



Resource Road Safety video targets both industry and recreational users

A new resource road safety video has recently been released showcasing the importance of using resource roads safely. With over 620,000 kms of resource roads across BC used by both industry and recreational users, resource road incidents continue to occur causing great concern for both industrial and public users.

The 10-minute Resource Road Safety video - *Work Here, Play Here, Stay Safe Here* features Gord Judson, a 45-year veteran log truck driver, discussing his personal account involving a tragic incident with a recreational road user on his way to fish for the day. His moving and impactful narrative provides invaluable insight into the potential hazards related to driving on resource roads. Judson's narrative transitions from his heart-wrenching

experience to highlighting the safety measures required for driving safely on resource roads and provides step-by-step instructions to aid users in reaching their destination safely.

The video was produced by the BC Forest Safety Council (BCFSC) in partnership with Mosaic Forest Management, Coastal GasLink, the BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development, West Fraser Timber, Interfor, Conifex, Sinclair Group, Weyerhaeuser, Gorman Bros, Canfor, Tolko, and professional off-road driver training company, Overlanding Training Canada, as a collective message to the public to ensure resource road users understand and follow resource road safety rules.



BCFSC Resource Road Orientation Video

Welcome to the Summer edition of Forest Safety News, covering news about safety topics in forestry. This is YOUR safety newsletter. We look forward to your input and feedback! Email the editor at editor@bcforestsafes.org or call 1-877-741-1060.

What's Inside:

1 - 4	Industry News
5	Work-Related Deaths & Injuries
6 - 7	SAFE Companies
8 - 11	Training
12 - 14	Transportation Safety
15 - 17	Falling
18 - 22	Manufacturing Safety
23 - 24	Health & Wellness
25	Kid's Corner

Travelling on resource roads can pose various risks and though there may not be active logging in the area, other industrial users such as oil & mining exploration, silviculture and forest management may be using these roads. All resource road users should exercise caution and expect the unexpected.

View the [Resource Road Safety - Work Here, Play Here, Stay Safe Here](#) video on YouTube.

Learn More - Resource Road Safety Resources

- [BCFSC Resource Road Safety](#)
- [Government of BC – Resource Road Safety](#)
- [Overlanding Training Canada](#) 🌲



What's New

Here is the latest on what we have to offer since March 2021. Find direct links to safety alerts, industry-specific resources, industry information and more to download and/or share with employees, industry and safety peers. And make sure to follow us on social media to stay up-to-date with the latest news. Follow us on [Facebook](#), [Instagram](#), [LinkedIn](#), [Twitter](#) and subscribe to our [YouTube](#) channel.

Resource Road Safety Video – As summer approaches and traffic increases on resource roads across BC, this video will help keep drivers safe when using resource roads for work or play.

Worker Training and Assessment – Each forestry occupation requires different knowledge and skillsets to safely perform the job at hand. BCFSC worked with industry to develop competency-based standards, training and assessment tools for specific harvesting activities to help employers evaluate workers and complete on-the-job training.

Tree Planter Danger Tree Awareness Training – This free interactive online training course is available to help tree planters recognize danger trees and better understand what to do when working near potential danger trees in their work areas.

Training Calendar – Our 2021 Training Calendar offers both in-classroom (with COVID-19 safety protocols in place) and online courses.

Healthy Worker Series – Get our free posters, crew talks and backgrounders on our latest topics focussing on obesity and mental health and help encourage workers to maximize their health at work and at home.

Industry Lost Time Injury Fact Sheets – The BCFSC has developed fact sheets specific to each CU we represent featuring statistics relating to lost-time injury claims from 2015-2019.

Safety Alerts – Alerts provide timely information on incidents and issues which cause, or result in, serious or fatal injuries. The alerts we send by email and post on our website are intended to raise awareness and educate industry so we can learn from each other's experience and effort. Here are the latest alerts from BCFSC and industry.

- **BCFSC Safety Alert of the Month** - Heavy Equipment Operation on Wildfires
- **Manufacturing Weekly Safety Alert** – click on the link to see the latest weekly alert
- **WPAC Safety Alert** – Explosion at Wood Pellets Receiving Port

Industry Links

Wood Pellet Association of Canada Safety Committee – New webpage launched with links to safety resources, videos, fact sheets and more.

WorkSafeBC Announcements – check here for the latest information on WorkSafeBC policy and regulation updates, resource development, risk advisories and more.

WorkSafeBC Enews – Subscribe to Insight; WorkSafeBC's policy, regulation and research division e-Newsletter, Health and Safety Enews, Young Worker Enews and more. 📧

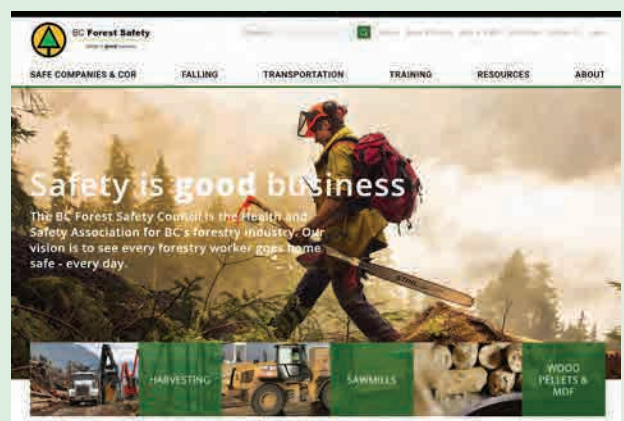
To subscribe to our safety alert emails – [Click Here](#)



BCFSC has a new website

By Michele Fry, Director, Communications

On April 13, the BCFSC unveiled our new website with an updated look. The new site was developed to provide for a better user experience with simple navigation throughout the site. The home page offers easy access to sector-based industry information on harvesting, sawmills and wood pellets/MDF, as well as direct access to Safety Alerts, Quick Links to key sections used by industry such as COVID-19 information, online audit submission, the BCFSC training calendar and more. There is also a quick link to our downloadable resource section that offers a filterable search function to help find documents, resource packages, crew talks, etc. You will also find access to SAFE Companies information, the latest news and real-time posts from our social media feeds from Facebook, Twitter, Instagram and YouTube. Each program area from SAFE Companies, Falling, Transportation and Training has its own section accessible from the top navigation banner where you will also find our resource link and information About the BCFSC with the latest reports and industry statistics.



If you haven't done so already, check out the site at www.bcforestsafesite.org or watch our guided video tour on our [YouTube](#) channel. 📺



Shortened spring break-up and increased road traffic - a cause for concern

With winter weather behind us, more and more vehicles are heading out on the highways and resource roads for work and play. With over 620,000kms of resource roads across BC, these roads are travelled by many types of vehicles from large heavy-loaded logging trucks to industrial pipeline vehicles to pickup trucks carrying tree planters to blocks and vacationers, many without radios, heading out in RV's for some weekend fun.

Resource roads are typically not built or maintained to public roadway standards and pose various risks for all users requiring drivers to exercise caution at all times but also have the necessary knowledge and ability to safely navigate these roads.

With recent market conditions, the high-demand for wood fibre is generating unseasonal logging activities and with it, an increase of forestry vehicles on resource roads - not to mention the spike in traffic

from pipeline construction in central and northern BC. These factors combined with the BC tree-planting season in full swing and RV sales hitting an all-time high are creating higher risks for potential incidents to occur.

Mike Pottinger, BCFSC Safety Advisor for the North Coast and Central Interior, has been talking with several contractors, operators and stakeholders and has received a great deal feedback about increased traffic on resource roads causing upset conditions. *"This major increase in vehicle traffic is an important factor to consider for companies sending workers out on these roads but also for the public when planning a trip. The new [Resource Road Safety video](#) is very timely and is an excellent awareness tool to help the public understand the dangers of driving on resource roads and what they need to do to help avoid collisions with other vehicles."*

"But spring weather conditions can also create many other hazards including wash-outs, potholes, blowdown, and wildlife." He cautions, "Add to that a short timeline for contractors to get trucks, equipment and crew ready for another busy season and it becomes vital this important message gets across to everyone travelling on these roads. Drivers need to be extra vigilant to ensure they reach their destination safely. So plan your day and allow for extra time to get to and from work. All drivers need to be aware of fatigue, have their head on a swivel, not be distracted and communicate hazards with other road users to help ensure everyone makes it home safe at the end of the day."

The BCFSC has tools to help drivers prepare themselves with the skills and knowledge they need to travel safely on resource roads. Our dedicated [Resource Road Safety](#) section on our website provides information on public use of resource roads, radio communication, safety tips, driver training and more. 🚧

The 2021 planting season is underway

With planting season underway, silviculture workers are back at camp manoeuvring through another season of pandemic challenges. But with last year's record number of 300 million seedlings planted and not one case of COVID-19 among them, BC planters are taking their knowledge and experience learned from 2020 and driving forward to another successful season for 2021.

Last year, industry waited with bated breath wondering if the season would get the green light from the province to forge ahead. After careful planning and implementation of provincial health guidelines, tree planting companies and workers headed out across the province after a late start and worked diligently to ensure their communities stayed safe while managing to have their best planting season ever.

The camaraderie and dedication of each person in the planting community kept them all safe in 2020 and has allowed the 2021 season to start without delay. Building on the lessons learned from last year, revised [Industrial Camp Guidelines](#) were updated April 13, 2021 to help mitigate further risk of COVID-19 infection and exposure for workers living in communal sites. With a renewed commitment from industry, companies and workers are following these revised COVID-19 protocols to help maximize health and safety for all.

John Betts, Executive Director of the Western Forestry Contractor's Association shares his insights for the 2021 planting season. *"Last year our efforts succeeded in keeping the virus out of our camps and crews. This year, given the*

Replant.ca



prevalence of COVID-19 infections and the new variants, our task will be to once again use all our protocols to help keep infections out while at the same time containing any spread that might make it past our screening processes. Even with the higher risk, we have the means and the collective will to manage COVID successfully."

Outside of pandemic challenges, tree planters are also at risk of wildlife encounters, ticks, MSI's and more. In addition to COVID-19 resources, the BCFSC has many tools available for employers and workers to help support worksite and worker safety while out on the block. Take a look at the silviculture materials and share them with your crews to make 2021 another incredible season for all.

[Danger Tree Awareness – Free Online Training](#)

[Resource Road Safety](#)

[Silviculture Safety Resources](#)

[Fit to Plant](#)

[WorkSafeBC Silviculture Resources](#) 🗺️

Blasting regulations to be updated

WorkSafeBC has completed a review of the OHS Regulation Part 21: Blasting Operation and updates to the regulation are planned for this fall. Industry feedback has been received as part of this process and is considered when the regulations are updated.

One of the expected changes is to require professional development training for certified blasters and people who are training to become certified. BCFSC is working with blasting experts, explosive manufacturers and WorkSafeBC to develop online training to help forestry blasters meet the new requirements. As more information becomes available, BCFSC will provide updates in Forest Safety News and on our social media channels. 🗺️





Work-Related Deaths & Injuries

There were two work-related deaths in March 2021 in the BC forestry industry. We extend our deepest condolences to the families and friends of the deceased fallers and our sympathies to all those affected by these tragic incidents.

Injury: Fatal

Core Activity: Manual tree falling and bucking / Helicopter logging / Integrated forestry management

Location: Vancouver Island/Coastal BC

Date: 2021-Mar

A hand faller was conducting road right-of-away falling in old-growth timber. The faller was struck and dragged downslope about 8.5 metres by a previously dead and down tree (no roots attached). The faller succumbed to the injuries.

Read the [BCFSC Fatality Alert March 1](#)

Injury: Fatal

Core Activity: Manual tree falling and bucking / Helicopter logging / Integrated forestry management

Location: Vancouver Island/Coastal BC

Date: 2021-Mar

A hand faller was cutting timber in a block slated for helicopter harvesting. The faller had completed the falling cuts on a cedar tree (67 inches in diameter). As the tree fell, a 34-foot top portion of an adjacent dangerous tree broke free, fell downhill toward the faller's location, and struck the faller.

Read the [BCFSC Fatality Alert March 15](#)

Recent work-related incidents reported to WorkSafeBC

The following sample of work-related incidents recently reported to WorkSafeBC may help prevent similar incidents in your workplace.

HARVESTING

Injury: Laceration, soft tissue injury

Core Activity: Manual tree falling and bucking / Integrated forest management

Location: Vancouver Island/Coastal BC

Date: 2021-Mar

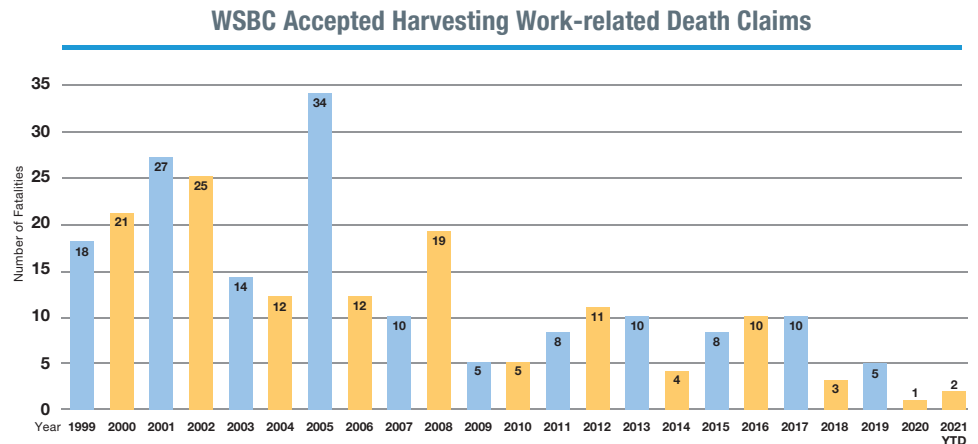
A hand faller was falling a tree (32 inches in diameter). As the faller was completing the back-cut, the tree sat back, creating a falling difficulty. The faller felled a smaller tree toward the cut-up tree in an attempt to push the cut-up tree over. During this process, a piece of wood was thrown backward and struck the faller.

Injury: Fractured finger

Core Activity: Integrated forest management

Location: Interior BC

Date: 2021-Mar



This information represents the number of work-related deaths by year in BC, up until March, 2021.

A worker was repairing the processing head of a feller buncher when the head was inadvertently activated.

Injury: Close call

Core Activity: Integrated forest management

Location: Interior BC

Date: 2021-Feb

A below-the-hook lifting device (J-hook) attached to a trailer loader broke while a trailer was about halfway through the cycle of being lifted. The trailer fell to the ground and sustained extensive damage.

Injury: Soft tissue injuries (1 worker)

Core Activity: Integrated forest management / Heavy equipment, machinery, or parts sales, rental, service, or repair (greater than 500 pounds)

Location: Northern BC

Date: 2021-Feb

A forestry processor operator and a mechanic were working on a processor head. The mechanic's service truck was parked on an icy road with a slight slope. As the work was being done, the ambient temperature increased and the ice and snow began to warm up. The truck slid downhill, pinning the operator between the service truck and the processor head. The operator was able to self-extricate from the entrapment. The mechanic was not injured.

Injury: Fractured arm, laceration

Core Activity: Manual tree falling and bucking / Integrated forest management

Location: Vancouver Island/Coastal BC

Date: 2021-Jan

A hand faller was completing the falling of a cedar tree 40 inches in diameter. Due to improper falling cuts, the cedar fell at 90 degrees from the intended direction, into standing timber, where it contacted two dangerous trees. One of the dangerous trees failed, sending debris toward the faller's location. The faller, who was injured by the debris, received first aid on site and was then transported by company crew boat en route to hospital.

MANUFACTURING

Injury: Close call

Core Activity: Sawmill

Location: Interior BC

Date: 2021-Feb

A security patrol spotted a fire at a sawmill that was not running at the time. The fire, which started in the chip screen room, spread up some conveyors and into the sawdust, chip, and hog bins, and then to other parts of the mill. The fire department attended and extinguished the fire, which caused extensive damage.

Injury: Close call

Core Activity: Sawmill

Location: Interior BC

Date: 2021-Feb

A fire broke out in a biofuel heating unit. A leak had occurred in the thermal tubes containing heat transfer oil; the oil ignited from exposure to the biofuel kiln combustor and spread through the ductwork of the structure. The biofuel heating unit and the building sustained fire damage. The fire department responded, extinguished the fire, and secured the building.

Injury: Close call

Core Activity: Sawmill

Location: Interior BC

Date: 2021-Feb

A fire occurred in the debarker at a sawmill. The fire appears to have started in the gear drive of the debarker, and the fire suppression system activated. Workers were evacuated from the building, and the fire department attended and ensured that the fire was contained and extinguished. There were no injuries and the structure was not damaged. The dust collection system was not involved.

TRANSPORTATION

Injury: Minor injuries (2 workers)

Core Activity: Helicopter visual flight rule operation

Location: Lower Mainland

Date: 2021-Mar

Two workers were travelling to a remote work location by helicopter when the helicopter crash-landed in a densely forested area. The workers were transported to hospital by ambulance. The cause of the incident is being investigated by the RCMP and the Transportation Safety Board of Canada. 🚚



2021 SAFE Companies audit submission requirements

By Martin Ridgway, SAFE Companies Supervisor, Quality Assurance

Internal Audits

Small employers (IOO, ISEBASE and SEBASE) are generally expected to perform their usual audit in 2021 at their normal (pre-COVID-19) time. All audits should contain evidence from the last 12 months before the audit submission date, even if that causes overlaps or gaps from the last audit. For example, if you submit in late August 2021, include September 2020 through August 2021 even if your last audit was sent in December 2020 due to COVID-19 delays. If you are unsure if you should submit a maintenance audit or a recertification, contact our office for specific information or default to a recertification audit which will reset your regular audit date.

BASE Maintenance Audits

While the ideal BASE audit scores answers from each question and question section, due to safety concerns travelling to various sites, scoring in-person observations and interviews may not be possible until restrictions on in-person site visits are lifted. While some

interviews can be done through video conferencing or by telephone (if video is not possible), these alternatives may not be practical if the worker is out of cell range or has an unreliable internet or phone connection. Questions (or parts of questions) that are omitted can be scored as 'not applicable'. The number of interviews could also be reduced, or the timing of the audit adjusted with sufficient justification. The auditor needs to clearly explain on the NOAA why their plan is the best achievable plan for their audit.

BASE Recertification Audits

BASE recertification audits, with the exception of certain silviculture and camp operations, are expected to have documentation, interviews and in-person observations. If the pandemic is severely impacting your company's operations, contact us to discuss audit solutions.

Silviculture and related audits

Recertification of certain BASE-sized silviculture and related camp-based

operations are subject to specific Provincial Health Orders. Reduced interviews and/or altered observation scopes and practices can be arranged on a case-by-case basis with WorkSafeBC approval.

Regaining COR status

To help companies regain COR status after the last year's unprecedented circumstances, BCFSC is offering free online auditor training to company representatives for those companies with someone previously trained in IOO or SEOHS. The 2021 audit submission should be submitted by the auditor as soon as practically possible after completing training, even if it is less than 12 months since the last audit in 2020. This offer is only available for a limited time from now through August 31, 2021 and does not include in-person or other instructor-led classes. Companies who do not have a previously trained IOO or SEOHS person are not eligible. For questions and enrollment information contact safeco@bcforestsafesafe.org.



Send your audit submissions electronically

By Cherie Whelan, Director SAFE Companies

The 2020 audit processing season is finally complete! With COVID-19 restrictions and BCFSC staff working remotely, submitted audits took us longer to process than in years past. We appreciate your patience in working through these difficult times.

Due to the restrictions, we have adjusted some business processes to ensure we can meet our deadlines with WorkSafeBC. One of those changes is we will no longer be returning your audit submission due to staff limitations. If you require a copy of your audit, contact our office and we will provide a scanned version.

This past year, we received many audit submissions in binders with tabs separating the material. We recognize the work, time and money it takes to assemble this information and ship it out and we want to help you save that precious time and cost. By using our electronic audit submission options, you will not only save on printing and shipping, but your documents will already be in digital copy format submitted by you so you will not require your audit to be returned. If our electronic audit submission options do not work for you, you can still submit your printed audit submission materials but we request they be sent in audit question sequence



without staples, clips, tabs or binders. It's easier for us and much less work for you!

Earlier this year, I had an eye-opening discussion with an employer dropping off his audit materials in a neatly organized binder to our office. We discussed the new electronic audit tool (OAT) we recently launched and he told me he

Continued on page 7...

Continued from page 6...

felt the printed materials submitted in a binder with tabs was an easier way for the Safety Advisors to review the audit materials. When prodded further, he said they can simply flip through the binder to access the information. I appreciated that he was thinking about our Safety Advisors when he put his materials together and he was trying to make our work easier. But in actual fact, printed audit materials are much more difficult to manage and take much longer to process on our end. Our filing system is now 100% electronic and staples, clips and tabs require considerable administrative effort for our limited staff to prepare the printed materials for scanning, not to mention the potential damage to our scanners should a staple or clip get missed. Once the paper audit is free of staples, clips, etc. and reorganized for scanning, our admin staff then process it and upload the scanned audit into our systems for the Safety Advisors to review. So although you may think your binder is an easy way for us to review your audit, it actually causes a lot of unnecessary work for both parties and is never actually reviewed in printed form by the Safety Advisors.

The most efficient and effective way to submit your audit is using our electronic audit tools. Consider one of the following for your next audit submission.

1. Use our new ONLINE AUDIT TOOL (OAT) (85MB max per file).

2. Upload via our website (for files 8MB or larger)

3. Email (files less than 8MB) to **audits@bcforestsafes.org**

4. Send by fax: 250-741-1068

If paper audit submissions are your only option (and we will always process paper audits) they can be submitted by:

1. Courier or delivery service to the BCFSC Nanaimo office.
2. Drop off to the BCFSC Nanaimo Office between 8:30am – 4:30pm, Monday to Friday. Upon arrival, masks are required with social distancing procedures in place.

Note: We request paper audits submissions be submitted **without** staples, paper clips, binder clips or binders to help reduce the processing time and allow us to get your results back faster! 🌱



New opportunity for COVID-19 in 2021: Virtual Site Visits

By Mike Sexton, BCFSC Safety Advisor

If you have been selected for a site visit in 2021- there still may be an option for a site visit.

While travel is currently suspended due to COVID-19 restrictions, the BCFSC will continue providing you with personal service by offering virtual site visits. This option will not replace regular site visits but offers supplemental service during provincial health restrictions, especially for companies that just want their audit done!

The requirements for virtual site visits are not much different from in-person visits but does require video technology ability through digital applications such as FaceTime for Apple mobile users or What's App for Android mobile users. If your mobile phone doesn't have these options, a laptop with a camera can also be used with an online video platform such as Zoom or GoToMeeting.

Observations and chats with you and your workers would be done using video interaction. A designated person in your company would show the BCFSC auditor what they need to see on site using the device's camera and documents can also be displayed on camera or sent electronically.

We do not expect this would work for everyone but for those with the technological ability, it's an option that can easily be put in place. If you have been selected for a 2021 site visit and would prefer to wait until COVID-19 travel restrictions are lifted that is easily managed. But if you want your audit done ASAP, contact us and let's see if we can make this virtual option work for you! 🌱

WorkSafeBC COR Proof of Concept update

BCFSC continues to work with the other Certifying Partners and WorkSafeBC on plans for a future COR audit. WorkSafeBC is currently developing a preliminary working copy of an audit tool and will be working towards its testing phase to ensure it functions properly. The current Proof of Concept (POC) stage is like a scale model test in its primary phase. It is even more preliminary than a pilot audit and not ready for a real test pilot.

Several POC companies and external auditors across various industries have been selected to test the new tool and will use POC audits from May to November this year. As the Certifying Partner with the most companies, BCFSC has the most audits. Many of our external BASE auditors also audit other industries, so over half the POC auditors are veteran BASE auditors.

The auditors and Certifying Partner QA staff have been trained but companies are not expected to change or alter their safety systems for the audits. A good investigation should be a good investigation no matter how you measure it. A company with years of 98% scores should not suddenly do a lot worse than a newer company that only grew from 81% to 84% in the three-year certification.

WorkSafeBC has posted all available public information regarding the POC on their [WorkSafeBC website](https://www.worksafebc.com). We will continue to keep you informed as things progress over 2021 and 2022. 🌱



BCFSC training activity to date

In the December 2020 edition of Forest Safety News, we shared how Falling Supervisor training was successfully delivered during COVID-19. Since then, we have continued to provide training and have also successfully delivered:

- Incident Investigation in Campbell River, Kamloops and Prince George
- Four days of funded BCFSC Forest Supervisor Training delivered at various BC Colleges
 - Okanagan College (Salmon Arm), College of New Caledonia (Quesnel), Selkirk College (Castlegar)
- BCFSC delivered scheduled Forest Supervisor training in Campbell River, Kamloops and Prince George. Three requested sessions were also delivered in Nanaimo for Mosaic Forest Management

We also launched the new Resource Road Training Program. Approximately 110 participants enrolled and participated in various activities like the online knowledge unit, eight sessions of one-day, in-field safety training and three sessions of two-day, in-field driver training.

Year-to-date, five Basic Chainsaw Operator sessions have been delivered in Port Alberni, Campbell River and Salmon Arm. All these sessions were hosted by colleges including North Island College and Okanagan College.

With established COVID-19 safety measures for both in-classroom courses and outdoor in-field training, BCFSC ensures venues allow for safe physical distancing and health and safety information is shared, understood and adhered to by participants. Our trainers are also expected to demonstrate and encourage best practices throughout the course. We continue to monitor the provincial COVID-19 requirements and make adjustments as needed to ensure the safety of our students and trainers is maintained.

As we've all had to stick-handle through pandemic protocols over the past year, the BCFSC has also seen increased demand for online courses. In response, we have developed FREE online course options including the new occupational-based training for forestry workers, Forestry Safety Overview, Serious Incident and Fatality Investigation, Phase Congestion and more. Check out the [training calendar](#) on our website for upcoming courses or contact training@bcforestsafesafe.org for more information.

Incident Investigation	2021 Feb 26	Campbell River
Forest Supervisor Mod. 1	2021 Mar 9	Salmon Arm
Forest Supervisor Mod. 2	2021 Mar 11	Salmon Arm
Forest Supervisor Mod. 3	2021 Mar 12	Salmon Arm
Forest Supervisor Mod. 1	2021 Mar 16	Quesnel
Forest Supervisor Mod. 1	2021 Mar 18	Campbell River
Forest Supervisor Mod. 2	2021 Mar 18	Quesnel
Forest Supervisor Mod. 3	2021 Mar 19	Quesnel
Forest Supervisor Mod. 2	2021 Apr 8	Campbell River
Forest Supervisor Mod. 3	2021 Apr 9	Campbell River
Forest Supervisor Mod. 1	2021 Apr 15	Nanaimo
Incident Investigation	2021 Apr 23	Kamloops
Forest Supervisor Mod. 1	2021 May 6	Kamloops
Forest Supervisor Mod. 1	2021 May 11	Castlegar
Forest Supervisor Mod. 2	2021 May 13	Castlegar
Forest Supervisor Mod. 3	2021 May 14	Castlegar
Incident Investigation	2021 May 14	Prince George

Resource Road Safety Training

2021 Apr 12	Harrison Mills	(5104)
2021 Apr 13	Harrison Mills	(5104)
2021 Apr 19	Campbell River	(5104)
2021 Apr 22	Castlegar	(5104)
2021 Apr 26	Prince George	(5104)
2021 May 3	Princeton	(5104)
2021 May 9	Princeton	(5104)
2021 May 10	Princeton	(5104)

Resource Road Driver Training

2021 Apr 13	Squamish	(5105)
2021 Apr 22	Terrace	(5105)
2021 May 1	Rock Creek	(5105)

Basic Chainsaw Operator

2021 Mar 8	Campbell River	(5089)
2021 Mar 10	Campbell River	(5089)
2021 Mar 15	Port Alberni	(5089)
2021 Mar 17	Port Alberni	(5089)
2021 Mar 22	Salmon Arm	(5089) 🌳

Tree Planter Danger Tree Awareness training



Free online [Danger Tree Awareness Training](#) for tree planters is now available.

This interactive course helps planters recognize danger trees and understand what to do when there are danger trees nearby.

A big thank you to Blue Collar Silviculture for sharing this training with the planting community. 🌳

Entry Level Forest Worker training update

Over the years, employers have provided feedback indicating the challenges in finding the right employees to sustain their operations. To help meet the needs of industry, the BC Forest Safety Council (BCFSC) is coordinating a funded initiative from AEST to develop and deliver pilot training for workers new to BC forestry.

The Entry Level Forest Worker Training program is intended as a worker-readiness training program targeting new groups such as Indigenous Peoples, women, and high-school students for safe worker entry in the BC forest industry. Graduates arrive on the job with basic skills, a thorough knowledge of forestry and fully prepared for on-the-job learning in their chosen occupation. This program is designed to align with the occupational resources developed by BCFSC and employers can opt to continue their worker's training by utilizing the BCFSC on-the-job training and assessment materials at the worksite.

Status of Deliveries:

Okanagan College (Revelstoke) completed their pilot in 2019. Overcoming delays and challenges due to COVID-19, Selkirk College (Grand Forks) and CNC (Vanderhoof) finished their programs in December 2020.

Coast Mountain College (Terrace) started in March 2021 and is well underway. Program Coordinator Laurie-Lynn Kallio comments:

"This program is an amazing opportunity to educate and introduce forestry as a career to our students. We continue to try and implement experiential-placed based learning safely. Thus far, the activities have included a visit to Gruchy's Beach to view an old growth forest and a visit

to a local business which sells heavy duty equipment related to forestry and construction sites.

Guest speakers have included representatives from WorkSafeBC and the Ministry of Forests, Lands and Natural Resource Operations. Guest speakers scheduled for May include: two forestry consultants who will conduct GPS exercises with the students, another who will take students to view timber stands at various stages of growth, a Field Safety Advisor from BCFSC who will discuss safety issues, and a representative from WorkBC.

We hope to complete the following field visits to view a tree nursery and mill in Smithers, a community forest near Terrace and an interpretive trail to view old growth and bonsai type forests near Prince Rupert."

Instructor, Murray Sanders says the program *"allows entry level workers to enter the forest industry where they fit."*

Participants involved in Coast Mountain College's Entry Level Forest Worker Program have stated:

"Our society is based on our phones. There is no wifi connection in the forest but you will find a better connection – this program can help you connect your interest in the forestry community." – Pasha O.

"A good foundation into an entry level forestry position" – Zachary Price.

"Great introduction into forestry! I enjoyed learning about the environmental aspect of forestry.

Having family in this field fuels me to want to be better than them." - Faith N.

Employer partners with Coast Mountain College so far have included: D.R. Holtom Ltd., Inland Kenworth Truck Sales/Heavy Equipment Sales, Seaton Forest Products Ltd., Cypress Forest Products Ltd., Woodmere Nursery Ltd.

The pilot steering committee members at North Island College and Vancouver Island University (VIU) are also offering programs containing some or all of the Entry Level Forest Worker training materials.

North Island College recently delivered their Coastal Forest Worker Certificate Program to an indigenous cohort sponsored by the Homalco First Nation and WorkBC, as well as a tuition-based diploma cohort with both programs incorporating the Entry Level Forest Worker training materials.

VIU started their Fundamentals of Forest Harvesting Practices Certificate in March 2021 in Woss, BC supported by their industry partners, Western Forest Products and area contractors.

An evaluation of the results from all deliveries will be assessed and any adjustments to the materials and model will be made between May and Dec 2021. Stay tuned for program updates from the BCFSC in our upcoming Forest Safety Newsletters.

If you have any questions about the Entry Level Forest Worker Training Program, please contact Allison Thompson, BCFSC Manager Training & Standards. 🌲



Funding provided through the Canada-British Columbia Labour Market Development Agreement.

Know your four-wheel drive systems and how to use them correctly

Modern vehicles are the safest and most technologically advanced vehicles ever built. Beneath the surface lies mechanical and technology systems many of us take for granted or may not even be aware of. These common features give you the ability to negotiate resource roads more safely.

The key to getting these systems to perform properly when necessary is driver knowledge. You need to know what to use, when to use it, how to use it and why.

There are four common types of drivetrains in today's vehicles:

Two-wheel drive (2WD)

- Only one axle is driven by the engine and transmission, either rear- or front-wheel drive. Typically used for driving on paved roads and highways.

All-wheel drive (AWD)

- Both axles are driven by the engine, transmission and a transfer case. The ratio at which power is sent between axles may vary depending on the vehicle model.

Part-time four-wheel drive (4WD)

- Both axles can be driven by the engine, transmission and a transfer case. The vehicle has a two-wheel drive option, a four-wheel drive high-range option and four-wheel drive low-range option. This is one of the most common drivetrains and is found in almost all pickup trucks and SUV's.

Full-time four-wheel drive (4WD)

- Both axles are always driven by the engine, transmission and a transfer case. The vehicle has a four-wheel drive high-range option and four-wheel drive low-range option and is found in some SUV's and pickup trucks.

When to use 2WD, 4WD high-range or 4WD low-range

2WD

- Use 2WD if you are driving on dry pavement or a surface that has very good traction.

4WD high-range

- Use this range when you leave a paved road and travel on a resource road or when you are negotiating a lower traction surface.
- Most modern vehicles are designed to be driven for their entire lifespan in this mode if necessary.
- Using 4WD on a resource road or lower traction surfaces can provide more control, less tire spin, less wash-boarding of the road and more mechanical sympathy.

4WD low range

- Use this range when on steeper resource roads or when negotiating a lower traction surface on steeper terrain
- This range is used when you need more torque such as for towing or transporting heavier loads

- You use this range when you have to move slower for more control. For example, over rough obstacles.
- 4WD low-range should be applied prior to needing it and will not necessarily help you from freeing your vehicle if it's stuck.

Vehicle Safety Systems

Modern vehicles use an array of sensors and control modules to control certain functions. These sensors work together to determine what the vehicle is doing and what the user may require from the vehicle. For passenger vehicles, they are the heart of a vehicle's safety system.

ABS – Anti-Lock Braking System

A skidding tire has lost control and traction. Modern vehicles use four-wheel speed sensors that determine whether tires are losing traction and in the case of braking, skidding. ABS will only activate when the vehicle senses you applying the brake and any wheel starts to skid. The system allows a "pulsing" of individual brakes, allowing the skidding tires to roll again and regain traction before applying the brake again. This happens many times per second.

Continued on page 11...



Continued from page 10...

Modern ABS systems will stop you 100% more quickly than any other braking system and will also allow you to steer, if necessary, while the ABS braking system is activated. This safety function automatically senses steering input and allowing the tires on the outside of the turn to roll a fraction quicker than those on the inside of the turn. However, this will increase your total stopping distance.

Traction Control

Traction control is that little orange light on the dash that shows the car with the squiggly lines underneath it. This system is often misunderstood and misused by drivers. Traction control is essentially the opposite of ABS braking. The vehicle senses the driver applying throttle (gas) and detects a spinning or skidding tire. The vehicle reacts by reducing the ability to apply throttle to slow the spinning tire so it can regain traction and control. In limited circumstances, tires spinning under throttle input may be beneficial such as in deep snow or mud where a slight tire spin allows inertia to keep the vehicle moving. This is why some vehicles have a button to reduce traction control input. However, other than deep snow or mud, in almost all circumstances, traction control should NOT be turned "off" as it greatly reduces your safety by allowing tire spin and can cause the vehicle to lose control.

Advanced Traction Control

Some modern vehicles have an advanced traction control system designed to help propel the vehicle when traction is lost. If your vehicle is equipped with this function, it is imperative to understand how it works and how to use it (professional driver training can help you learn how to utilize this great feature). The system is designed so that when the vehicle is losing traction while throttle is being applied, it will apply heavy braking to the wheels losing traction - redirecting torque to the wheels with good traction

and hopefully allowing your vehicle to correct itself and proceed safely. When this system is activated, its performance is limited so throttle control must be accurate and consistent.

Stability Control

Modern vehicles have pitch and yaw sensors and when combined with throttle input, the system can help control a vehicle in situations such as oversteering. When the vehicle's throttle is applied and there is excessive yaw or pitch, the system may momentarily remove the ability to apply throttle while also applying individual braking. This is the system trying to recentre the vehicle to correct the trajectory or maintain a straight path.

Locking Differentials

Some vehicles (particularly higher spec'd trucks) have the option of a locking rear differential. All 4WD vehicles have differentials on each axle allowing the wheels to be propelled, but also allowing each wheel to turn at a different speed to enable cornering. When cornering, each wheel needs to turn at a different speed as opposed to driving in a straight line when all wheels turn at the same speed. The challenge with a differential is they allow power to go to the path of least resistance. For example, if one rear wheel ends up on a slippery surface and throttle is applied, that tire may spin, and the vehicle may not be able to move forward. With a vehicle equipped with a locking differential, it can be activated so both wheels on that axle will turn at exactly at the same speed, no matter the traction difference between each wheel. This may allow forward progress.

Important information regarding locking differentials:

- They must be activated prior to needing them, not when stuck. They will often not engage once you are stuck. Good driver skill and knowledge is important.
- They must only be activated and used when driving in straight line (or

as straight as possible) as locking differentials cause increased mechanical strain to the vehicle.

- If the vehicle is equipped with both front and rear locking differentials, apply the rear first which will generally be sufficient.
- Never use locking differentials on surfaces with good traction such as paved roads.

Mechanical sympathy, terrain sympathy, smart driving

Whenever driving, the aim is to avoid tire spin or skidding. Maintaining control reduces wear and tear on your vehicle and reduces the impact on terrain. While modern technology systems help keep us safer, they are there to assist when needed and should not be relied upon to correct poor driving skills.

Durability

Vehicle durability can be challenging such as the ever-present Check Engine light, an ABS warning light and so on. Working in camp or driving a vehicle to and from remote areas can limit opportunities to fix minor mechanical problems. It is important to keep your vehicles well serviced to avoid breakdowns when working in the bush! Don't allow your vehicle to slip into a state of disrepair with inoperable safety functions. As soon as possible, have issues looked at and repaired.

Knowing your vehicle is key. Referring to the owner's manual is a good source of information to help you understand the features built into your vehicle. But knowing how to handle your vehicle and use it safely is essential. Train yourself and your workers. Enroll in the BCFSC's Resource Road Driver Training programs.

It is our duty to ourselves, our passengers and others out there on the roads to strive to be the best drivers we can be - armed with knowledge, skills and safety in mind. Always remember ... **Technique before Technology.** 🚗



Radio use and resource road calling procedures video scheduled for July 2021

This July, look for our next resource road video focussing on radio use and resource road calling procedures in follow up to the latest resource road safety video. This new video will address best practices related to radio use and road procedures and will highlight the Ministry of Forests, Lands, Natural Resource Operations and Rural Development standards for radio calling, road signage and radio programming. It will also incorporate some of the current practices used by several operations in BC.

This new video will target all industry resource road users and is intended to provide a comprehensive narrative that supports safe operations and highlights the importance of proper onboarding when changing worksite locations.

For more information contact the Transportation Safety Department at 1-877-741-1060. 📞



A focus on load securement

By Dustin Meierhofer, Director, Transportation and Northern Safety

Load securement related to log hauling is a critical step which must be done correctly to ensure the safety of workers and the public. The process of securing a load of logs has historically involved the driver throwing and securing cables around the load prior to transporting. This method has been effective in addressing load securement, but as evidenced by WorkSafeBC injury statistics, can result in driver injuries. These injuries may result from repetition, poor technique, load securement device weight, inadequate risk assessment, limited availability and/or understanding of load securement options and other related human and operational factors. The overall cost of injuries related to wrappers is more than \$3.6M in the last 10 years (WorkSafeBC 2020).

In light of this, in the fall of 2020, the Load Securement Working Group (LSWG) was formed with the objective of developing resources, tools and initiatives to help reduce the risk of injuries to log truck operators during loading and unloading operations in both routine and non-routine operations. The group is collaborating on assessment of risk, safe work procedures, training, existing and new technology, alternative practices and procedures, and potential impacts to industry.

With changes to Part 26 of WorkSafeBC OH&S regulations coming in late 2021, there are opportunities to identify improved load securement options, processes, techniques, tools and resources that could efficiently and effectively be utilized by industry. BCFSC, LSWG and FPInnovations have initiated a load securement project to investigating short-term solutions such as Joe Easy Wrap, JB Cable Slinger, synthetic ropes, platforms and tie downs, loader assist and lightweight wrappers to reduce wrapper related injuries. Longer-term solutions will also be explored which may include automated load securement systems.

The expected benefits of having the appropriate technologies and practices to manage wrapper related injuries will be:

- Prevent workplace related injury in BC's logging industry
- Lower WorkSafeBC claims
- Improve operational efficiencies
- Improved worker retention and recruitment

The project will be conducted over three phases and is expected to be complete in late 2021/early 2022. With funding provided by WorkSafeBC, phase one is currently underway and is estimated to be completed by June 2021. Information related to the study will be available on the BCFSC website as phases are completed.

For more information regarding the project or to access load securement resources please contact BCFSC Transportation Safety Department **transport.admin@bcforestsafesafe.org** or visit the Transportation section on the [BCFSC website](https://www.bcfsc.org). 📞



Look for our new Safety Zone billboard

By Trish Kohorst, Manager, Transportation and Northern Safety

The next time you're out driving in Prince George, look for the new **Safety Zone** billboard featuring important tips on how to drive safely when travelling around large commercial vehicles.

The new billboard was developed in collaboration with the BC Forest Safety Council and Be Truck Aware alliance partners to remind drivers of the visibility and manoeuvrability limitations of these large vehicles. These trucks require significantly more stopping distance than a passenger vehicle especially on wet road conditions. Also, it is essential that all drivers understand these trucks have



significant blind spots (the spots where the driver cannot see another vehicle) due to their large size and limited rear visibility.

As summer approaches, more and more logging trucks will be out on the highways. Knowing your limitations and the limitations of other vehicles on the road will help us all share the roads

safely. It is important for all drivers to understand that we ALL have a role in keeping the highways safe.

For more information or to order a billboard, contact the BC Forest Safety Council Transportation Department at 1-877-741-1060

Learn more about the [Be Truck Aware](#) program. 🚚

Message from the Canadian Council of Motor Transport Administrators about June 2022 ELD enforcement mandate

On May 5th, the Canadian Council of Motor Transport Administrators (CCMTA) issued an announcement regarding the enforcement plan for electronic logging devices (ELDs). The enforcement plan outlines a 12-month progressive educational enforcement strategy that ends in June 2022. It reflects the Canadian Trucking Alliance's main position on the issue established earlier this year. The latest enforcement plan issued by the CCMTA is based on the realities of the current requirements needed to institute the mandate including the availability of third-party certified ELDs. The current lack of availability of certified ELDs is an issue of concern for the enforcement community. This concern is reflected in the announcement, however, the CCMTA statement confirms that jurisdictions will continue to monitor progress for certification of these devices entering the market.

"The Canadian Trucking Alliance (CTA) wanted to see full enforcement of the ELD mandate beginning in June 2021, but as we have been aware for some time, that would have been difficult to achieve for several reasons, not the least of which is the worldwide pandemic which

caught the industry, governments and suppliers by surprise in 2020," said CTA president Stephen Laskowski. "However, CTA is pleased that the period of progressive enforcement will end in 12 months and full enforcement will commence in June 2022, which is in fact the industry's position."

He continues, *"In the meantime, CTA expects several of these ELD devices to become certified shortly. As that continues to occur, CTA expects the conversation between government and industry to develop regarding the 12-month progressive enforcement strategy. The CCMTA announcement reflects a moment in time and is reflective of the current market landscape during these challenging times. Once these devices are certified, the issue of stronger enforcement leading up to June 2022 will be a subject matter of discussion between CTA and CCMTA. CTA expects those conversations to be active throughout the next 12 months as the landscape regarding third party ELDs evolves."*

Review the [full CCMTA announcement](#). 📄



Industrial Workers at the highest risk of fatigue

– published with the permission of Fatigue Science

Sleep affects every aspect of our lives. For an industrial worker, the stakes are even higher. Sleep interruptions cause fatigue, which impacts both safety and performance on the job. Moreover, the nature of 24/7 operations and night shifts means that industrial workers are more affected than most by natural circadian forces that create fatigue.

What is a circadian rhythm?

The body's circadian rhythm is the natural 24-hour clock regulating the body's sleep-wake cycle. As one of two major biological factors behind sleepiness and fatigue, circadian rhythm dictates that we should be asleep at night and awake during the day.

In an ideal world, everyone would maintain a consistent sleep schedule. Unfortunately, the reality is that many people work in environments that challenge their body's natural sleep and wake cycle. It isn't always easy, but there are steps you can take to help get the best sleep possible:

How can you sleep better?

Tell family and housemates

Post a calendar in your home with your work and sleep schedules. This will help everyone know when you're away, and more importantly when you'll be sleeping.

Create a sleep zone

Blocking outside noise and light is ideal if you're trying to sleep during the day. Put blackout curtains on windows and use earplugs or white noise to mask outside sounds. Make sure the room is at a comfortable temperature to help encourage your body's circadian rhythm. The optimal range is 15.5°-19.5°C (60° – 67°F).

Get ready for sleep

Spend some time winding down to send your body signals that it's time to sleep. Do relaxing activities like reading, stretching, or taking a warm shower. Limit your exposure to sunlight and avoid TV and digital devices as these can increase the time needed to fall asleep.

Be consistent with your sleep

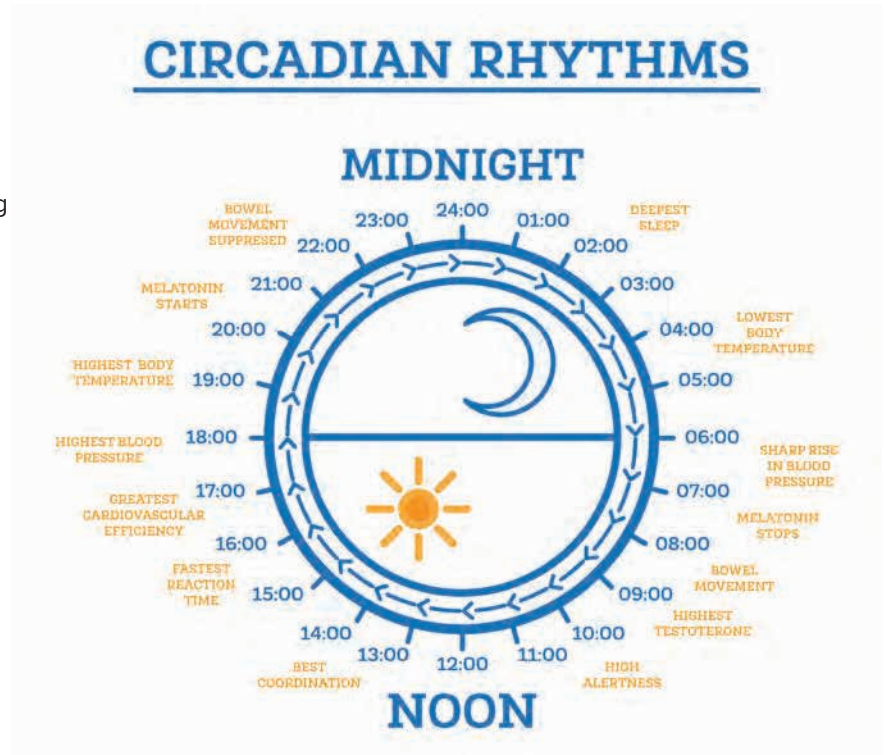
If you always work the same shift, be consistent with your sleep schedule. Go to bed and wake up at the same time, including on days off.

Watch what you eat and drink

Don't eat or drink too much within three hours of your bedtime. Avoid coffee and other caffeinated drinks within 12 hours of bedtime, and limit alcohol well before bed. If you're working nights and need a snack, stay away from heavy, fatty foods, and don't eat after 3 a.m.

Plan ahead

If you work rotating shifts, gradually move your sleep and wake times over a few days. If you're beginning a series of night shifts, try to take an afternoon nap before your first shift. 🌙





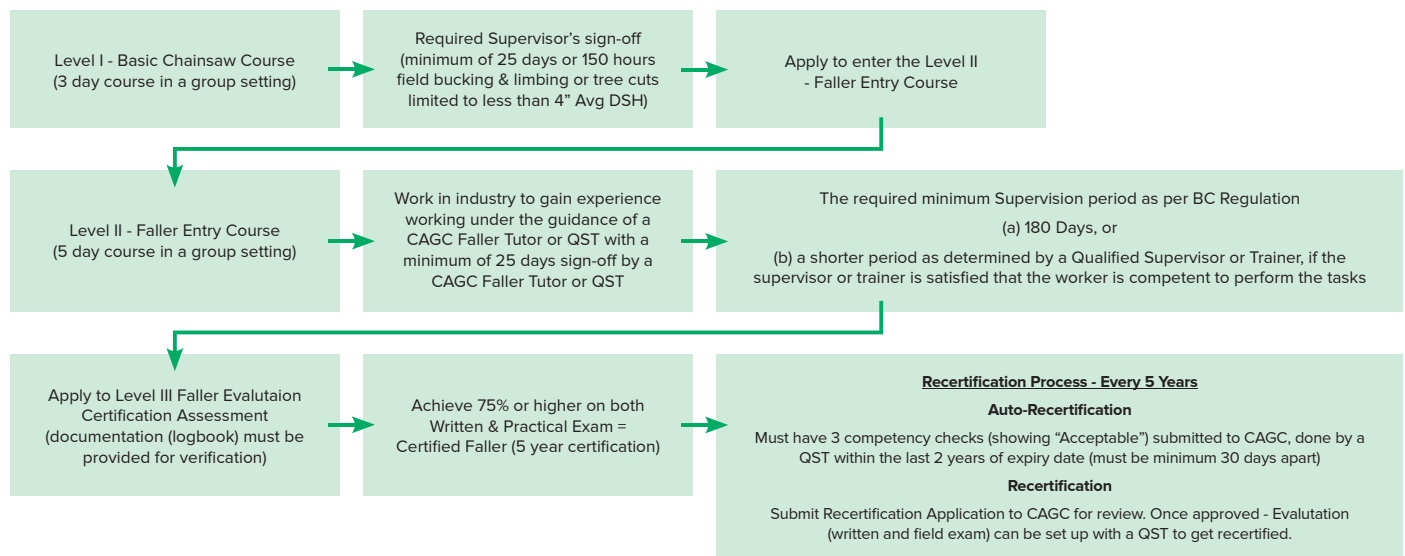
Approved administrators of the BC Faller Training Standard

As Administrators of the BC Faller Training Standard, the BC Wildfire Service (BCWS), the Canadian Association of Geophysical Contractors (CAGC) and the BC Forest Safety Council (BCFSC) have been approved by WorkSafeBC to provide faller training and certification to individuals wanting to become hand fallers. But each organization's faller program differs from the other which is causing some confusion throughout the industry.

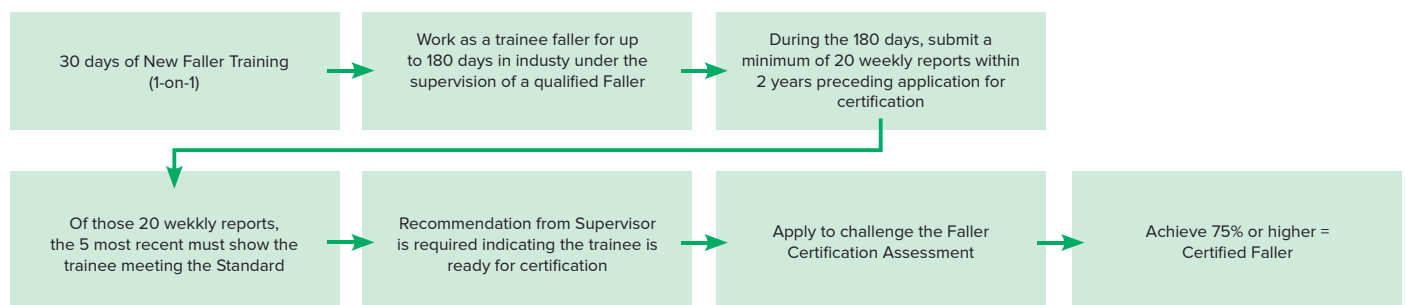
A Certified Faller with certification from any one of the three approved administrators is recognized by WorkSafeBC and permitted to work in British Columbia. However, it is the responsibility of the employer to deem the Certified Faller qualified for the work being performed. As per OHS Regulation Part 1: Definitions - **qualified** means "being knowledgeable of the work, the hazards involved and the means to control the hazards, by reason of education, training, experience or a combination thereof".

To help explain the difference between each approved Administrator's faller program, refer to the flow chart below:

Canadian Association of Geophysical Contractors



BC Forest Safety Council

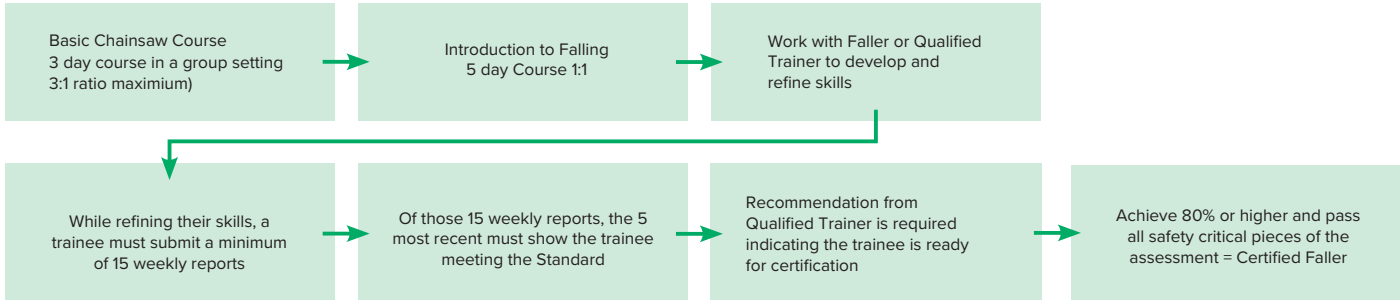


Please note: Once an individual begins training in one stream, they are not permitted to jump to a different stream, mid-training. For example, if an individual completes Level I and II with CAGC, they are not permitted to work under the guidance of a BCWS faller, working towards their certification. Rather, they must work with a CAGC Faller Tutor or QST as per the program requirements.

If you have additional questions regarding the training and certification process, please contact the relevant administrator. 📞

BC Wildfire Service

Note: In order to take training offered by BCWS, the individual taking the training must be an employee of the organization.



Please note: Once an individual begins training in one stream, they are not permitted to jump to a different stream, mid-training. For example, if an individual completes Level I and II with CAGC, they are not permitted to work under the guidance of a BCWS faller, working towards their certification. Rather, they must work with a CAGC Faller Tutor or QST as per the program requirements.

If you have additional questions regarding the training and certification process, please contact the relevant administrator. 📞



BC Forest Safety

New Faller Training – Nanaimo Lakes

The most recent New Faller Training (NFT) Course took place in Nanaimo Lakes from March 25 – April 26, 2021. Participants and trainers were required to complete COVID-19 self-assessments prior to attending the program and were also required to stay in their cohort until the course completion to ensure everyone stayed safe and healthy.

The BCFSC along with John Jacobsen, Lead Trainer of the NFT Program would like to thank Mosaic Forest Products for their continued support and understanding of the need for training in our industry, allowing our program to take place on their lands. Special thanks go out to Digger Pond and Chris Vukovic from Mosaic and to Don Bahen and Denny Pement from Coastline Fibre Ltd. who supplied the block for training.

There is an increased interest in the NFT program and the need for training sites is growing. The BCFSC relies on industry to supply these sites, ensuring that the NFT program continues and is successful. If there is interest in offering sites for the program, please reach out to Marla Guldbrandsen, BCFSC Manager, Falling Programs.



Left to right: Assistant Trainer – Wayne Miller, Trainees – Shea Hickmott-Pilatzke, Brodie Corrigan, and Lead Trainer – John Jacobsen

New Faller Training Site Specs

- Second growth blocks are ideal, usually offered from mechanical falling areas
- Slope up to 60% with portions allowed up to 70%
- Majority of the timber being “round and sound”
- A full course (four trainees) will require +/- 5000 m3 which can include a portion of a block, right of ways and/or multiple blocks
- Prescriptions required for the job will be followed as required, such as felled full length or fully manufactured to specs
- Will also train in old growth and can usually make most sites work

If there are any falling companies that also are interested in taking on successful participants from the NFT course, please reach out to the BCFSC for more information. 📞

Two Faller Fatalities in March 2021

It is with great sadness that the BCFSC Falling Department was notified of two faller deaths in the first two weeks of March.

While the incidents are still under investigation, the preliminary fatality alerts are available on our website.

Fatality Alert - March 1, 2021

A faller was fatally injured at a logging site near Gold River, BC.

Media coverage: [Chek News](#) | [CTV News](#)

Fatality Alert - March 15, 2021

A faller was fatally injured when he was struck by the top of a Hemlock danger tree at a logging site near Port McNeill, BC.

Media coverage: [Chek News](#) | [CTV News](#) | [Westerly News](#)

The BCFSC extends its sincere condolences to the families, friends and colleagues of the deceased and sympathies to all those affected by these falling incidents. In light of these

recent incidents, the BCFSC is gathering information through discussions with WorkSafeBC, fallers and licensees to determine how best to support industry. BCFSC will update information as investigations are completed and information is provided. 📞



Mobile Equipment/Pedestrian Proximity Research Project

The Manufacturing Advisory Group (MAG) is working with the BCFSC to conduct an assessment on some technological solutions to help reduce SIFp (Serious Incident Failure potential) incidents between mobile equipment and pedestrians in sawmills. Previous work has been done in this area but with emerging technologies like cameras and detection devices, MAG feels there are opportunities to develop more advanced controls for these SIFp activities.

MAG has identified some common forklift challenges in sawmills:

- Interacting regularly and in close proximity to pedestrians
- Unloading and loading of different contract drivers such as By-Products, logging and shipping trucks
- Frequent and close interaction with other pieces of mobile equipment
- Tightly congested work areas

BCFSC will be working with Brigade Electronics on this project. Brigade Electronics is considered a world leader in this technology with a proven track record of implementing practical technological solutions for employers to reduce potential SIFp events.

A six-week assessment will be conducted at Gorman Bros. Lumber, West Kelowna Sawmill to pilot and test these potential technological solutions. During this time, the BCFSC will work with Gorman Bros. to obtain feedback on the installation and operation of the equipment and will be gathering information on the effectiveness of the technology in improving the detection of a pedestrian in close proximity to a working forklift. The BCFSC is currently working on the evaluation criteria, surveys and resources required to conduct the six-week trial. The on-site activities are planned to commence in mid-May.

"From a Gorman Group perspective, trialing this line-of-sight and detection technology is the next logical step in preventing mobile equipment-related SIFp's. We've been grateful for the mobile equipment/pedestrian interface safety learnings we've previously gained and implemented from our MAG member peers and the BCFSC. We hope the outcomes of this project will build on our shared priority - the pursuit of driving serious safety risks out of our business" says David Murray, MAG committee Chair and Gorman Group Corporate Safety, HR & Environment Manager.

The following project deliverables were identified by the BCFSC and MAG to help support the sawmill industry:

- Identify appropriate technological solutions for sawmills to reduce Mobile Equipment/Pedestrian SIFp events
- Installation guidance for these technological solutions
- Installer training for technology implementation at worksites
- Operator and worker training on equipment use and identification of limitations (if any)
- Guidance for proper maintenance and inspection activities to ensure the equipment is functioning properly

BCFSC will take the outcomes and learnings and develop resources for industry to aid in the selection, installation and use of these technological solutions to help reduce Mobile Equipment/Pedestrian Interface SIFp events in sawmills. 🌱



Mark Your Calendar! New Pellet Safety Foundations Webinar Series

Dr. Fahimeh Yazdan Panah, Director of Research and Technical Development, WPAC

Safety is the foundation of our pellet industry. Our work around safety never ends; we are constantly striving for new ways to improve safety whether it be the equipment we use or the processes that support good, safe decision making.

To achieve this, we have to start with the basic foundations of pellet plant safety. That's why WPAC's safety committee in co-operation with WorkSafeBC, the University of British Columbia Biomass and Bioenergy Research Group, and our media partner Canadian Biomass Magazine are hosting the Safety Foundation Series. This six-part series, focused on Process Safety, has broad application across all sectors and is free and open to everyone. The first part in the series will launch May 18, 2021 at 10 a.m. Pacific; and new webinars will be released every two weeks after. You can find out more [here](#).

Immediately following each webinar, there will be a quiz that participants will need to successfully answer in order to pass the webinar and be issued a certificate. Those who successfully pass the six webinars, will be issued a certificate in Safety Foundation Course.

"We believe this type of training is a first for the pellet industry globally," said Scott Bax, Chief Operating Officer at Pinnacle Renewable Energy and Chair of WPAC's Safety Committee. "We've created the series based on what our committee has observed over the past seven years, choosing the areas where we feel we could have the biggest impact from a safety perspective."

The first two webinars will cover **Bow Tie analysis** which is a simple and effective tool for communicating risk assessment results in order to identify the links between the potential causes, preventative and mitigative controls and consequences of a major incident.

- Bow Tie Analysis Part I: Using Bow Tie Analysis to Assess Combustible Dust Hazards and Controls, Kayleigh Rayner Brown, Research Associate at Dalhousie University.

- Bow Tie Analysis Part II: Using Bow Tie Analysis for Critical Controls Management, Cherie Whelan, Director for SAFE Companies, and Bill Laturnus, Safety Advisor, BC Forest Safety Council.

The next two webinars are focused on **Human Machine Interface and Effective Use of Alarms**. Poor alarm management is one of the leading causes of unplanned downtime in process industries contributing to billions of dollars in lost production every year. This introductory principle-based webinar will help participants to understand how the system should convey and facilitate accurate and timely fault and diagnostic information to operators and support effective plant management. The webinars will encourage attendees to think about how their control systems could be optimized for efficiency, safety and operator detection and decision making.

- Human-Machine Interface (HMI) Part I: Situation Awareness and Effective Alarm and HMI Design Practices, Jenny Coleman, Human Factors Investigator, WorkSafeBC, and Charles Bloom, Senior Partner and Jamie Errington, Senior Partner, Human Centered Solutions.
- Human-Machine Interface (HMI) Part II: A journey to improved situational awareness, Jenny Coleman, Human

Factors Investigator, WorkSafeBC, and Brian Grantham, Pulp Manager, West Fraser.

The final two webinars in this series will discuss **Best Practices for Managing the Major Safety Hazards** in wood pellet manufacturing including wood pellet off-gassing, self-heating and silo fires, and combustible dust and gas management. Self-heating, off-gassing and dust/gas explosions are significant challenges for the industry that have already resulted in significant losses of capital investments and tragic loss of life. With the growth of the bioenergy sector, it is important not only that opportunities for bioenergy are implemented in an efficient and economic manner, but also safely.

- Safe Handling and Storage of Biomass Part I: Off-gassing, self-heating and silo fires, Fahimeh Yazdan Panah, Director of Research and Technical Development at Wood Pellet Association of Canada.
- Safe Handling and Storage of Biomass Part II: Combustible dust and combustible gas, Jeff Mycroft, Regional Sales Manager, Fike Canada.

Each webinar is one hour and open to everyone including operating personnel at every level of the pellet plant, supervisors, senior management, control operators, other industry participants, equipment suppliers, and safety professionals. We encourage you to share the news about this new webinar series with your colleagues across industry. You can read more by visiting our [website](#).

For more information, contact:

Fahimeh Yazdan Panah
Director of Research and Technical Development
Wood Pellet Association of Canada
fahimeh@pellet.org 



SAFETY FOUNDATION WEBINAR SERIES

Complete & pass this 6-part Webinar Series to receive the **Safety Foundation Course** certificate.

The graphic features a background image of two workers in safety gear (hard hats, high-visibility vests) looking at a large tablet or screen on a wooden surface. The text is overlaid on the left side of the image.



Despite significant safety advancements in the pellet industry, the potential remains for pellet plants to experience major unwanted events (MUEs) such as explosions fires and fatal accidents, that are hard to prevent by traditional approaches to safety.

The Wood Pellet Association of Canada (WPAC) and the British Columbia Forest Safety Council (BCFSC) have partnered to pursue a process known as Critical Control Management (CCM) that already is or will be underway at every WPAC member plant in 2021.

“Critical Control Management will help companies understand their equipment better; employees will be able to operate and maintain the equipment safely and improve its reliability; and plant managers will know what activities are most important.”

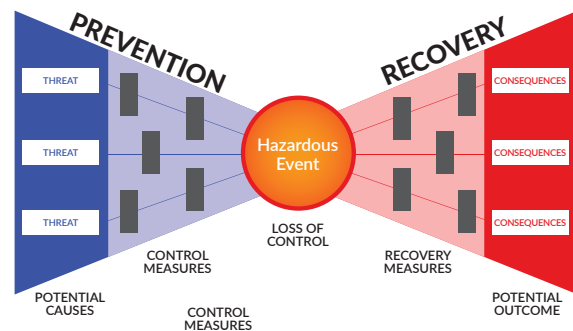
– Gord Murray,
Executive Director, WPAC

HOW DOES CCM WORK?

Plant operators identify potential MUEs or “Top Events” – like fires and explosions – each one of these Top Events forms the centre of a bow tie. All plausible accident scenarios that could exist around each MUE are considered and then critical controls that would prevent the Top Event are identified.

This approach relies on the Swiss Cheese Model where each slice of swiss cheese has holes and each hole represents a potential safety weakness. But when you layer the slices together, the holes don't line up, they create a collective barrier to safety weaknesses. This is the essence of CCM.

CCM is already widely used in mining, chemical, and oil and gas industries around the world, but it's new to the wood pellet industry.



“The bow tie is a great tool because it gives everyone involved a better understanding of how they need to work together to prevent an incident. We can now manage multiple layers of controls into a single process resulting in better safety at every level.”

– Cherie Whelan, BCFSC's director
for SAFE Companies

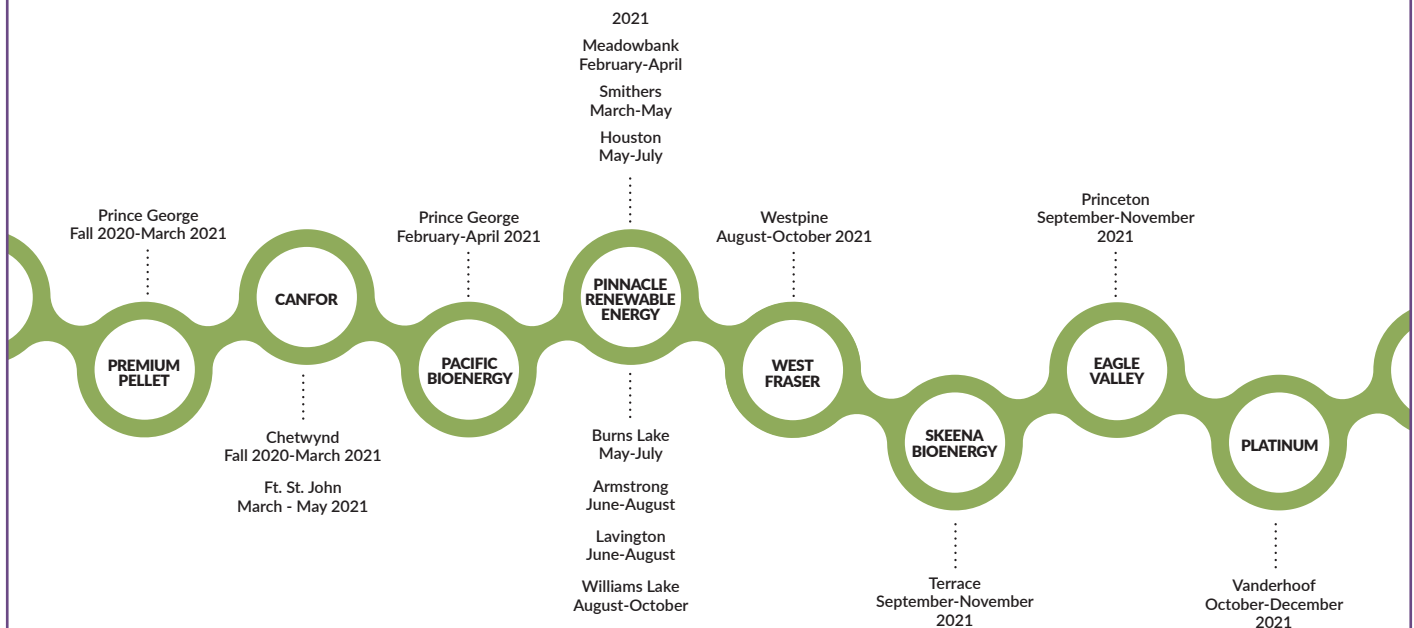
CCM COMING TO YOUR PLANT SOON

The CCM committee, comprised of representatives from WPAC, BCFSC and Dalhousie University, have developed an implementation schedule with the goal of completing bow ties and critical controls to WorkSafeBC by late 2021. In 2021, the primary focus is on potential fires and explosions.

BCFSC Safety Advisors, Bill Laturnus and Tyler Bartels are providing on-site and online support to all 15 operations. They will provide education, training and mentoring in the necessary knowledge and skills required to identify the

site-specific critical controls. Further support will help the operations develop their internal systems to effectively manage these critical controls to ensure they operate 100% of the time.

WorkSafeBC is also funding a Dalhousie University Department of Process Engineering and Applied Science research project that will build on this work and transfer this knowledge to employees and employers throughout the wood pellet industry across Canada and internationally.



COMMITMENT TO SAFETY

British Columbia's wood pellet producers are devoted to running safe operations. In 2014, the Wood Pellet Association of Canada established the WPAC safety committee as a forum for industry participants to share knowledge and to work collectively on solving common safety concerns.

FOR MORE INFORMATION

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BC Forest Safety
Safety is good business



DALHOUSIE UNIVERSITY



Article submitted from Canadian BioMass Magazine

Achieving a safety culture amid a pandemic

By Gordon Murray, WPAC



Every day, WPAC members and their employees work tirelessly to ensure leading safety practices are implemented and embraced. We know we will be measured by our collective efforts as an industry. Our reputation and the trust of regulators, the general public and the families of our employees depend on this. That we achieved this and more in 2020 was no small feat in the context of a global pandemic.

With the support of our partner, the BC Forest Safety Council (BCFSC), and the commitment of our members from the boardrooms to the plants across Canada, we were able to overcome the challenges of not being able to meet face to face. It meant long, virtual web conferencing, technical glitches and it required at times more patience and perseverance than most have with technology on the best of days.

We entered 2020, with ambitious goals, and we're proud to say that we met most of them and continue to progress several others. Perhaps the one that stands out is an initiative we undertook with BCFSC in collaboration with WorkSafeBC.

After some research, and with guidance and prompting from WorkSafeBC, WPAC's safety committee decided to pursue a process known as Critical Control Management (CCM) which starts with a procedure known as bowtie analysis. We now have all 14 of our member plants and one MDF facility clamoring to be the first to implement it. Together, WPAC and BCFSC, in conjunction with the industry, have developed an implementation schedule with the goal of completing bowties and critical controls to WorkSafeBC by late 2021.

The initiative also caught the eye of university researchers. WorkSafeBC is funding a Dalhousie University Department of Process Engineering and Applied Science research project that will facilitate knowledge and transfer of this work across the wood pellet industry in Canada and internationally.

That same year, our safety committee decided to produce an educational video to help operators minimize the risks associated with syngas. Several partners quickly stepped up with technical and financial support. These include the University of British Columbia Biomass and Bioenergy Research Group, BC Forest Safety Council, Bio Mass Canada Cluster, and Agriculture and AgriFood Canada. This group has now released the seven-minute video Best Practices in Managing Combustible Gas which describes how and where combustible gas will accumulate during the pellet manufacturing process and gives recommendations for reducing risk.

In addition, WPAC, in co-operation with the BC Forest Safety Council, WorkSafeBC and media partner Canadian Biomass, held the Belt Dryer Safety Symposium. The purpose of the symposium was to share the learnings from these incidents and for individual operators to share in-house safe operating procedures with their industry colleagues. There were more than 70 participants and, at the end of the event, they agreed to form a Belt Dryer Working Group to review past incidents and lessons learned for safer uses of belt dryers in our industry.

That brings us to 2021. WPAC's safety committee, which is responsible for developing and communicating strategies for continuous improvement has released its 2021 safety work plan with a focus on:

1. Critical Control Implementation

Complete Bowties and critical controls to WorkSafe BC by end of 2021.

2. Improving Belt Dryer Safety

Establish a working group to develop safer operating procedures.

3. Equipment Isolation

In cooperation with Dalhousie University, prepare white paper and host a symposium on best practices.

4. Plant Operator Training and Use of Alarms

With BCFSC, complement development of the basic plant operator competency assessment and host webinars.

5. Local Nitrogen Supply Initiative

Complete and share information on stationary and mobile nitrogen systems, as well as recommendations for effective emergency response in case of self-heating and silo fire.

6. Training and Supervision of Workers

Complete and rollout Safety Foundation series videos and webinars.

7. Incident Reporting

Evaluate how we report in collect, track and report incident data.

8. Communications


Continue to hold monthly Safety Committee calls, host webinars and distribute communications that promote and foster a safety culture across the industry.

While these may feel like uncertain times, one thing we can be sure about is that safety will remain our foremost priority. We also know that our success will be determined by our partnerships, by listening to our members and their workers, and communicating effectively every day.

The 2021 Work Plan is available [here](#).

WPAC's safety committee works in close cooperation with WorkSafeBC and the BC Forest Safety Council. The committee welcomes new members. If you are interested, please contact Scott Bax or Gordon Murray:

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Tel: (604) 787-3176

Gordon Murray, Safety Committee Secretary
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What's all the fuss about Fitness

By Dr. Delia Roberts

The condition of being physically fit and healthy can mean quite different things to different people, especially when you add on the idea of being fit to work. What is a given, is that of all the various treatments and approaches, the one that has been consistently proven to improve health, performance, well-being and quality of life is physical fitness. Yes, this one simple thing will not only improve your endurance, strength and agility, it also helps with everything from the inside of your blood vessels to the function of your white blood cells to your sex life. This isn't surprising when you consider that our bodies' evolved to do physical work. Before the invention of machines the physical labour that was needed to survive was more than enough to keep our bodies strong. But nowadays many of us spend long periods of time at a desk, or in a vehicle or machine – and without hard physical work, we lose the capacity to generate force, utilize fuels, transport nutrients and wastes, and repair damaged tissues. In short, we cease to function well.

So we know that we need some level of physical activity to provide good health and well being, but what about performance? Here's where things start to get complicated, because once again, performance means different things to different folks. At one end, you have jobs like tree planting, where a third of the planter's body weight is carried 15 km or more over difficult terrain, and you have to get those trees in the ground fast if you want to make money. Compare that to the other extreme, where a log hauler sits in their machine all day, but repeats the same arm and leg movements thousands of times – and has to have the focus and reactions of a professional hockey player in order to keep more than 60,000 kg moving safely down the

road. In between, you might have an engineer whose daily job is desk-work, but then has to hike up through steep slash to lay out a block. In each of these situations, the risk of injury is high if the physical capacity to do the work is less than what is needed to get the job done. And the greater the physical reserve, the more energy there will be to do the job well, stay alert, and enjoy the rest of the day outside of work.

But just 'getting fit' isn't a simple task. If it were, we would all be able to maintain the level of fitness that we want. The reality is that it's difficult to know how to build and maintain physical fitness between work, family and other responsibilities. None of us have a lot of extra money or time, and with the multi-billion dollar fitness industry trying to sell you the latest trend it's hard to know what is marketing and what is for real. So here's a quick guide to help you find a good fitness program that will not only meet your health and performance goals, it will fit your lifestyle so that you can make it a permanent change.

Your first step towards fitness is to ensure that there aren't any safety concerns. If you haven't been exercising, have any kind of pre-existing medical condition, a family history of disease, or have suffered a previous musculoskeletal (MSK) injury, consult your primary health care provider to determine if there are any health risks that an exercise program might cause problems with.

Next, choose your current activity category:

Sedentary – This is you if you get less than 30 minutes of moderately intense physical activity (where your breathing is deep enough that you have to pause for a breath while carrying on a

conversation) per day or a total of 150 minutes per week. Your goal will be to build up to this basic level of fitness and reap the many health and wellness benefits that will result.

Intermittent exerciser - This is you if your work and lifestyle are mostly sedentary but you occasionally have to do hard physical work. Also known as the weekend warrior, most days/weeks you do not meet the basic level of physical activity required for health, but sometimes because of work, projects at home or sports activities you do go hard. You have a high risk of injury because your systems are not accustomed to hard work, and yet the demands you place on your body require you to generate a fair bit of strength, power and/or endurance.

Seasonal - Your activity level is quite low for most of the year, but you engage in physically demanding work and/or other activities during certain seasons of the year. Often people in this category rely on the first few weeks of the activity or work to generate the fitness that they need to get the job done, which means that at the start of their season their fatigue levels and risk of injury are very high. It's hard for your body to respond and build capacity when all your energy is going to getting through the day, so unless you have at least three to six weeks of slowly ramping up your activity level, this is not likely to give you a successful season.

Sustained – You work hard every day, far exceeding the minimum activity level required for health. Your needs are for recovery tools, to help your body cope with the cumulative stress of hard physical work, long days, and managing all the other stresses in your life.

Continued on page 23...

Continued from page 22...

Each of these four categories requires quite a different approach to building and sustaining good physical fitness habits, but here's where to look for some evidence-based information for each of them. These programs are all part of the Fit to Work series, designed specifically for folks working in the forestry industry.

Sedentary. The most important aspects of any program that you choose is that you enjoy it and it fits into your lifestyle. Since you haven't previously been exercising, your goal is to get moving, and build gradually - which you are far more likely to do if it is already part of your day and you enjoy doing it. The Fit to Drive program will explain what kinds of activities will be helpful, how to incorporate them into your day, how much you should be doing, and how to stay motivated when you don't want to do your workout. The program is free and can be found on the BCFSC website starting on page 81 of the [Power Driving Manual](#).

Intermittent Exerciser. Since your bouts of physical activity only take place every now and then, it's not likely that they are enough for you to build and maintain the physical fitness you need to get your job done safely and well. This means that like those at the Sedentary level, you will want to find activities that fit into your lifestyle on a regular basis so that you will stick with your program and maintain your fitness throughout the year. The [Fit to Log](#) program is available on the BCFSC website free of charge, and includes sections on building and maintaining fitness. Beginning on page 97, you will find specific exercises for your back, knees, shoulders and neck, which can be helpful if you have had a previous injury or the demands of your activity stress a particular joint. Pages 129-138 explain how to build endurance capacity quickly, with two different levels of a six-week program. For those starting from the Sedentary level, basic programs can be found starting on page 151, and motivational help on page 163.

Seasonal. Summer forestry jobs can often be very physically demanding, so if you want to make money and not



get hurt, it's a good idea to come into the job with a good level of fitness. Depending on how much time you have to do this, and the specific needs of the job you will also find some good resources on the BCFSC website. The Fit to Plant program offers a free, planting specific eight-week program, or if you are short on time, try the [10-day Desperate Planter's Last Chance](#) to build some fitness in a hurry. If your summer forestry job isn't tree-planting you likely won't need the same level of preparation for your arms, so the two levels of programs provided in the Fit to Log manual described in the Intermittent section above are a good place to start.

Sustained. You work hard, all day every day, which takes a toll on your muscles and joints. Energy management and recovery strategies can go a long way to ensuring that you have a long and productive career. Check out the resources in the Fit to Log program, provided free of charge on the BCFSC website. The Power Eating section that begins on page 7 explains how to make sure that your body has enough of the right fuel to perform well day after day. This can help keep you strong and reduce fatigue on a daily basis. Specific joint exercise found on pages 103-125 can help lower any pain from previous injuries and help you maintain your posture and muscle strength. Lastly, the section on stretching (pages

139-148) will show you how to use even a small amount of stretching to relax tired muscles at the end of the day.

Fitness is a lifelong goal, one that can provide you (and your family) with good physical and mental health, reduce pain and fatigue and increase well-being. It takes time and effort, but for every bit of energy you put into it, the rewards are tremendous. People who exercise regularly have lowered rates of pretty much every disease, from heart problems, to diabetes, to cancer and even depression. It's a positive change for yourself and your family that you can make today, without special equipment or money. Just put on a pair of good shoes, grab a friend and head out the door for a brisk walk. Each step you take is one toward a longer and better life. 🌱

New Healthy Worker Resources

The Healthy Worker Series of crew talks, posters and backgrounders was created to help forestry workers and supervisors talk about common health challenges and ways to become healthier.

The latest resources on obesity and mental health have recently been added to the [BCFSC Healthy Worker Series](#). 🌱



Colouring Contest

Thanks to everyone who entered our March colouring contest. **Congratulations to Kieran, age 4**, whose name was picked from our random draw. Kieran wins the DRIVEN Toy Logging Truck and we will be sending a special gift to everyone else just for entering!

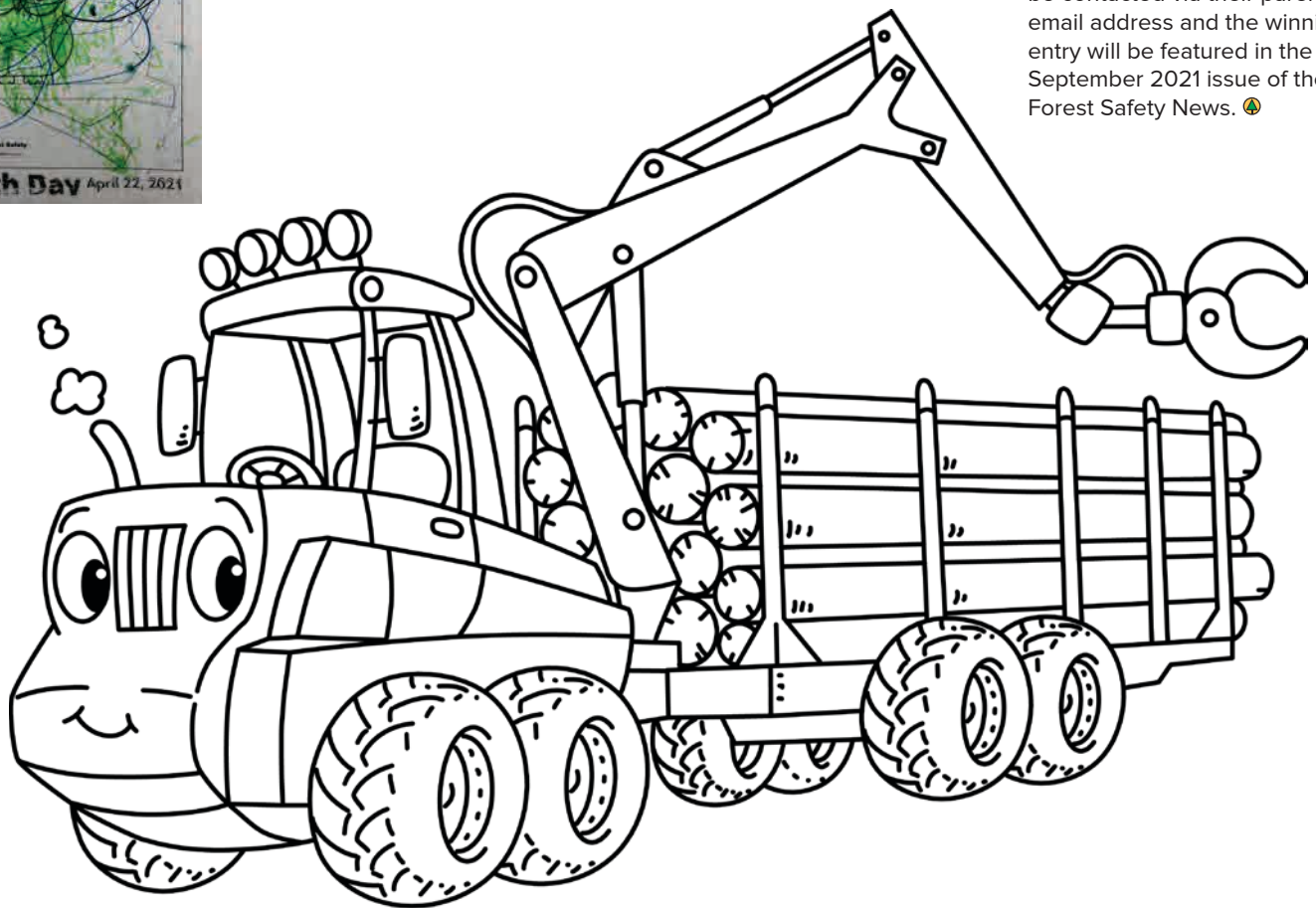


For our June issue, send us a picture of your artwork and enter to win another of our DRIVEN Toy Logging Trucks complete with a crane arm and logs. Have your mom or dad, grandma or grandpa or guardian email us a photo of your artwork with your first name and age and we'll put your name into the draw.



How to Enter:

- Colour the Forwarder or make your very own drawing.
- Have an adult take a picture of your artwork and email it with your name, age and your mom/dad's email address to editor@bcforestsafesafe.org
- Submit your entry by 4pm, Friday, July 30, 2021.
- Kids aged 3 – 12 are eligible.
- All entries will be put into a random draw to win the toy logging truck. The winner will be contacted via their parent's email address and the winning entry will be featured in the September 2021 issue of the Forest Safety News. 🌲



ABOUT Forest Safety News

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