



While we navigate the changing landscape of our province and strive to reach a higher level of understanding and cooperation, we can't help but feel intimidated and sometimes overwhelmed by the magnitude of events this year. This edition brings together the strength and learning of our ministry colleagues, and with it, hope that we can continue on this journey and be supported by one another when the going gets tough.

Third Edition: Table of Contents



[Working Together on the Sparks Lake Wildfire](#)



[South Area Research Program Achievements](#)



[BCTS contributes to W-TEAMS](#)



[FNFC 2021 Mentor of the Year Award](#)



[Wildfire 2021 W-TEAMS Summary](#)



[Book Review of Vladimir Krajina](#)



[FTFLP celebrates six years](#)



[FireSmartBC: Homeowner saved home from wildfire offers crucial lessons](#)



[Forest Service 50th Trap Shoot](#)



[BCTS forester honoured with CIF-IFC Award](#)



[Invasive Plant Species Management](#)



[BCTS Squamish Loggers Sports Festival](#)



[FLNRORD Photo Gallery](#)

Read articles about our ministry's rich history in the [Archives](#), and more recent editions on the [Newsletter Homepage](#).

Feedback? Questions? Story ideas? Review the [Article Submission Guidelines](#) and write to [FLNR News](#).

We acknowledge with respect that our ministry operates on the ancestral lands of Indigenous peoples.

The FLNRORD Newsletter Advisory Group recognizes the power of stories in building relationships and providing a safe space for all voices to be heard and reflected.

In loving memory



This edition is dedicated to our dear friend,
Pam Rutley



Photo by Gabrielle Mustapich on Unsplash



Working together on the Sparks Lake Wildfire

December 7, 2021

By Eric Scott, FIT, Authorizations Technologist
Sunshine Coast Natural Resource District, South Coast Region



Figure 1: Photo taken from equipment staging area at Sparks Lake Fire. High winds, high temperatures, and low relative humidity that day caused the fire to grow and cross over multiple machine-established fire guards.

The 2021 wildfire season proved to be a busy, challenging and emotional year for the Province and BC Wildfire Service (BCWS). Considering this, I thought I would share an excellent example that I witnessed this summer of FLNRORD working together with a local Indigenous community impacted by the Sparks Lake Wildfire. This example occurred during one of my deployments with the W-TEAMS program.

W-TEAMS is a program that utilizes the exceptional skill set and knowledge of existing FLNRORD staff to support wildfire management efforts throughout the summer fire season. FLNRORD staff, like myself, when called upon, offer up those skill sets to provide additional support to the BCWS.

It was early July when I received the TEAMS call to deploy to the Kamloops Fire Centre. After accepting the request, I was told I would be heading to the Sparks Lake Fire, which at the time was one of the largest fires in the province (total size: ~96,000 hectares). Upon arrival, I was assigned the role of Task Force Leader, which involved coordinating and working with heavy equipment on the fireline. While I had some experience in the role, I still felt rather green given the scope of the fire. Adding to my nerves was the fact that I hadn't been out on any fires in the previous two seasons. The final stressor was the extreme and unpredictable fire behavior that was developing throughout the Interior. As Forrest Gump would put it, wildfires are "like a box of chocolates. You never know what you're gonna get."

Turned out, however, my saving grace occurred upon arrival when I was paired up to work alongside local Skeetchestn Indian Band staff, who were working with BCWS on the Sparks Lake Fire. It was a unique experience as I had never seen an interagency partnership of this nature occurring between BCWS and a local Indigenous community before. Throughout my deployment, Skeetchestn staff freely shared their local knowledge on the terrain, roads, weather, and historic patterns of fire with myself and other ministry staff. This sharing of information and the relationship that was developed allowed for thorough and efficient decision making on the fireline.

Not only did Skeetchestn staff have experience in fighting fires but they were also well connected in the local forest industry. Their strong connections and networking abilities were a huge asset for BCWS and myself. Skeetchestn staff were able to contact and supply qualified forest professionals, archaeologists, and experienced machine operators in a time of need crucial to the overall success of managing this fire.

Admittedly, the partnership occurring wasn't all positive as there were some initial challenges and hiccups with setting up contracts and agreements between our two parties; however, all the departments worked efficiently to resolve the issues. There was learning on both sides with this partnership, and I personally took away a lot of new knowledge and experience from this deployment. I saw, firsthand, the benefits of working closely with local Indigenous communities on wildfires and could foresee a promising future as Indigenous communities continue to take on larger roles in land base management.

I hope I have the opportunity to work with the Skeetchestn Indian Band again on future fires and other initiatives.



Skeetchestn's Carey Jules planning fire suppression with BCWS, Sparks Lake wildfire 2021-07-09, photo Skeetchestn Natural Resources

Figure 2:

Photo of W-TEAMS staff Eric Scott and Skeetchestn's staff Carey Jules planning heavy equipment operations on the Sparks Lake Fire. Photo provided by Skeetchestn Natural Resources.



Photo by Gabrielle Mustapich on Unsplash



Indigenous Forestry Scholarship Program 2021 Mentor of the Year: Sydney Monteith

December 7, 2021

**By Dawn Guido, Business Relations Officer – Interior, BC Timber Sales Castlegar, and
Christi Howes, Communications and Engagement Specialist, BC Timber Sales Headquarters**

Sydney Monteith, Woodlands Supervisor for BC Timber Sales, Williams Lake, was honoured with the 2021 First Nations Forestry Council (the Forestry Council) Indigenous Forestry Scholarship Program's (IFSP) 2021 Mentor of the Year Award. The award is in recognition of Sydney's dedication to mentoring students enrolled in the Forestry Council's IFSP. Over the six years that Sydney has been involved in the program, she has provided mentorship and training to seven Indigenous students.

"Sydney has been a consistent and dedicated mentor in the IFSP and has given countless hours of valuable time and encouragement to the students over the years. She is appreciated and valued by her students and everyone here at the Forestry Council. You are so deserving of this award Sydney! Hy'chqa" (the Forestry Council).



Figure 1: Sydney with the Forestry Council's IFSP 2021 Mentor of the Year Award

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The award is a cedar carving of an eagle feather with abalone inset and has the following inscription:

“In our First Nations’ cultures Eagles are among the most sacred of creatures. They represent attributes we aspire to in our communities such as wisdom, strength, courage, dignity, and excellence. When an Eagle feather is offered it is with great honour as it is felt the recipient embodies these qualities.”



Figure 2: (left to right) Jamie Moore, IFSP student; Sydney Monteith; Chandell Dillman, IFSP student.

Now entering its tenth year, the IFSP is a partnership between the Forestry Council and FLNRORD with support from industry partners. The program is a workstudy mentorship program that provides the opportunity for Indigenous students to access funding to enter into forestry related training and educational programs and to receive mentored summer work experience in their field.

To date, BC Timber Sales has mentored 48 IFSP students in 11 business areas. A big thank you to all our staff who participate in this valuable program. And congratulations Sydney on this well-deserved recognition. Your dedication and knowledge sharing has helped make a positive difference in the careers of the students you’ve mentored.

Learn more about the First Nations Forestry Council Scholarship Program:

- Recruitment video (4 mins) youtu.be/FnrNVveo3Vw
- Recruitment video (10 mins) youtu.be/dLOGt5DUh_c
- BCTS website www2.gov.bc.ca/gov/content/employment-business/economic-development/funding-and-grants/first-nations-forestry-training
- FNFC website www.forestrycouncil.ca/cpages/jobs-training





BCTS FTELP celebrates six years

December 7, 2021

By Kyla Fraser, Coordinator of Business Excellence

BC Timber Sales Headquarters

BC Timber Sales' Forest Technologist Entry Level Program (FTELP) celebrated its sixth year this September. [FTELP](#) provides two years of on-the-job training for recent forestry graduates and support for participants to achieve their RFT and RPF designations. The training portion of the program is followed by a two-year commitment of employment with BCTS in Northern B.C.

We would like to extend a big welcome to the 12 new technologists currently making their way through the program in Mackenzie, as well as congratulate the past two cohorts on completing the training portion of the program.

These last two cohorts are the most widely dispersed to date, filling positions throughout the ministry's northern offices and also earning some of the quickest promotions. This demonstrates the quality of the forest technologists coming out of FTELP, and we look forward to seeing the positive impact you all make throughout your careers in the ministry and with BCTS.

Located in Mackenzie, the program produces approximately six new fully qualified Forest Technologists for BCTS' northern operations each year. Since its start in 2016, FTELP has helped 18 young forest techs obtain their Registered Forest Technologist (RFT) and Registered Professional Forester (RPF) designations from the Association of BC Forest Professionals (ABCFP), all of whom are currently fully working for BCTS in a variety of positions.



Figure 1: (left to right) Victoria Dyduch, Craig Tilander, Catherine Singh, Rebecca Chettleborough, Brenden Voysey, Megan Yelland, and Alyssa Skaalid

The FTELP offers participants the opportunity to build on their strong educational foundation by gaining practical hands-on experience as forest technologists in an operational environment. The curriculum includes: cutblock and road design, TSL preparation and monitoring, check cruising, silviculture activities including planting and surveys, appraisal preparation, contract preparation and monitoring, GIS training, forest health, safety, and Indigenous Peoples awareness training.

The FTELP will be accepting applications between November and mid-December each year.

Do you know someone who:

- Will have graduated within two years of June 2021 from an ABCFP-accredited Forest Technology or Forestry program,
- Will be eligible for immediate enrolment as an ABCFP Trainee Forest Technologist or Forester in Training, and
- Is enthusiastic about experiencing all that northern B.C. has to offer?

Have them contact Kyla Fraser (Kyla.Fraser@gov.bc.ca) for more information on applying to the FTELP and how to succeed in our interview process!

For more information, go to gov.bc.ca/gov/content/careers-myhr/job-seekers/featured-careers/ftelp.



BCTS forester Liz Wass honoured with CIF Award for Sustainable Forestry

December 7, 2021

**By Christi Howes, Communications and Engagement Specialist
BC Timber Sales Headquarters**

Each year, the Canadian Institute of Forestry (CIF) presents a number of awards in recognition of outstanding and unique accomplishments to forestry in Canada. This year's recipient of The Prince of Wales Award for Sustainable Forestry is Elizabeth (Liz) Wass, Practices Forester, BC Timber Sales – Prince George Business Area.

This award encourages the engagement in and dedication to the principles of sustainable forest management policy, planning and practice, sound science-based land stewardship, and public outreach/knowledge exchange focusing on the wise use and conservation of forests and the ecosystems that they encompass.



Figure 1: Liz Wass, Practices Forester, BC Timber Sales Prince George Business Area

As an environmental student leader throughout university, Liz was involved in several groups, including the University of Northern British Columbia Forestry Club, the International Forestry Students' Association, and the Cariboo Section of the Canadian Institute of Forestry. Liz also volunteered at the Willow River Interpretive Trail in Prince George for the annual Walk in the Woods event and travelled to Uganda as a volunteer and agroforestry researcher. Upon graduating from the University of Northern British Columbia in 2018, she was the CIF-IFC Gold Medal Recipient for her class.

The Prince of Wales Award for Sustainable Forestry, developed by the CIF-IFC and the Duchy of Cornwall, and endorsed by His Royal Highness The Prince of Wales, annually recognizes the achievements of an outstanding young forestry professional in Canada.

Congratulations, Liz!

[Read the media release from the Canadian Institute of Forestry.](#)





FLNRORD Research Program – Brief Summary of Achievements – South Area

December 7, 2021

By Francesco Cortini, PhD RPF, Research Management Lead

Forest Improvement and Research Management Branch, Office of the Chief Forester

The South Area includes the Cariboo, Thompson/Okanagan, and Kootenay/Boundary Regions, where the Research Program is represented by 21 research scientists that conducted 42 research projects during the fiscal year 2020/21. These projects fall under the Research Program's portfolios as follows:

- Timber – 16 projects
- Ecosystem Health and Disturbance – 11 projects
- Water – 8 projects
- Ecosystem Stewardship – 5 projects
- Species and Habitat – 2 projects

The research scientists from the South Area also worked on 10 additional research projects funded outside the program.

Cariboo Research Achievements

Research from the Cariboo Natural Resource Region advanced our knowledge on topics such as: shelterwood silviculture systems in the Sub-Boreal Spruce Zone (SBS); long-term effects of pre-commercial thinning on winter wildlife use of Interior Douglas-fir Zone (IDF) forests; post-wildfire regeneration of Douglas-fir seedlings as well as post-fire total ecosystem carbon storage; and, resistance of Lodgepole pine families to Elytroderma needle cast.

A good example of the work from the Cariboo Region is the *Post-Fire Improved Regeneration Experiment* looking at how to maximize seedling survival while minimizing carbon emissions following wildfire. The experiment covers approximately 180 ha of area burned in 2017 in the Gustafson Fire (near 100 Mile House, B.C.), and includes four silvicultural treatments: conventional salvage logging (CL), salvage logging with high woody debris retention (SLR), a ripper plow treatment (SP), a no-harvest underplanting treatment (NH), and an uncut control. The overall objective is to determine which of the four treatments will promote seedling survival and establishment, as well as facilitates a rapid return to net negative ecosystem carbon balance on severely burned, frost-prone, and droughty sites in the IDF of the Central Interior. Researchers are monitoring soil carbon, nutrients, microclimate conditions, and seedling survival. Preliminary results suggest that the ripper plow reduces soil carbon stocks by 6.7%, whereas high woody debris retention showed a slight increase (6.6%) in soil carbon stocks in the first measurement year relative to conventional logging. Only time will tell which treatment will maximize total ecosystem carbon, but the preliminary soil carbon results hold promise that the high woody debris retention treatment keeps more carbon in the ground relative to the conventional logging treatments.



Figure 1: Burned and salvaged block at Gustafson Fire.



Figure 2: Planted seedling within high woody debris retention.

Thompson/Okanagan Research Achievements

The Thompson/Okanagan Natural Resource Region enhanced our knowledge on topics such as: forest responses to anthropogenic disturbance; wildfire management and post-wildfire effects on ecosystems; defoliator and bark beetle outbreaks in the Interior Douglas-fir zone; characteristics of BC soils; and, large-scale interdisciplinary silvicultural systems trials.

The Thompson/Okanagan Region has been studying the effects of logging on hydrological processes and characterizing the hydrology of the Southern Interior since 1984 as part of the “Upper Penticton Creek Watershed Experiment” (UPCr). Approximately 50% of two treatment watersheds were clearcut logged and compared to an unlogged control watershed. Results from the first four decades of research at UPCR has been summarized in “Approaching Four Decades of Forest Watershed Research at Upper Penticton Creek, British Columbia: A Synthesis” by Rita Winkler and others. After three decades running UPCR, Rita Winkler has passed the torch on to Sheena Spencer, who will take UPCR into Phase 2 of the research, which focuses on hydrologic recovery and climate change impacts on hydrology.

This summer, fieldwork at UPCR has focused on upgrading the existing climate stations and installing 21 shallow groundwater wells. These shallow wells were installed along transects from the riparian area to upslope areas and along ephemeral stream reaches to characterize the subsurface flow of water, groundwater-surface water interactions, watershed behavior during high flow events, and the influence of forest regrowth on subsurface hydrological processes. More specifically, well transects will be used to determine when hydrological connectivity occurs (when the hillslope is connected to the stream) by the presence of a perched water table in all wells along the transect to better understand the potential for downstream flooding during variable soil moisture conditions.



Figures 3, 4, 5: Climate stations and shallow groundwater wells in the Upper Penticton Creek Watershed Experiment.

Kootenay/Boundary Research Achievements

Moreover, the Kootenay/Boundary Natural Resource Region delivered on topics such as: whitebark pine harvest retention; efficacy of root disease treatment; long-term soil productivity effects on timber growth; limber pine distribution and health; whitebark pine disease resistance screening and long-term forest health monitoring; old growth forests; spruce beetle repellent trial, defoliator and bark beetle outbreaks; assessment of forest carbon and partial cutting data; hydrometeorological monitoring along an elevational gradient, snowmelt contributing area assessment for the Kettle River basin, and support for local hydrometric monitoring. A new Biogeoclimatic Ecosystem Classification (BEC) guide was published for the Boundary-Okanagan-Shuswap-Southern Arrow Areas, along with updated stocking standards and BEC mapping.

In the Kootenay Boundary Region, the Forest Health group successfully completed the control program for western hemlock looper using a biological insecticide B.t.k. (*Bacillus thuringiensis* var. *kurstaki*). A total of 10,182 ha were treated over 25 blocks in the Revelstoke Timber Supply Area (TSA). The spray treatment was conducted in July when larvae were at peak 3rd to 4th instar and the efficacy sampling was conducted in July and August. Direct control of western hemlock looper using B.t.k. is just one facet of the Forest Health Program's integrated defoliator management strategy. The program also conducts annual monitoring of numerous native defoliators to elicit population trends and to predict outbreaks.

Also in the Kootenay Boundary Region, an assessment of the area contributing snowmelt to peak flow in the Kettle River basin has been completed. This involved analysis of streamflow data for eight nested drainage basins in combination with publicly available spatial snow products for 2010-2020 to determine snow disappearance patterns and the average area of each watershed that was snow covered at the onset of the peak flow period. This information can be used in forestry operations planning when considering the effect of forest disturbance on the synchronisation of snowmelt across different elevations, as well as in cumulative effects analysis. The methods developed for the Kettle River basin will be applied across the upper Columbia River basin in Canada.

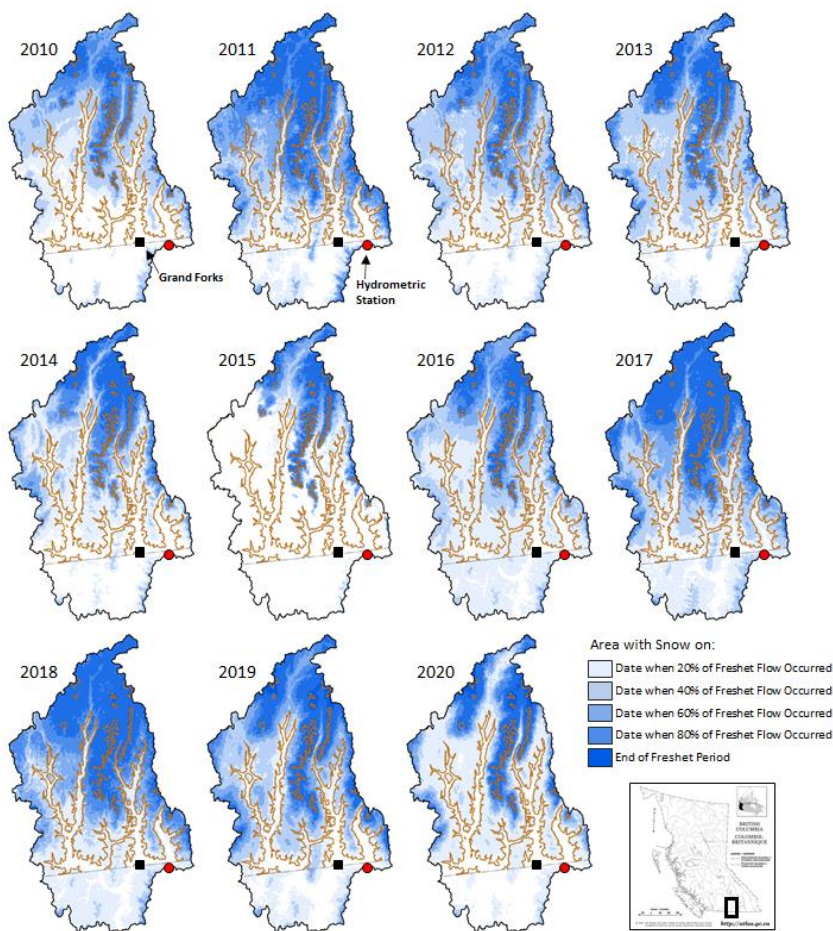


Figure 6: The progression of snow covered area (SCA) over the 2010-2020 spring freshet periods in the Kettle River basin above Laurier. Maps show SCA on the dates when 0, 20, 40, 60, 80 and 100% of the freshet flow volume occurred. Areas in white were snow-free at the start of the freshet flow period. Darker blue areas indicate longer snow persistence at higher elevations. Brown lines are the 1000 and 2000 m contours in the Canadian portion of the basin, and the international border is shown.



Photo by Gabrielle Mustapich on Unsplash



W-TEAMS was in full swing during 2021 wildfire season

December 7, 2021

By Carolyn Bartos, Communications Specialist

BC Wildfire Service – Northwest Fire Centre

With photos submitted by Jean Strong, Communications Assistant, BCWS – PWCC

The BC Wildfire Service (BCWS) would like to extend a huge thank you to all Wildfire Temporary Emergency Assignment Management System (W-TEAMS) members who gave their time and energy to help with wildfire response this year.

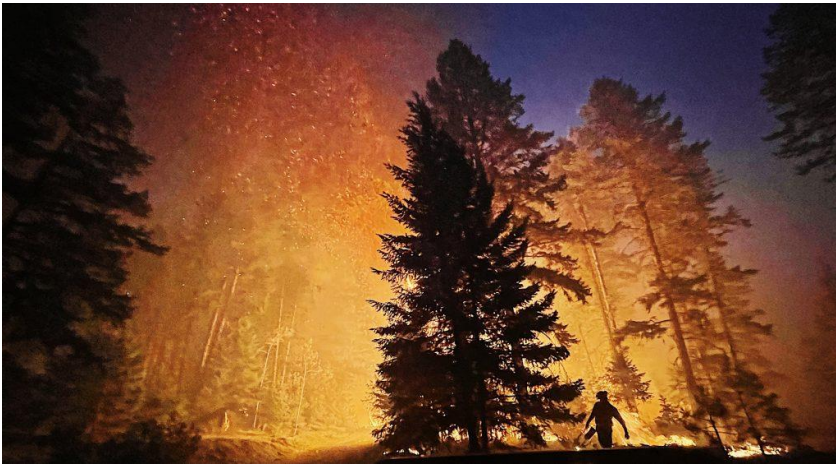


Figure 1: Big Horn Unit Crew Kathleen Cahoon Night Ops



Figure 2: Airtanker Action

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The Buildup

In the first half of June, relatively normal rainfall occurred in the northern half of the province, while southern regions (especially the Interior) received only 30% of their normal June rainfall. Temperatures climbed steadily throughout the month, culminating in a historic heat wave that broke records and affected the entire province. The dryness and extreme heat raised the fire danger to extreme levels and burning conditions were more typical of August. As a result, BCWS implemented a province-wide prohibition of campfires and open fires effective June 28, 2021.



Figure 3: Tremont Creek – August 2021 – Josh Skinner

As we transitioned from June to July, hot and dry conditions persisted. Fuels were increasingly susceptible to ignition and the volatility of these fuels and severe weather events contributed to new wildfires, rapid growth, and increased rates of spread. In the first two weeks of July, an average of 40 new wildfires started every day. Northern regions of B.C. received moderate rainfall in the latter part of July, helping to slow fire growth and behaviour in those areas. However, the precipitation that fell was not enough to extinguish some larger wildfires.

In August, daytime conditions were hot and dry and high winds drove fire growth and intensified fire behaviour. As the number of daylight hours decreased, overnight recoveries (i.e., cooler temperatures and increased moisture levels in fuels) slowly began improving. Varying amounts of precipitation were recorded throughout the province, which helped moderate fire activity and fire danger ratings. Temperatures and fire weather indices returned to seasonal averages by the end of the month.



Figure 4: Crew member on the fireline during Wildfire 2021

The Support

As the number of wildfires increased so did the need for resources. Each of the six fire centres, incident management teams, and the Provincial Wildfire Coordination Centre (PWCC) needed more personnel in areas such as command, aviation, operations, plans, logistics, finance, and administration.

Many BCWS employees transition into specialized roles during wildfire response, and the ability to tap into W-TEAMS allows for an increase in response capacity across government by using staff members from numerous ministries within the BC Public Service.

Each W-TEAMS member has support from their supervisor to join and has taken the time to complete training at the nearest fire centre. Once deployed, members fill various Incident Command System roles.

This year, a total of 697 W-TEAMS members registered and 466 members were deployed to areas throughout the province, many of them numerous times.



Figure 5: W-TEAMS members working in the Southeast Fire Centre in Logistics



Figure 6: The Southeast Fire Centre utilizing W-TEAMS members in Plans, including Geographic Information System

The Aftermath

From April 1 to November 18, 2021, a total of 630 wildfires burned 869,210 hectares in B.C. Approximately 60% were lightning caused, 38% were human-caused, and the remaining 3% are classified as undetermined.

A provincial state of emergency was declared on July 21, 2021, and stayed in effect for 56 days until September 14.

The wildfires triggered the implementation of 181 evacuation orders and 304 evacuation alerts.

The total cost of wildfire suppression from April 1 to September 30, 2021, was approximately \$565 million. This estimate does not account for future cost recoveries, such as money received from other jurisdictions if BCWS crews are deployed outside of the province in the remaining months of this fire season.

The wildfire season was certainly one of the most challenging that we have experienced. Preparation for the 2022 wildfire season is underway. The current wildfire season will officially end on March 31, 2022.

If you are interested in participating in the W-TEAMS program for the upcoming wildfire season, please obtain approval from your manager or supervisor. An official expression of interest solicitation will be posted in the spring. To learn more about the W-TEAMS program, visit the [Wildfire TEAMS page](#) on the BCWS intranet.



Figure 7: Paul Sloan Photography of Airtanker Action in Sicamous during the 2021 Wildfire Season





FireSmart BC story about how owner saved home from wildfire offers crucial lessons

December 7, 2021

By Amanda Reynolds, FireSmart Education Officer
BC Wildfire Service

It started with an ominous plume of smoke rising behind a mountainous horizon visible from McKay Creek, near Lillooet in southwestern British Columbia. That's when Erin and her partner decided to take action, resolved that within the bounds of their own physical safety, they would do everything they could to save their home.



Figure 1: Erin's fence near her residence

They started with a quickly drafted plan and an agreement to pack up and leave, “no questions asked,” if flames began to approach from three sides, if either of them wanted to get out, or if the water stopped flowing. Then they got to work, carrying out a series of simple tasks aimed at a single overriding goal: denying the huge fire any opportunity to take hold on or near the home. As she explained in a [post that went viral on Twitter](#), and again in a [video testimonial](#) for FireSmart BC, they spent the next 30 hours mitigating every risk they could control:

- They cut all the grass and weeds near the house as short as possible;
- They used regular garden hoses and sprinklers to keep the outside of the house – including the roof – wet;
- They moved propane and other flammable or explosive materials a safe distance from the home;
- They cleared wood and dry debris away from the house, and moved flammable yard items inside;
- They loaded their most precious possessions into their vehicles and parked them near the front gate;
- They also had an evacuation plan, complete with details of how and under what conditions they would leave.

So, what did they achieve? When the flames finally arrived, they consumed everything in their path, including 158.5 hectares of Erin's 160-ha property – all except the house and the area immediately surrounding it.



Figure 2: Erin's fence with wildfire visible

It is no coincidence that everything they did right came straight from the [FireSmart BC Homeowners Manual](#). Making a home more wildfire resilient is not complicated, requiring no specialized training and no equipment more exotic than common lawn and gardening tools. The point is to remove any and all potential fuels from the immediate vicinity of the structure – wildfire travels and spreads where flames and embers find something to ignite. Obviously, where there is nothing to burn, there can be no fire, so even the biggest blazes can be kept at bay if the right preparations are undertaken. There are no guarantees, but many firefighters know from personal experience that, more often than not, [the homes that survive a wildfire](#) are those whose owners took preventative measures beforehand.

This is precisely the approach that the FireSmart program was founded on to promote and support, and we strive every day to spread awareness of how a little advance preparation can successfully defend homes and communities at large. In fact, just recently, the FireSmart BC Magazine published an article titled "[Wildfires in BC: What you can do NOW to give your property a fighting chance](#)".



Figure 3: Erin's partner here using a hose to keep the home's exterior wet

It is important to draw the correct lessons from her experience. The first is that while they did many things right and managed to save the home, apart from regularly pruning the lower branches of trees near the house, they left many things to the proverbial last minute. According to her account, the smoke was less than 20 kilometres away when they noticed it, and in some conditions, a wildfire can cover that distance in under an hour. In other words, they were very lucky.

The second is that the [worst plan is no plan](#), as Erin acknowledged in her Twitter post, as they were “running around madly trying to prep things,” they realized how helpful it would have been if they had been more systematic about disposing of trash and yard waste. They also wished they had drawn up a list of items to take with them in the event of an evacuation alert or order, and for good reason: “too many decisions!” A key principle of FireSmart’s approach is that by carrying out regular maintenance and having a comprehensive evacuation plan, property owners can buy themselves precious time when it matters most.

Last but not least, the third lesson is that FireSmart’s program for wildfire preparedness works. While it is not a guarantee, the images that Erin posted online speak for themselves, her intact home serving as a testament to survival in the face of desolation.



Figure 4: House and fence – how close the wildfire got

For more information on all the things you can do to protect yourself, your loved ones, and your property against wildfire, please check out the following links:

- [Prepared BC Wildfire Preparedness Guide](#)
- [Top 10 tips to FireSmart your home](#)
- [Why we focus on embers](#)
- [The Get FireSmart Podcast](#)





How to do your part in Invasive Plant Species Management

December 7, 2021

By Alice Pinheiro, Internal Communications and Online Content Co-op Student
Deputy Minister's Office



Figure 1: Yellow Starthistle (*Centaurea solstitialis* L.)

Recognized internationally as the second greatest threat to biodiversity, invasive species are a notable environmental based management issue that disrupts British Columbian forests. In the “REM 211: Applied Ecology” course at Simon Fraser University, I conducted, along with my team members, a survey design on invasive plant species within British Columbia’s forests. By constructing circular patches, we measured the percentage of invasive species within forests in comparison to native species. Initially, we wanted to analyze whether invasive plant percent coverage and forest proximity to human development were correlated, but later discovered that Invasive Plant Species is a larger issue that will need continuous diligence in our work and recreational practices.

Invasive plant species are characterized as species who have been accidentally or purposefully introduced into native wildlife habitats. Not only do invasive plant species threaten biodiversity but they disrupt economic, social, cultural and ecological systems and human health. Invasive species management is expensive and often lacks funding; therefore, the best approach to keeping forest’s safe from invasive species is by preventing their spread. Whether you are a community member or a field worker, we can collectively work together to stop the spread of invasive plant species throughout British Columbia.

Community prevention tactics include:

- correct disposal of indoor/garden non-native plant species away from natural environments;
- not touching or attempting to remove invasive plant species yourself;
- reporting new invasive species sites;
- cleaning hiking gear after use to prevent the transfer of seeds and vegetative plant material to uncontaminated sites.

Forest work prevention tactics include:

- surveying and treating invasive species within a site area before commencing further site work;
- working in non-contaminated forest areas and then moving into contaminated area to avoid further contamination;
- maintaining forest gear cleanliness to avoid transferring invasive species to different sites.



Figure 2: English Ivy (*Hedera helix*)

As someone who has studied invasive plant species management in university and is now the Internal Communications and Online Content Co-op Student at FLNRORD, it has become apparent that the best way to prevent invasive plant species from disrupting British Columbia's ecology is through working together. Through the creation of educational resources about the importance of stopping invasive species spread, we can keep forests and communities free from invasive plant species.

Information on invasive species and how to report them: <https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/invasive-species/reporting-invasive-species>

Invasive Species Council of BC: <https://bcinvasives.ca/>





BCTS contributes to W-TEAMS

December 7, 2021

By Carolyn Bartos, Communications Specialist
BC Wildfire Service – Northwest Fire Centre

Throughout the 2021 wildfire season, BC Timber Sales (BCTS) deployed 84 employees as part of the BC Wildfire Service Temporary Emergency Assignment Management System (TEAMS) program.



Figure 1: BCTS staff at the Sparks Lake Complex (left to right): Cam Paterson, Hilary Fraser, Lisa Boudages, Alex DeVos, Kathy Walker, Steve Bowker, Keegan Hofmann, and Christi Howes

Learn more about W-TEAMS at intranet.gov.bc.ca/bcws/teams.





Book non-review(!) of Vladimir Krajina: World War II Hero and Ecology Pioneer

December 7, 2021

By Robert Taylor, Seed Orchard Technician, Skimikin Seed Orchard

Forest Improvement and Research Management Branch, Office of the Chief Forester

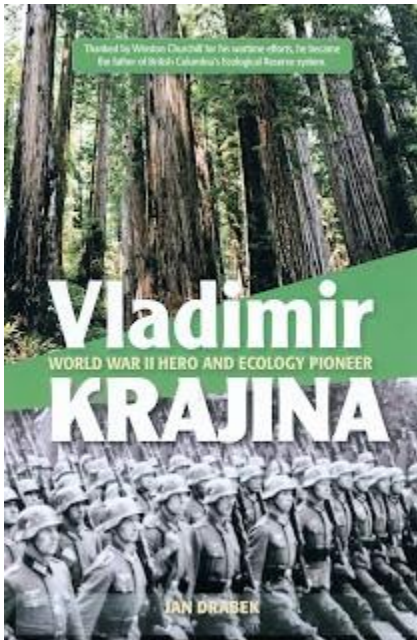


Figure 1: Book cover of Vladimir Krajina: World War II Hero and Ecology Pioneer

You can google “Vladimir Krajina World War II Hero and Ecological Pioneer by Jan Drabek” and read several well written and thoughtful reviews. Don’t do it! I think it’s easy these days to read a summary online and say to ourselves “ya, got it,” and move on. However, there is so much detail lost in that approach. So, my advice is just to go down to your local bookstore for a copy of this book or perhaps convince your supervisor to buy a copy for “professional development.”

I feel obliged to offer some sort of justification for that advice, so here are two reasons to give this book a read:

- 1) We should know how we got here. Professor Krajina is the “OG” of BC forest ecology classification and the network of BC ecological reserves. There is probably not a branch of FLNRORD whose policies, guidelines and procedures are not in some way reliant on the ecological communities and succession that Krajina started mapping in the 1950s. This is especially true in the Office of the Chief Forester and the seed orchard that I work in, where climate-based seed transfer is based solidly on Krajina’s work.
- 2) The story is fascinating: a botany professor in Prague who became a WW2 resistance fighter, evaded death several times at the hands of Nazis and Communists alike, escaped over snow-covered mountains to Austria, and met Winston Churchill over cigars and cognac. After arriving in Vancouver, he went on to receive the Order of Canada, was honoured by Václav Havel, and changed the face of BC forestry. There were several points in the book where his life touched on important historical events, and I wonder if the rights to his life story have ever been optioned for a movie.

I recommend reading it with the internet at hand. Much of the history and geography that Professor Krajina navigates through is not thoroughly described, but research of the places, people and events added a lot of context and detail as I read the book. I spent a significant amount of time using street view to visit the towns he grew up in or hid from the Nazis in, the university he graduated from and taught in, the mountains he escaped over, and even the cemetery he and his wife are resting in.

After reading it, I felt refreshed. It is easy to get bogged down in the everyday routine of work. This book reminded me that I am part of something larger than keeping the trees in the seed orchard alive and healthy.

Krajina spent much of his life fighting for what he thought was right. After the Nazis and Communists, coming to Canada and being able to speak freely without reprisal must have meant that even the logger barons of the day were a refreshing change of pace for him.

I mentioned the internet before. There is a good article in the [Spring/Summer 2011](#) Forest History Association of British Columbia newsletter that has many useful footnotes and links for further reading. Another good resource is the 1978 NFB film “The Forests and Vladimir Krajina” by Tom Radford ([available online](#)). For more detail on the science of ecological succession, “Reflections on the Life, Work, and Times of Vladimir Joseph Krajina” by Mohan K. Wali, amongst other articles, is available at ecoreserves.bc.ca.

It would be interesting to watch [Krajina’s 1928 Czech-language movie “Aloha-oe!”](#). Perhaps someone reading this article has the time, language skills, Czech film archive connections, and ability to find it online somewhere!

I recommend this book and the historical internet searches it can lead to. It is not an imposing book and can be read in a few sittings. I may bring mine to work and put it on our book shelf for my coworkers.



50th Annual BC Forest Service Trap Shoot

December 7, 2021

By Brian Rosengren, RPF, Stewardship Forester
Cariboo-Chilcotin Natural Resource District, Cariboo Region

The 50th BC Forest Service Trap Shoot was held at Alexis Creek’s Chilcotin Rod and Gun Club Range on Saturday, September 18, 2021. Usually held in the spring, it was postponed due to COVID-19 precautions.

The turnout of 45 shooters (comprised of 9 five-person shotgun trap-and-skeet teams as well as individual .22 calibre rifle shooters) was well under the 100 allowed by our COVID-19 Safety Plan, but enough to have a great event.



Figure 1: Blake Haley wins Annie Oakley #2. Leonard Tepemma (second-last standing)



Figure 2: Ladies .22 (left to right): Jo Fosberry (Third), Andrea Robinson (First), Roxanne Bambrick (Second)



Figure 3: Quesnel Quality (left to right): Ted Traer, Ryan Robertson, Adam Veley, Journey Carlson-Campbell, Lloyd Como



Figure 4: Trapshoot Quilt

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Figure 5: Top Shooters are Lloyd Como and Roxanne Bambrick

Alexis Creek and Williams Lake staff from the Cariboo-Chilcotin Natural Resource District organized the event and the Ravens Unit Crew set up the tables, chairs, and other equipment. Lloyd Como from the Williams Lake Sportsman's Association supplied and operated target launchers, Adam Veley acted as Range Master, and Malcolm Cattanach was Range Master/Instructor for the ladies and youths .22 Shoot.

"Quesnel Quality" was the highest scoring trap-and-skeet team and was awarded the Jack Lynn Memorial Trophy. The "Quesnel Quality" team were Lloyd Como, Ted Traer, Ryan Robertson, Journey Carlson-Campbell, and Adam Veley; they scored 71 out of a possible 125 points.

Lloyd Como was the Top Gun with a 20 out of 25. Roxanne Bambrick was the female Top Gun with a 15 out of 25.

Vince Austin was the last man standing on the first Annie Oakley trap shoot line.

Blake Haley triumphed on the second Annie Oakley line.

The .22 calibre rifle shooting winners (listed from first to third) were Andrea Robinson, Roxanne Bambrick, and Jo Fosberry for the women; and, Journey Carlson-Campbell, Meakin Carlson-Campbell, and Salem Tepemma for the youth.

Team "Puntzi Pullers" won a hard-fought battle for the lowest-score trophy, the Broken Shotgun; and Jenn Bowman won the 179th fastest gun trophy.

This year being the 50th Anniversary, we had a quilt commissioned using T-shirt designs from many of the years, and we plan to have it displayed in various FLNRORD offices in the Cariboo.



Photo by Gabrielle Mustapich on Unsplash



BCTS Community Engagement – Squamish Days Loggers Sports

December 7, 2021

**By Christi Howes, Communications and Engagement Specialist
BC Timber Sales Headquarters**



The Squamish Days Loggers Sports Festival is the largest festival of its kind in British Columbia and the longest running annual event in Squamish. Now in its 64th year, BC Timber Sales (BCTS) is a proud supporter of the Squamish Days Loggers Sports Association (a not-for-profit entity run solely by volunteers that donates the proceeds from the festival to the community via local charity organizations).

Usually a five-day event, this year the event was condensed to one day, Saturday, September 18, and limited to 50% capacity due to COVID-19 regulations. BCTS staff hosted an information booth and, despite the limitations, staff report this year's festival as one of the best attended. "At one o'clock the sun came out, just in time for the competitions to begin," says Karen Marshall, BCTS Practices Forester.

The Squamish Days Loggers Sports competitions attract both world-class competitors and amateur athletes. The competitions are true sporting events with competitors requiring strength, skill and stamina. Participants, like any other athletes, must train and work diligently to reach the level of skill required to win any of the events. A number of additional activities such as the World Championship Chair Carve, Festival Parade, Kettle Boil, Picnic in the Pavilion, Pancake Breakfast, Beef Barbeque, Kids Festival, Axe Throw Invitational, 8-K Run, Timber Training, and Bed Races are all part of the festival's agenda.



It is only through the support of sponsors and volunteers that the association is able to put together and host such a successful event that gives back to the community. Thanks to the BCTS staff, Evan Horley, Karen Marshall, Chris Runnals, and Darren Vandergrift for contributing their time to engage and share their business knowledge with both local community members and visitors from afar at this year's Squamish Days Loggers Sports Festival.





FLNRORD Photos

December 7, 2021

Thank you for your magnificent photos!

All following photo submissions by Jasmin Campbell, Resource and Contract Administrator, Front Counter BC



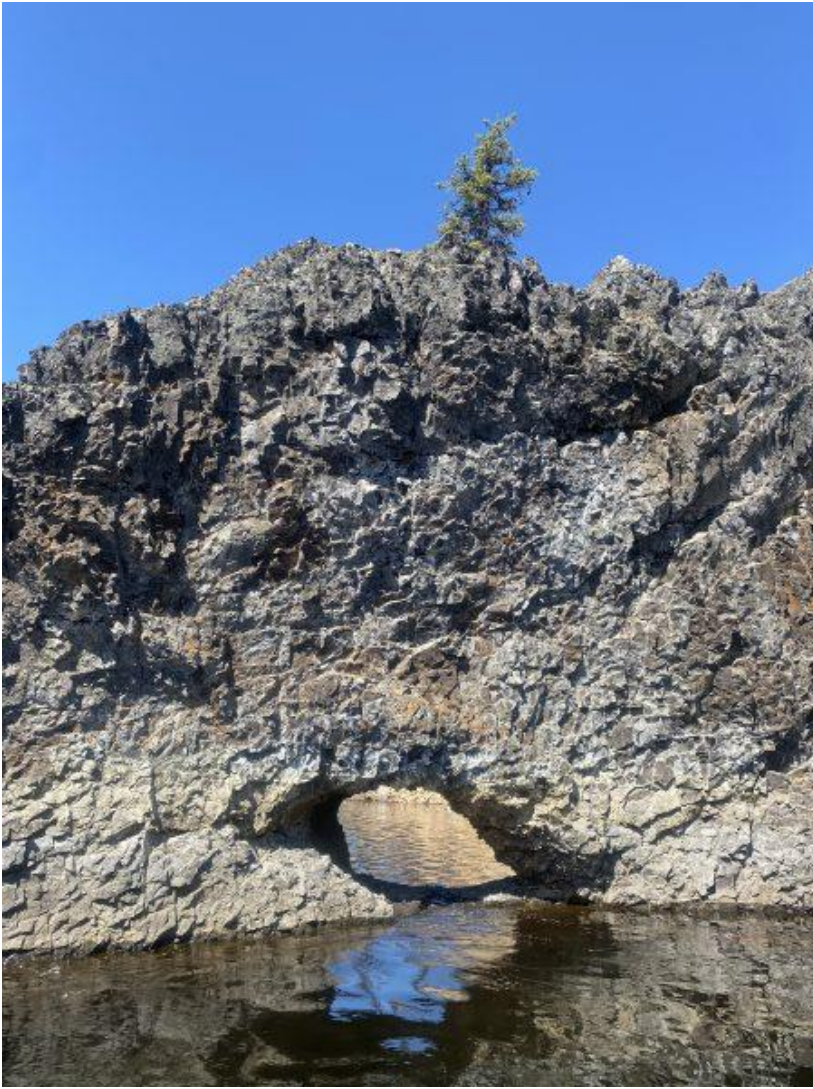
May 5, 2021. I forgot to turn the sprinkler off and it froze. Our temporary ice lawn.



May 5, 2021. I forgot to turn the sprinkler off and it froze. Our temporary ice lawn.



Sturgeon fishing on the Fraser River out of Agassiz (approx. a 60lbs fish)



"The Hole in the Rock" on the Entiako River part of the Nechako Reservoir



Sturgeon fishing on the Fraser River out of Agassiz (7 foot 9 inch long fish)

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Fall colours in Vanderhoof, B.C.



Kenney Dam south of Vanderhoof from the water

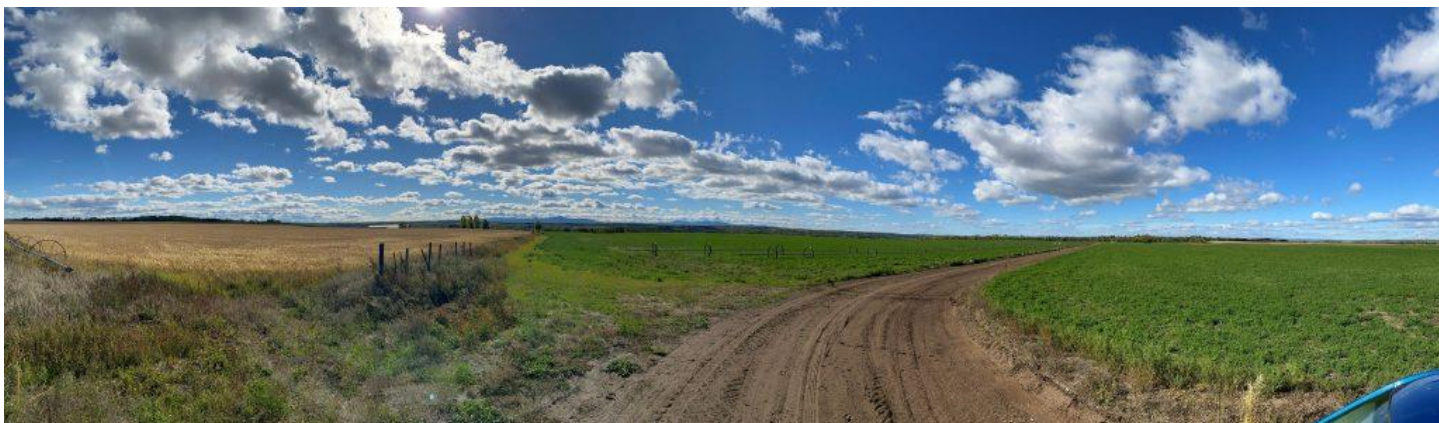
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Busy bee on a sunflower



Kenney Dam south of Vanderhoof from on top of the dam



Panoramic of the Nechako area. Looking south towards Sinkut Mountain and Nulki Hills

