streams in three of the largest wildfires.

The researchers used stratified random sampling to select 30 stream reaches in watersheds burned in three of the largest of the 2020 fires (Riverside, Beachie Creek, and Holiday Farm)

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with a range of pre-fire stand age and fire severity, including unburned watersheds and those that experienced high-severity fire. Six additional unburned watersheds in Washington state will also serve as controls during the five-year study.

To date, the researchers have identified several initial key findings:

## Aquatic Organisms

- Overall, fish in the study area appear to be resilient to wildfire.
- Seven at-risk species were found only in burned watersheds (coastal tailed frog, northern red-legged frog, Pacific lamprey, western brook lamprey, steelhead/rainbow trout, coho salmon, chinook salmon).
- Two at-risk species (steelhead and coastal tailed frogs) were detected in both burned and unburned watersheds.

## Riparian Vegetation

- Tree canopy loss continued for at least four years post-fire, especially in old watersheds with higher severity fire.
- Riparian tree species composition will influence tree survival and thus stream shading immediately post-fire.
- Understory vegetation cover rebounded quickly following high-severity fire, especially in young watersheds.

Nearly half of the lands burned in 2020 were federal, mostly US Forest Service and Bureau of Land Management; the remainder were in private ownership (44 per cent) and state and other lands. Roughly 50,586 hectares of Weyerhaeuser's Oregon SFI-certified timberlands were burned. The fires also burned significant areas of other SFI-certified timberlands, including







### What is eDNA?

“Environmental DNA (eDNA) is organismal DNA that can be found in the environment. Environmental DNA originates from cellular material shed by organisms (via skin, excrement, etc.) into aquatic or terrestrial environments that can be sampled and monitored using new molecular methods. Such methodology is important for the early detection of invasive species as well as the detection of rare and cryptic species.”

### Source

[www.usgs.gov/special-topics/water-science-school/science/environmental-dna-edna](https://www.usgs.gov/special-topics/water-science-school/science/environmental-dna-edna)

### For Additional Information

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- Kirkland, J. & Penaluna, B. E. (2023). “The promise of environmental DNA: Life in northwest streams revealed through a bottle of water.” *Science Findings*, US Forest Service Pacific Northwest Research Station. Online at: <https://www.fs.usda.gov/pnw/sciencef/scifi248.pdf>
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3,237 hectares owned by Port Blakely’s US Forestry division.

“We thought that the effects of wildfires on aquatic ecosystems would be the physical responses more than anything, such as canopy cover and the amount of light that’s reaching the stream channel,” said Dr. Ashley Coble, a senior research scientist with NCASI. “We also thought fires would eventually, if not immediately, have huge effects on large woody debris entering stream channels, which will have a significant impact on the amount of sediment moving through and/or being stored in these stream systems. We expected that these and other factors will influence aquatic food webs, whether that’s primary production within streams or secondary production of macroinvertebrates, which are part of the food web but are also good indicators of water quality, indicators that are commonly used by regulatory agencies in assessing water quality.”

During the study, Dr. Jake Verschuyf, NCASI’s Director of Western Forest Sustainability, focused on wood in streams in areas with varying levels of forest management, including areas where salvage harvesting operations were conducted soon after the fires were controlled.

“We assumed that fire severity would have an effect on the input of wood into the streams, and we wanted to look at how forest management in these watersheds might also affect that input,” said Verschuyf. “So far, we haven’t seen much of a signal that forest-management intensity is driving wood into the streams, compared to wildfire severity. That’s not too surprising, but I expect that dynamic to shift a bit over time. Forest-management intensity, specifically salvage harvesting in riparian areas, which is rare, certainly will provide a long-term signal related to wood input into the streams. As we continue to study these watersheds,

we’ll be better able to describe the full dynamic. We’re only now beginning to see the early stages of wood input from the various disturbances that occurred along those streams.”

The SFI grant helped the researchers analyze eDNA to assess the effects of the fires on aquatic ecosystems. eDNA is shed by fish, macroinvertebrates, and other organisms and can be collected from samples of soil, water, snow, or air. Fragments of eDNA from a cutthroat trout in stream water, for example, confirms that the fish is present in the stream.

Fragments of DNA shed from fish typically come from scales or excrement. Dr. Brooke Penaluna, a Research Fish Biologist with US Forest Service, thinks of these fragments as breadcrumbs that indicate the presence or absence of a species, its relative abundance, and genetic variability within the species. A variety of devices for filtering DNA from water samples in the field are available. Penaluna and her colleagues use a device called a Tube for eDNA (ToD), made by David Leer of CreekWalker Aquatics, that allows them to process up to four samples from one location. The ToD has separate filters for each of the four samples; the filters are sent to a lab for eDNA analysis.

“We normally try to process four, if we can, because with four we can get a better sense of the majority of the signal across the replicates. You can do that with three replicates, but using four helps provide additional information,” Penaluna said.

Care must be taken to avoid contaminating samples. Scientists wearing clean waders and surgical gloves collect water samples from the middle or sometimes the edge of a stream, river, pond, or

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*Brooke Penaluna, a Research Fish Biologist with US Forest Service, demonstrates processing water samples from a stream on Weyerhaeuser land in Oregon. Filters from the device will be sent to a lab for eDNA analysis. Penaluna explained the process during a tour of the area organized by the Oregon Forest Resources Institute in May. Photo credit: Steve Wilent.*

“We’re finding that most of the responses show that fish are quite resilient to wildfire — either there was no response or they’ve recovered.”

wetland. In streams and rivers, scientists collect water from upstream of their position to avoid contaminating a sample with DNA that may be on their gloves, waders, or clothing.

In summer, when stream flows are low, fragments of DNA may travel 50 metres or less before settling into sediments at the bottom. In fast-flowing rivers, the fragments may travel as far as several kilometres. DNA fragments deteriorate over time; they do so faster in water with high pH levels or relatively high temperatures.

The study is the first to employ eDNA to assess aquatic biodiversity within such large areas burned by wildfires.

Another researcher involved in the study is Dr. Laura Six, a forest ecologist at Weyerhaeuser, who focuses on biodiversity research and sensitive species monitoring in managed forests. For the past four years, Six has served as Weyerhaeuser’s representative for SFI’s Project Learning Tree initiative, a national environmental education program designed for educators, parents, and community leaders to help children from pre-school through grade 12 to learn about environmental issues.

“It’s interesting to see from our data that the response after wildfire is very dependent on the layer of vegetation,” Six said. “For

instance, the mortality of the tree canopy often doesn’t happen all at once — we’re still seeing mortality three to four years after the fire. But the understory has seemed to respond a lot more quickly, at least in terms of cover and the species richness. A year or two after a fire, it looks similar to unburned sites. Species composition might be a bit different, as in the vegetation community may be a little different, but the overall cover in the number of species there is similar within a year or two.”

Although the study is not yet complete, the researchers are encouraged by their finding that fish in the study area are resilient to wildfire.

“Some people were thinking that these large fires would be very detrimental to aquatic ecosystems,” Penaluna said, “but our findings so far are surprising, because we’re finding that most of the responses show that fish are quite resilient to wildfire — either there was no response, or they’ve recovered. Amphibian tadpoles have shown greater sensitivity, but for most of the organisms in the streams the general story is that the impacts of wildfire haven’t been as detrimental as anticipated.”

Penaluna and her colleagues will be making observations and collecting data through the summer of 2025.

“Now the question is how frequently we need to sample after 2025,” she said. “Can we sample every two or three years and get a sense of whether the first five years were the most important years? And of course we’re waiting for a big storm event to come in, so we can begin to understand its impact on the post-fire environment.” ❖





*Researchers collect data about dead and downed trees along a stream in an area burned by a 2020 wildfire. Photo credit: Laura Six, PhD.*



*Dave Leer of CreekWalker Aquatics, a lead contractor for NCASI, collects DNA samples from an Oregon stream. Photo courtesy of NCASI.*



*Six months after a 2020 wildfire in Oregon, bigleaf maples like this one showed signs of life. Photo credit: Steve Wilent.*



*A feller cuts a dead Douglas-fir six months after the 2020 Beachie Creek Fire in Oregon. Photo credit: Steve Wilent.*





*Bike trails were identified during layout, and cleaned post harvest on private lands near the Town of Qualicum Beach.* Photo credit: Pam Jorgenson, RPF.

*The North end of Buttle Lake/Upper Campbell Lake area has several social values polygons mostly due to recreational use. A campground and visual corridors for tourism operations are some of the values identified here. Red zones are areas that will trigger highly modified approaches to harvesting and outreach (the red zone seen here is directly adjacent to BC Parks Buttle Lake Campground); orange zones will have somewhat modified approaches; and yellow zones will have mildly modified approaches, but are still of some significance.*

*Walking a trail along the Nanaimo River on a field tour with elected officials, First Nations, and a variety of interested local public.* Photo credit: Pam Jorgenson, RPF.

**Continued** from page 12

When hauling on a road early in the morning results in neighbour complaints, we map the area and record the issue and the solution so we can make different plans in the future. When we meet a new neighbour who requests a specific walking trail be maintained, we map the trail and add the person’s name and request into the tabular data of the GIS layer.

When new areas are being planned by our field planners, the block is automatically run through the GIS overlay, and if the newly proposed block or road intersects one of the social values polygons, the proposed unit is tagged as having public interests the planner must consider and review.

To be more specific, our team ranks each social values area with a colour/ranking:

Red = High	Orange = Moderate	Yellow = Low	Green = Status Quo
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Depending on the classification of the social values area as Red/ Orange/Yellow, specific actions are expected, with more involved strategies being put into play as rankings increase. In all cases, Mosaic’s land use foresters — forest professionals with a mandate to work with communities — sit down with planning foresters and often other professionals to come up with site-specific strategies for each area, potentially including things like meeting with local officials and interested public, managing existing recreational trails, running visual assessments, offering community firewood, hosting tours, scheduling forestry activities outside of tourist season, and more.

**The Results**

Our social values management system is now in full implementation. Planning forest professionals consider the social values’ ranking of new blocks early in their processes and work with land use foresters to develop effective operational strategies for meeting social values objectives. Teams also meet quarterly to discuss these future harvest areas and roads, reviewing key values and determining how to proceed given the historic information and current objectives.

We are regularly updating all social values polygons and tabular information and using this data to record long- and short-term commitments in these areas, as well as pointing to files in our network that will provide additional information.

We also recognized later in the development process the social values GIS layer could be used to better plan timber supply impacts of managing areas for high public interest. We anticipate systematically lower harvest levels in red and orange zones, so we have adjusted the timber supply assumptions accordingly.

Overall, the social values management system has set-up our organization for success in the long run. Having a simple, landscape-level approach to tracking local interests is a key step for a company operating regularly in the community interface. With interested parties ranging from a single neighbour to First Nations and local governments, we are addressing the challenges of tracking each group’s requests and interests in a strategic, searchable, and pragmatic way. Discussing social values has become a standard action in our business with all professionals involved, and it is here to stay. ✘





*The Lil'wat Forestry crew inspecting plants during brushing.* Photo credit: Simon Bedford Photography.



*The area which was earmarked for wildfire risk reduction activity was close to homes and is used for recreation.* Photo credit: Simon Bedford Photography.

**Continued from page 14**

providing them with essential resources for heat during the colder months. Moreover, this project has also resulted in the creation of 16 jobs, helping to boost the local economy.

**4. Reviving Cultural Heritage**

Opening up access to cedar trees, which are essential for traditional Lil'wat crafts, has been of great benefit to the community. Previously, access to cedar trees was challenging due to the remoteness and density of the forests. Cedar, particularly valued for its durability, is sustainably stripped and used in the creation of woven goods such as baskets, hats, and in the making of traditional regalia. The greater accessibility to cedar trees will help preserve the traditional knowledge associated with these crafts, allowing Elders to pass down techniques and practices to younger members of the community.

**5. Exploring Innovative Practices**

The project has encouraged us to look at innovative ways to reduce greenhouse gas emissions, utilizing every part of the forest without wasting anything. One such innovative practice we are adopting is the use of a carbonizer. This is a new and innovative tool used to transform wood waste into biochar, a charcoal-like substance that can be used as a natural fertilizer for ground stabilization and even for treating contaminated water. Unlike traditional methods of dealing with wood waste, which often involves burning and can release significant amounts of carbon dioxide into the atmosphere, the carbonizer processes the waste in a way that captures carbon by storing it in the biochar itself, rather than it going up in smoke in a slash pile. We believe that by incorporating innovative practices along with other forest management techniques, we are giving our forests the best chance to thrive, with minimal to no waste left behind.

For other First Nations looking to undertake similar wildfire risk

reduction projects, there are three key lessons we can share from our experiences:

- **Capacity Building:** It is important to ensure sufficiently trained personnel are available who understand fire behaviour, forest management, and the importance of the cultural aspects of forestry.
- **Sustainable Practices:** Knowing where, when, and how to integrate sustainable and culturally significant practices, such as the preservation of traditional plants and the use of natural resources for community benefits, can prove very beneficial. For this, consulting with knowledge-keepers and Elders is critical.
- **Government Partnership:** For a project to be successful, strong advocacy for governmental support is crucial. Securing cutting permits in wildland urban interface (WUI) areas, adjusting timber pricing to reflect the additional costs of partial cutting and extra piling or waste cleanup, and considering the higher expenses associated with increased public consultation and communication. These factors must be taken into account in log pricing and funding, especially for projects that better protect communities and help restore cultural heritage. Additionally, we believe the government needs to provide more support and collaborate on projects like this to encourage First Nations to practice and lead the way in managing forests and their land.

Phase 2 is set to commence in late fall 2024 and will extend the work by an additional 130 hectares. This phase is anticipated to bring continued benefits and knowledge on how we can improve our efforts in proactive environmental stewardship.

The biggest takeaway from this project for our team, for the Nation, and for Lil'wat Nation members, is that we need to shift our thinking from "What can forests do for us?" to "What can we do for our forests and for our future generations?" ✘



# Optimizing the Credential Assessment

**For most trainees registered with Forest Professionals British Columbia (FPBC), their pathway begins with graduation from an unaccredited post-secondary program. In 2023,<sup>1</sup> 59 per cent of trainees pursuing the Registered Professional Forester (RPF) designation were enrolled in the Allied Science Forester in Training (ASFIT) program and 65 per cent of trainees pursuing the Registered Forest Technologist (RFT) designation were enrolled in the Allied Science Trainee Forest Technologist (ASTFT) program.**

Each allied science program — one for forest technology and one for professional forestry — has a separate Credential Assessment Process (CAP). For years, the number of trainees going through each CAP has been on the rise, with registrants hailing from a range of educational backgrounds including those with international credentials. To date, FPBC has admitted trainees with education from over 40 different countries. Provincial legislation such as fair registration practices and international credential recognition helps to ensure transparent and impartial assessment for all CAP applicants. FPBC continually seeks to improve the fairness, efficacy, and efficiency of those processes so that individuals can be licensed to practise independently in a timely way.<sup>2</sup>

## The Credential Assessment Process

Any trainee seeking practising RFT or RPF licensure must demonstrate core competence in either forest technology or professional forestry, respectively. For trainees with unaccredited or international qualifications, core competence is demonstrated by completing the CAP. The CAP is an evidence-based evaluation where ASTFTs and ASFITs must submit documented proof that supports their competence in either forest technology or professional forestry standards. The CAP may identify gaps in competence that must be filled during the

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*Sydney Kucera joined FPBC staff in 2020. In her current role as Certifications Lead, Sydney administers the FPBC and FPRC credential assessment processes and as a key member in the registration department, she manages the certification processes for independent forestry practitioners. Sydney holds a BA, Hons in Geography from the University of Western Ontario.*

trainee period to achieve full, independent RFT or RPF licensure.

To assess competence in forest technology, the ASTFT's evidence is evaluated by provincial assessors within BC. Similarly, to assess competence in professional forestry, the ASFIT's evidence is evaluated by national assessors. In both cases, CAP evaluations are completed by a combination of post-secondary forestry educators and/or practising RFTs and RPFs with expertise in forestry practice areas. Once assessments are completed, CAP results are sent to FPBC to determine if assessed ASTFTs or ASFITs require any further upgrading to meet forest technology or professional forestry competence.

The forest technologist CAP is owned and administered by FPBC. In contrast, the professional forester CAP is owned by a national coalition of provincial regulators known as the Forest Professional Regulators of Canada (FPRC). Each regulator of the FPRC coalition applies this CAP to ensure consistent competence of professional foresters and to facilitate labor mobility across Canada.

## Feedback Received on the Credential Assessment Process

In the summer of 2023, FPBC partnered with Royal Roads University (RRU) to consult with registrants regarding their experiences with the CAP. The goal of this engagement was to identify ways to improve the CAP — from the registrant's perspective — that could be leveraged by FPBC and key stakeholders to improve the overall process.<sup>2</sup> Identifying ways to improve the CAP would assist trainees with faster completion rates to obtain their independent practising licensure in a fair, transparent, and timely way, while maintaining alignment with FPBC's strategic goals.

## Grants Support CAP Improvements

FPBC secured grant funding to finance foundational work to address some challenges identified by registrants. Building on the success of registrant consultation, external consultants were hired to develop a national strategic action plan for improving the efficiencies of the professional forestry CAP. The strategic plan project engaged CAP stakeholders to gather input and resulted in a list of prioritized action items. Funding has also been secured for the revision of the existing national certification standards





# Process for Allied Science Trainees

for professional forestry practice. The revision of the certification standards will address issues of ambiguity in the current standards and make it easier for applicants to provide appropriate evidence for their CAP applications. Additionally, FPBC received funding for system improvements for the professional forestry CAP database. These system improvements support the ability to analyze the CAP database to identify academic courses that have been reviewed by national assessors. The aim of this analysis is to create a searchable database of post-secondary courses that meet CAP standards, making it easier for future ASFITs to gather course information and input evidence in their applications.

## Addressing Feedback and Making Improvements

Based on the recommendations from the engagement process, FPBC has been able to identify specific short- and medium-term actions that can be undertaken internally.<sup>2</sup> In January, FPBC began piloting monthly orientation sessions to inform new trainees and their sponsors about professional expectations, license obligations, and requirements for practising registration. Subsequent orientations specifically targeted to CAP were also launched for trainees enrolled in the ASTFT and ASFIT programs. These sessions highlight expectations and provide guidance on how to prepare CAP submissions. Feedback from these orientation sessions has been positive and registrants can expect to see more of these engagements going forward.

FPBC recognizes the need to improve trainee progress through their requirements for practising registration. To this end, FPBC has implemented a quality assurance schedule to review and revise experience area content in the online learning management system. Notably, *Experience Area 4: Forest Legislation and Policy* was recently revised to eliminate module exams and increase direct engagement with sponsors. The estimated time to complete the new *Experience Area 4* has decreased from several months to 15-20 hours. Additional work in this area includes a review of the roadmap to practising registration<sup>3</sup> to make it more streamlined for registrants to progress through.

At the national level, FPRC recently announced a new two-stage assessment process for the professional forestry CAP. This revised process allows ASFITs to receive their initial assessment results

based on their academic qualifications. This change removes the potential for duplicate evidence to be submitted, allowing for ASFIT work experience to be submitted as evidence for the specific elements not being met by an ASFIT's academics. The two-stage process will be complimented by an updated national CAP manual, providing clear and concise information to applicants.

Work also recently concluded on the creation of a set of national professional standards for forest technologists. These standards were adopted by the provinces that regulate forest technologists and will soon be used for accrediting post-secondary diploma programs and completing credentials assessment for individuals trained in forest technology. In the future, FPRC will develop a national CAP for forest technologists. In the meantime, in support of these new standards, FPBC is in the process of revising the forest technologist CAP to align with the newly developed national standards and is exploring options to integrate them in an online platform.

## Wrapping Up

As the occupational regulator, FPBC sets the licensing requirements for individuals hoping to obtain an RFT or RPF designation. For those with unaccredited and foreign qualifications, CAP is a requirement to obtain independent licensure. In partnering with RRU, FPBC set out to explore the challenges individuals experience with CAP in order to uncover ideas and improve fairness, efficacy, and efficiency so that individuals can be licensed to practise independently in a timely manner.<sup>2</sup> Actionable recommendations were identified as a result of stakeholder engagement. Some recommendations have been acted on and are valuable improvements to the credential assessment process within BC.<sup>2</sup> Other recommendations are set to be implemented over the long-term, given their strategic and holistic nature.<sup>2</sup> Registrants can expect to hear further updates on this work as it progresses.

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3. Forest Professionals British Columbia. Roadmap to Practising Registration. [www.fpbc.ca/wp-content/uploads/2024/08/2024-FPBC-Roadmap-Practising-Registration.pdf](http://www.fpbc.ca/wp-content/uploads/2024/08/2024-FPBC-Roadmap-Practising-Registration.pdf)

# Finding the Right Voice

Empowering Registrants to Speak Up



**Garnet Mierau, RPF, director of practice with Forest Professionals**

British Columbia (FPBC), wants to help forest professionals find their voices again. He thinks some lost theirs with the introduction of the *Professional Governance Act* (PGA) in February 2021. Looking back, he wishes he used his more before the Tremont Creek wildfire.

“When the PGA came into force, there was a common misunderstanding with regards to advocacy,” Mierau says. “And I think, unfortunately, what registrants heard is, ‘We can’t advocate anymore,’ as in, they can’t advocate anymore. And that’s not accurate.”

Regulators can’t advocate, but registrants still can. They still have a voice, adds Mierau, who joined FPBC staff in 2023. “What we’re trying to get at, as far as finding your voice, is empowering registrants to speak up about stewardship, about forest practices, about their specific area of competency, that kind of thing.”

Mierau previously spent four years as a practitioner working with the Logan Lake Community Forest management team on a commercial thinning and wildfire risk-reduction plan. Then in August 2021, the Tremont Creek wildland fire happened, racing south across the landscape, consuming everything in its path.

The month-long fire — sparked by lightning — burned 63,548 hectares, including parts of the Logan Lake Community Forest. No structures were lost in the District of Logan Lake, due in part to 18 years of FireSmart efforts<sup>1</sup> — such as prescribed burns and

fuel management in the surrounding area. However, the Tremont Creek fire destroyed 1,700 hectares of the com-

munity forest’s 16,724 hectares before the wildfire risk reduction plan could be put into practice.

“We didn’t get to do what we wanted to do,” Mierau says of the team of professional foresters. He isn’t suggesting the plan would have prevented damage to the community forest, which presented challenges in steep terrain and dense vegetation. “All bets are off when it comes to wildland fire and extreme conditions.”

In the end, suppression efforts in the Logan Lake area were aided by a shift in wind. But in hindsight, he wishes implementation of the plan had been accelerated. If the team had been more assertive and pushed forward with the timeline for the plan, maybe more of the community forest would have survived, Mierau says.

“But sometimes you’ve got to go slow to go fast.”

**Public Interest**

At the time of the Tremont Creek fire, the thinning plan was to treat 135 hectares of the Logan Lake Community Forest. “We were looking to do risk-reduction right in tight to the community, inside the community forest.”

The plan, after a pivot, was to thin from the town nucleus out. “That’s a principle that FireSmart would promote as good behaviour, working from your values out and mitigating risk in that direction,” he says.

The planning team was just getting ready to bring in equipment and start work when the fire started. The team had consulted extensively with First Nations, tenure holders and forest users, from hikers to mountain bikers, and there had been some push-back during the public engagement process.

“As a community forest, that tenure is really linked to the constituents,” Mierau says. “It’s common throughout BC for

*Mike Hall is a senior communications specialist with Forest Professionals British Columbia and is a former journalist and editor.*







communities close to forests to view them as their own.”

As forest professionals, protecting the public interest and public safety are paramount, as set out in the *Code of Ethical and Professional Conduct*.

The fire risk in Logan Lake Community Forest was high. “When we looked at it, as forest professionals, we saw and predicted pretty significant fire behaviour,” Mierau says. But some folks didn’t want to hear it.

While the intention was to mitigate wildland fire risks by treating the fuel load, opponents felt the message was “code” for logging. Some wanted no harvest at all, he says. Such attitudes make it challenging for a community forest, Mierau adds, to do business, to sustain operations to the benefit of the entire community. “It’s public land.”

The intent in the community forest was to remove what was needed, not to maximize profit.

And this is where the right voice is needed. “As a forest professional, it’s important to find your voice and advocate for the stewardship, advocate for the public interest,” says Mierau. “As a forest professional, we knew and understood the potential wildland fire behaviour, and what the risks were. We truly understood them.”

The public may or may not agree with your plans, he acknowledges, but “own what you know.”

In Logan Lake, “I think, ultimately, what we were trying to do was be really good corporate citizens, really embracing that model of ‘local voices, local choices’ that a community forest brings,” Mierau adds. “This is where you, as a forest professional, you need to find that balance of, ‘OK, I’ve reasonably listened to the public’s concerns and interests, and I’m now making a decision when I’ve considered all the values.’”

### Communication Lesson

Work carries on in the Logan Lake Community Forest. “The entire area to the south of Logan Lake that was not burnt. That is now being harvested in the way we had envisioned, with a thin from below,” Mierau says. “This as well as other areas such as Face-Paska Lake and the Coquihalla Highway are being treated. So, it’s helping to pay the bills.”

But it will take a rotation for the community forest to fully recover from the Tremont Creek wildfire. The community forest’s annual allowable cut has been reduced.

“For an area-based tenure that’s small in nature, catastrophic wildland fire has a major impact because you can’t go to a new area to go get your cut. You’re confined to the boundaries of your tenure,” says Mierau.

That is a pitfall of forest management, says Mierau. A pitfall in communication, he adds, citing Irish playwright, critic, and polemicist George Bernard Shaw, is the illusion it has taken place. “You may think you’re communicating to the public, but are you?”

Mierau says it’s important as a forest professional to find the right level of communication to ensure people understand your message; to speak in plain terms, tell a story, and listen. “I think it’s just a good tactic when you’re engaged with the public to truly understand them.” His advice is to be open to and curious about their opinions, find what is core to their values, and seek common ground. If you can understand where the public is coming from, Mierau says, “then you have a better opportunity to make a more informed decision and long-lasting relationships.”

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# Supporting Forest Professionals with Practice Area Definition and Standards Development

**Traditionally, the fall season has been a time for the Practice**

Department to re-connect with the registrant base and provide updates and insights into important influences on your professional practice. This year, prompted by strategic work of the Forest Professionals BC – BC Wildfire Service Wildland Fire Joint Panel, we are introducing practice area standards and competencies aimed at supporting improved understanding of the scope and expectations of each professional forestry practice area.

In response to changes in the profession and to support new areas within forestry, practice areas have evolved over the years. They provide both registrants and the public with information about the work, activities, and tasks that are inherent to a particular scope of work within the practice of forestry, particularly when specific services or advice are within reserved practice. Clear definition of the parameters of practice areas (and the associated competencies) allows for a greater reassurance for registrants when self-declaring their areas at each renewal year, which is important in influencing several subsequent processes, including the focus of competence or professional conduct audits, independent practice, and the allocation of supporting continuing

professional development activities. It also provides for the public interest — through transparency and accountability.

Practice standards provide an overall framework for a given practice area and describe, in broad terms, the professional expectations of performing work in each category. A practice area may have five or more standards; of which each has multiple demonstrable competencies. A demonstrable competency describes the day-to-day tasks, or the nature of the work that practising individuals are able to do. They are developed intentionally to provide adequate information about the “what to do,” without advising the methods of the “how to do it.” This ensures a more timeless approach to supporting registrants with guidance instead of prescriptive methodology, and allows for incorporation of experience and knowledge.

Where practice areas span a broad or complex set of activities, we are able to delineate levels of competence, to allow for entry and growth within a practice area. For example, see the excerpt from the Wildland Fire Resiliency and Risk Reduction practice area (*Figure 1*). There is significant complexity in fire behaviour and fuels management understanding, prompting three levels of competency. While not intended for use (at this time) in self-declarations, they are meant to help registrants and the public recognize increasing competency and application of knowledge as one progresses in their career and/or scope of work in this field.

Developing practice standards will support many areas of professional practice, including the audit program, regulator to regulator interaction (particularly in reference to the duty to report), and certification approvals for associated registrants. As practice areas come up for both definition and practice standard development, FPBC will be engaging the broader registrant base to identify subject matter experts to provide insight and review, either within communities of practice or as individual subject matter experts.

Please reach out to [practice@fpbc.ca](mailto:practice@fpbc.ca) with questions related to practice area standards and/ or with interest in participating as a subject matter expert in your professional scope of practice. These standards will be available on the FPBC website in the coming months. ✕

**REFERENCE**

1. See the definitions in the Forest Professionals Regulation: [www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/15\\_2021](http://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/15_2021)

*Garnet Mierau, RPF, is FPBC's director of practice and Tara Bergeson, MSc, RPF, is FPBC's deputy director of competence and practice.*

*Figure 1. Excerpt from the Wildland Fire Resiliency and Risk Reduction practice area.*

**Standard 1: Sampling and Monitoring**

Sampling and monitoring represent data measurement, identification, and management at both the stand and landscape level. Proper sampling design and collection is important to accurately interpret and assess the wildland fire threat in a given location or geographic region. Monitoring provides long-term information about the relative risk, incorporating evaluation of both fuel treatments and wildfire interactions.

Standard 1: Sampling and Monitoring	Level I	Level II	Level III
Demonstrable Competencies			
1.1 Measure fuel loading and spatial arrangement across fuel strata	X	X	*
1.2 Describe fuel loading and spatial arrangement across fuel strata	X	X	X
1.3 Collect stand attribute and inventory data	X	*	*
1.4 Identify site classification	X	X	*
1.5 Measure fuel moisture	X	X	*
1.6 Design sampling protocols		X	X
1.7 Implement sampling protocols	X	X	*
1.8 Manage collected data	X	X	*
1.9 Interpret collected data against intended outcomes		X	X
1.10 Evaluate that prescription specifications have been met post-treatment		X	X
1.11 Assess wildfire interaction with treatment area(s)			X

\* It is expected that practitioners have conceptual knowledge of these competencies as they apply to interpretation.



# How FPBC Mitigates the Risk of Unlawful Practice for Registrants and Non-registrants

**The Professional Governance Act (PGA) has brought many changes** to the way FPBC regulates the profession. We are no longer an advocacy body for registrant concerns about forest policy; we have lay members on our board and committees to ensure conflicts of interest are mitigated and addressed immediately — and to ensure the public interest in the practice of professional forestry always comes first; and we have specific prohibitions on retired and non-practising registrants. The latter change has been tough for some registrants to reconcile. Historically, the profession leaned heavily on retired forest professionals to provide guidance and wisdom.

However, the public interest has shifted. Limitations exist for retired registrants because it would be inconsistent with the PGA to provide practice rights to a non-practising registrant. Retired, resigned, and non-practising registrants are not obliged to carry out any continuing education, whereas continuing professional development (CPD) is a significant pillar of the PGA and FPBC Bylaws.

It can be helpful to compare different professions to understand why certain requirements are in place. Most people would not consider getting medical advice from a non-practising doctor, or legal advice from a retired lawyer. Why is that? Partly due to liability but also because we recognize that a retired professional is not current in their practice and their advice may not represent the latest science or good practice. And while there are grey areas in regulating a profession, the line between practice and non-practice is black and white. This is by design, with the safety and welfare of the public and the environment at the forefront.

What about the public? Increasingly we see non-registrants with no specific background in natural resources speaking out in opposition to the work of registrants or forestry practices completed by licensees. The perception is FPBC takes no enforcement action against those individuals for unlawfully practising professional forestry, yet actively enforces this limitation on retired and resigned forest professionals. While this may seem like a contradiction, there is a critical distinction between these types of individuals, with respect to their relationship to FPBC's reserved practice, as well as how that intersects an individual's right to free speech under the *Federal Charter of Rights and Freedoms*.

A member of the public who is advocating a personal opinion about forest management on social media is likely not engaging the reserved practice of professional forestry. No one is soliciting their advice for the purposes of managing the forest;

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*Casey Macaulay, MA, RPF, is FPBC's registrar and director of act compliance. He oversees the registration of forest professionals and the complaints and discipline process. Casey has a technical diploma in forestry, an undergraduate degree in forest management, and a master's degree in conflict analysis.*

they are simply expressing their viewpoint. Social media can amplify misinformation. We see this every day. However, free speech rights in Canada mean a person can spread information whether it is true, false, or misinformed. Misinformation can be harmful; however, it is not the mandate of professional regulators to silence the public from expressing those opinions, unless there is clear evidence the misinformation is being used to inform or influence policy and practices or is triggering the "protective purposes" in regulation.

In contrast, an employee (particularly one who has cancelled or retired their registration) who provides services related to forest management and is actively and routinely solicited by their employer to provide advice is more likely to engage reserved professional practice due to the nature of the services they are employed to provide. Even retired registrants may be called upon to provide advice to a former client or community group. This needs to be navigated carefully by the non-practising individual, and the line between opinion and advice clearly understood. What their opinion or advice might be used for needs to be clearly understood.

A personal opinion and a professional opinion differ mainly in the basis on which they are formed. A personal opinion is an individual's viewpoint or belief about a particular matter. It is subjective and is influenced by personal experiences, feelings, and perceptions. It may not necessarily be based on facts or research and can vary greatly from person to person. A professional opinion, on the other hand, is an informed viewpoint given by an expert in a particular field. It is based on years of experience, education, and extensive knowledge about the subject matter. Professional opinions are typically backed by evidence, facts, and research, and are expected to be objective and unbiased.

It's important to note that while both types of opinions can be valuable, a professional opinion often carries more weight in matters requiring expertise. Complaints from the public to FPBC indicate that opinions provided by retired and resigned registrants carry more weight than those of a layperson.

These are tricky concepts to navigate, especially when people are vested in their own point of view, a desired outcome, or have invested a career in routinely giving advice. It is also challenging to navigate work environments where registrants, lay people, managers, and other regulated professionals are undertaking similar or shared work. Navigating these conversations takes openness and a commitment to seeking what is best for the public interest. This means recognizing the public wants to know that decisions that impact the values they care about are being made by appropriately trained, competent, and accountable people. This model can be undermined when the public sees people giving advice who may lack the knowledge of current practices and who lack the authority to give that advice. ❌



# For the Love of Forestry

## Bill Dumont, RPF(Ret), Gives Back to ForesTrust, the Registered Charity of FPBC

**Bill Dumont, RPF(Ret), remembered as a big man with big opinions and a big heart, bequeathed a donation to aspiring forest professionals befitting his larger-than-life legacy.**

Bill, who stood six feet six inches, would have turned 76 on July 15. He passed away on January 25, 2023, following a brief illness.

In his will, Bill left \$10,000 to ForesTrust, the registered charity of Forest Professionals British Columbia (FPBC). ForesTrust provides funding for scholarships and bursaries for forestry students enrolled in accredited forestry programs at nine BC post-secondary institutions. ForesTrust also provides funding for educational activities focused on caring for and managing BC forests, as Bill did throughout his acclaimed career.

It was his hope the donation to ForesTrust would encourage more students to explore forestry as a career and discover in it the same passion and purpose he did.

"It wasn't just that he wanted people to discover forestry and what he loved about it," says Brenda Burch, Bill's wife of more than 20 years and former president of Canadian Women in Timber.

"A lot of what motivated Bill was attempting to ensure folks knew there was value in harvesting," she adds. "It's one thing to cut down a tree. It's another to plant another. Bill wanted it done properly and felt that if he worked hard at it, he could help others see that the forest industry is renewable."

### A Forester

Bill was introduced to the industry during childhood. His grandfather owned a sawmill in Bridesville, BC. His father was a doctor, but also owned a sawmill in Richmond, where Bill and some of his 11 siblings worked.

Bill, the middle child, went on to study forestry at UBC. During his time on the Point Grey campus, he was involved with what was then the Forestry Undergraduate Beneficial Association of Recreation (FUBAR), including the traditional chariot races against engineering students.

After graduating in 1971, Bill volunteered with the Perak State Forestry Department in Malaysia through CUSO International, an economic and social equity organization. He returned to BC two years later and took a job as a resident forester for Rayonier Canada, which became Western Forest Products (WFP). In 1979, he transferred to Haida Gwaii and helped create the Gwaii Haanas National Park Reserve and Haida Heritage Site. "One of his strengths with Western Forest Products was his ability to work well with Indigenous folks," Brenda says. "He wanted them to get what they needed in Haida Gwaii."

Bill relocated to Port McNeill in 1982 to become forestry manager for WFP, and eventually became chief forester, leading the company's expanded role in reforestation, fish enhancement, and habitat conservation. During his time as chief forester, WFP achieved certification from the Forest Stewardship Council (FSC)

and Sustainable Forestry Initiative (SFI), recognizing the company's commitment to environmental responsibility and sustainable forest management.

Bill also served as the FPBC Board's 37th president, from 1984-85, around when ForesTrust was established. He was recognized by FPBC and his peers as a *Distinguished Professional Forester* in 1992 for his advocacy to support sustainable forest management.

From 1999-2002, Bill served on Port McNeill municipal council, helping shape policies that balanced economic growth and environmental stewardship.

"He was very proud of that," Brenda says of Bill's time on council.

After 28 years with WFP, Bill returned to Malaysia to be the chief operating officer of the government's Sarawak Forest Corporation, leading reforestation efforts.

Bill and Brenda came home to BC after a few years, settling in the Cowichan Valley, where they showcased their rhododendrons during garden tours to help raise money for charity. In 2010, Bill was appointed to the Forest Practices Board, and served six years.

In addition to gardening, and cooking, and travelling, Bill loved to fish — almost as much as he loved forestry — and during his career helped develop community-run salmon hatcheries on Haida Gwaii and northern Vancouver Island. At the time of his passing, the hatcheries had produced more than 10 million salmon fry, according to an in memoriam article in the spring 2023 edition of BC Forest Professional. For his efforts, Bill was recognized by the Governor General with the *Canada Recreational Fisheries Award*.

His forestry career spanned 40 years, during which Bill oversaw the planting of "more than 100 million trees in tropical and temperate rain forests." As well, he helped create organizations focussed on creating educational opportunities for practising forest professionals, including an endowment to support an advanced forest management program at UBC for graduate students.

Bill donated funds from his estate to five BC forestry organizations. "The amount willed to ForesTrust was one of the largest," Brenda says. Forestry was the love of his life, she adds. "I was a pale second."

### For Forestry

Brenda first met Bill through the Canadian Women in Timber after hearing that he had a felt tree he used in classrooms when volunteering with National Forest Week (NFW) and telling students about forests, forest stewardship, and the forest environment.

Bill had just become chief forester for WFP at the time and worked at an office tower in downtown Vancouver. Brenda says during NFW each year he had the lobby of the WFP office decked with trees.

"To Bill, National Forest Week was better than Christmas."

He encouraged WFP staff to get involved with NFW and other initiatives and led tours of forests for students and seniors.

Bill believed in the forestry industry, how it benefitted families and the province, and he defended it, in particular around the





LEFT to RIGHT: Dumont, circa the 1980s, wearing his official UBC Faculty of Forestry student jacket; Dumont while working in Haida Gwaii; and Dumont with Brenda Burch and friends Lyle and Maggie Flostrand at a totem pole near Tow Hill during a tour of Haida Gwaii in June 2018.

conservation and management of the Great Bear Rainforest.

"Forestry isn't killing the environment. I think that is what always motivated him," Brenda says.

Gerry Burch, RPF(Ret), who turned 101 in August, was Bill's father-in-law. They often spoke of forestry, served on forestry committees together, and jointly organized and ran tours of forestry operations for retired foresters.

"Bill was a consummate forester," says Gerry, who has also included a donation to ForesTrust in his will.

Gerry was on the FPBC finance committee when ForesTrust was established. An annual auction was created then to garner donations.

"Bill played a major role in obtaining many articles, such as First Nations art, for this cause," Gerry says.

He also recalls Bill as one of the few outspoken foresters, standing up for the profession and correcting "erroneous" public statements made by others.

"His statements and arguments were well researched and presented," adds Gerry. "We veteran foresters miss Bill Dumont."

### For Future Foresters

Candace Parsons, RPF(Ret), is one of them.

"He was a salt of the earth guy, so dedicated and devoted to

forestry throughout his career, and retired life too," she says. "He went way too soon." Candace worked with Bill as the executive director for the Silviculture Institute of BC and Institute of Forest Engineering of BC, both of which he founded. Those organizations were amalgamated to create the Forest Management Institute of BC. She recalls flying to Victoria with Bill in a WFP helicopter to meet with government representatives about funding for the institute.

"We wound up getting \$1 million."

That funding was used to create the UBC endowment.

"Bill was very bright, involved, and forward-thinking," adds Candace, a member of the NFW-BC Coalition. "He had lots of great ideas, energy, and enthusiasm, and really made things happen. "That showed in his support for the BC Coalition, established in 2013 to encourage community events showcasing the level of professionalism demonstrated in managing and utilizing BC's forest resources.

"Bill volunteered countless hours throughout his career educating the public about forests and forestry," Candace says. "His legacy lives on with his contribution to ForesTrust." 🌱

### REFERENCE

1. Background: Occupations first aid regulatory changes: <https://www.worksafebc.com/en/resources/law-policy/act-amendments/regulatory-changes-background-occupation-first-aid?lang=en>

## IN MEMORIAM

It is very important to many registrants to receive word of the passing of a colleague. Obituary submission guidelines and due dates can be found at [fpbc.ca/contribute](http://fpbc.ca/contribute). Forest Professionals British Columbia offers condolences to those who have lost a family member, friend, or colleague.



### Vern Strain

RPF #657

June 21, 1934 – August 1, 2024

It is with heavy hearts that we announce the passing of our amazing father, Verne Strain, at the age of 90 years.

Verne was born in Santa Cruz, California and spent his childhood in and around Watsonville, California.

At the age of 17 years, he joined the Navy and worked as a radio operator during the Korean War. After the war, he attended Utah State University and earned a degree in Forestry. He met the love of his life, Rose Marie, in Great Falls, Montana where they were married in 1961. Together they had six children.

The family moved to Canada in 1969, living throughout British Columbia where Verne worked as a Registered Professional Forester in Victoria, Prince Rupert, and Smithers. Upon retiring in 2002, Verne and Rose Marie moved to Warner, Alberta, where Verne was an active community member, serving as a city councillor and then as mayor. Verne was an avid golfer till the end and a lover of animals — rescuing many cats and dogs throughout his life.

Verne leaves behind his children Dennis (Julia), Phyllis (Randy), Johanna (Mark), and Christina (Kevin); and numerous grandchildren, great grandchildren, and cats. Verne was predeceased by his wife Rose Marie and sons Roger and Russell.

Verne was a legend of a man — known for his generosity and kindness, he set the bar high with 90 years of a life lived well.

In lieu of flowers, donations in memory can be made to the SPCA.

Submitted by Christina Fraser.



## Doing the Climate Change Shuffle: On Climate-based Approaches for Seed Transfer

Near the end of the second *Lord of the Rings* film, *The Two Towers*, there is a stirring scene called *The Last March of the Ents*. In the scene, the ents — large, tree-like creatures who act as shepherds of the forest — march out to face a threat. In a breathtaking wide shot, the entire forest appears to be in motion.

The reality is that forests do move. However, at an average rate of less than 500 metres per year<sup>1</sup>, they advance even more slowly than the stately pace of the ents. Yet the climate is changing faster than trees can move. To keep ahead of climate change, forests may have to move up to 10 times faster than their natural migration.

### Our forests are feeling the heat, and it's leaving them thirsty

Warmer and drier temperatures due to climate change are impacting the health and productivity of BC forests. Unhealthy forests are less productive in many ecological and economic ways, such as carbon sequestration, wood production, and wildlife habitat.

We must update our approach as shepherds of the forest.

BC has a long history of regulating seed transfer for reforestation. Traditionally, this was based on geographic proximity — a method that is increasingly inadequate in the face of rapid climate change.

Climate-based seed transfer (CBST) has emerged as a new solution to the realities of the times. CBST matches the quality and characteristics of the seed to the current and — here's the key — future climate for a planting site. This approach includes assisted migration; tree seeds are intentionally moved from areas they naturally grow to areas that are climatically suitable for their growth now and in the future. While this can be a powerful tool, it's essential to proceed carefully and consider potential ecological impacts.

BC has been a pioneer in adopting CBST, recognizing its importance in safeguarding our

forests. CBST was included in the BC Ministry of Forests, Lands and Natural Resources' *Forest Stewardship Action Plan for Climate Change Adaptation*.<sup>2</sup> New research from a Genome BC project called CoAdapTree supports the use of CBST.

Another aspect of the project has researchers using molecular markers to assess tolerance to temperature and drought in four key tree species: Douglas-fir, lodgepole pine, western larch, and jack pine. By analyzing the genetic makeup of these tree species, researchers discovered the trees are more sensitive to drought than temperature, making the recent trend of drier conditions in BC a real challenge to the forest sector. This finding highlights a need to prioritize drought tolerance in seed selection.

That's why the real solution is a combination of assisted climate-based seed transfer and the identification and use of more resilient seedlings for tree breeding and reforestation. By identifying trees with natural resilience to climate change for use in breeding programs, we can develop seed sources better equipped to thrive in future conditions. I'll address this topic in the next Under the Microscope column.

In addition to the genomic work, CoAdapTree conducted a survey to gauge public and forest professional opinions on CBST. The results showed strong support for seed movement within the natural range and less enthusiasm for movement outside these boundaries. Nevertheless, the survey confirms that CBST is generally accepted as a necessary adaptation strategy.

The road ahead is undoubtedly challenging, but with strategies like climate-based seed transfer and the use of research and innovation, we can ensure our forests remain vibrant, productive, and resilient in the face of climate change.

It's time to plant the seeds for thriving future forests. ☘

### REFERENCES

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2. BC Ministry of Forests, Lands and Natural Resource Operations Forest Stewardship Action Plan for Climate Change Adaptation, online at [https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/nrs-climate-change/adaptation/action\\_plan\\_two-page\\_summary\\_feb\\_27\\_final.pdf](https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/nrs-climate-change/adaptation/action_plan_two-page_summary_feb_27_final.pdf)

*Simren Brar, PhD, is a Research and Innovation Manager at Genome BC. She previously led the pathology research program and pathology diagnostic lab at Canopy Growth Corporation. Simren holds a BSc and MSc from UBC in Forest Sciences and a PhD in genetics from Massey University in New Zealand.*







A Moment  
in **Forestry**

"Below canopy view of a Western Larch stand turning orange in the West Kootenays." *By Angela French, RFT.*



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