



Entry Level Forest Worker Training Update

In the March 2020 issue of Forest Safety News, BCFSC featured an article about *Entry Level Forest Worker Training*, a project funded by Province of British Columbia Ministry of Advanced Education, Skills and Training Sector Partnerships Program.

Since then, amid the COVID-19 pandemic, our world has changed. All universities and colleges across BC and Canada shut down for in-person classes affecting tens of thousands of students, including those in Selkirk College's Entry Level Forest Worker Program and creating uncertainty around future post-secondary programs.

As post-secondary pandemic planning continues, the Ministry of Advanced Education, Skills and Training is working closely with all 25 public post-secondary institutions in BC to support their planning for the 2020/2021 academic year. Some of the strategies they are currently developing include:

- The post-secondary sector is developing broad health and safety guidelines.
- Once guidelines are set, each institution will develop individual plans for program delivery which consider the health and well-being of students, staff and faculty.

Many institutions have decided to continue with mostly online course delivery this fall, with hands-on, experiential training where required while practicing physical distancing. Returning and prospective students are encouraged to visit their post-secondary institutions' website for the latest information. Regarding the Entry Level Forest Worker Program, the following are being considered.

Program Update:

- Revelstoke (Okanagan College) – program completed January 2020.
- Grand Forks (Selkirk College) - paused classroom deliveries due to COVID-19 in March 2020. Information will be available once further options are considered.

Funding is available 2020-2021 to deliver pilot programs at the following post-secondary institutions:

- Vanderhoof (College of New Caledonia).
- Terrace (Coast Mountain College).

Vancouver Island University and North Island College, who are also members of the steering committee guiding this project, have similar programs. At time of publication, Vancouver Island is planning for a 2021 delivery in Woss, BC and North Island College is planning to start October 5, 2020 in Campbell River.

Steering Committee member Jim Magowan, Interfor, Adams Lake highlighted the forest industry is a key sector of the British Columbia economy and it is deemed an essential service during the COVID-19 pandemic response. This entry level training program is critical for the industry's continued contribution to the health and welfare of British Columbians.

BCFSC CEO Rob Moonen comments "This project is a fantastic opportunity to develop and test forestry learning and assessment materials for new workers", adding "this initiative relies heavily on active employer participation and feedback in multiple parts of the project."

To help support this training program, or if you are a potential student looking for information about this funded opportunity, contact any of the post-secondary institutions offering this training directly to find out more.

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

Learn more about the Entry Level Forest Worker Training Program, visit www.bcforestsafesafe.org/files/fsn_2020Mar_Training.pdf.



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

A&G Reforestation Pilots Resource Road Light Truck Assessment Materials

When Sara Keay, Operations Coordinator at A&G Reforestation in Squamish, BC, heard about the work industry members have been doing to develop worker training and assessment materials while she attended our BCFSC Forest Supervisor course, she volunteered to pilot new assessment materials for Resource Road Light Truck driving.

Despite challenges with COVID-19 restrictions this past spring, A&G used the existing assessment materials from the supervisor course and adapted them to their needs to assess the knowledge and skills of 10 A&G drivers. Sara noted A&G has always had solid worker training and assessment practices in place, but the new materials she adapted provided a way for A&G drivers to demonstrate more

depth. For example, those with very basic knowledge know that four-wheel drive (4WD) should be engaged when driving on a resource road. For those with more advanced and practical knowledge, they can illustrate the difference between the two traction modes and expand on why they are important. The competency evaluation allowed for a deeper conversation about high vs. low traction, muddy road conditions, etc.

The competency evaluation is a great tool for indicating where a driver sits on the spectrum of knowledge, skills and attributes. And the assessment summary is great for building gap training programs to address weakness areas and determine where to focus efforts to improve and enhance future training.

“With the additional tools,” says Sara “the driver assessments are now easier for crew leaders to use as the assessment data is captured and tracked using iPads. Information is then summarized for the owners for record keeping and enhancing training plans for A&G workers.”

Through this pilot project, Sara was able to provide valuable feedback to improve the BCFSC course materials. She indicated that overall, these materials hit the mark and A&G plans to continue to use them for future knowledge and skills assessments.

If you are an employer who would like to use these materials, contact Allison Thompson, Manager, Training and Standards at thompson@bcforestsafesafe.org for more information. 📧



Safe Re-start of Classroom Training

By Allison Thompson,
BCFSC Manager Training and Standards

In mid-March, BCFSC paused in-class training in response to COVID-19 to help reduce the risk of possible exposure. Since then, we have worked diligently with our course trainers and venue providers to develop enhanced safety protocols to return to in-class training. Our first classroom session resumed July 25, 2020.

To ensure our client's and trainer's safety, we established basic precautions such as physical distancing, hand washing procedures, surface sanitizing and health checks encouraging people to stay home when sick. We also created a flexible refund policy.

The new world of training during a pandemic has resulted in some adjustments to our schedule and venues to meet our strict requirements. As we move forward into more regularly scheduled classroom training, behind the scenes, BCFSC staff is working session-by-session to ensure our venues have solid COVID-19 Safety Plans in place and our trainers, who are safety professionals, are comfortable with all the required provisions. These plans are also shared with our participants when they enroll in classroom courses.

So far, we have delivered two in-class sessions as part of our restart phase. Our Basic Supervisor and Falling Supervisor courses were delivered over the summer. Our Basic Supervisor Training instructor in Campbell River, delivered our first session



after the pause and was pleased with the venue's COVID-19 safety measures and noted the venue provide sufficient room to ensure physical distancing amongst participants. As part of the new procedures, the instructor provided a daily orientation overview on COVID-19 protocols and Provincial Health Guidelines before starting the training demonstrating best practices from other BCFSC training.

As we move forward, we will continue to monitor each classroom delivery and adjust plans accordingly. We are also currently working on adapting some training courses to offer more virtual and online options where possible. Check out our [upcoming courses and training schedule](#) or contact us directly if you have any questions at training@bcforestsafesafe.org or call 1-877-741-1060. 📞



Winter Driving

by Chris Walker, Overlanding BC



It won't be long before winter is upon us again, creating often-challenging driving and road conditions. In this article, we'll share some tips for driving in these conditions, dispel a few myths and remind everyone of some ways to safely negotiate while driving resource roads and highways.

Winter driving requires the same safety attitude as it does when driving in any other season. Right from the outset, it's important to approach any driving activity in a methodical and considered manner following safe operating protocols set out by your company and WorkSafeBC. As a driver, you need to take responsibility for your vehicle, its occupants, its load, other road users and the environment - no matter the driving task or season.

Winter brings unique challenges including cold temperatures, fewer daylight hours, more challenging conditions for the vehicle's mechanics, less traction, longer stopping distances, less distance travelled due to slower speeds, equipment requirements such as chains and so on. These challenges are not the only limits to winter driving but should be highly considered as we approach the winter season.

Preparation

There are several considerations to take into account when preparing for winter driving. Not only should vehicles be equipped and ready to handle winter conditions, but companies and individuals should also prepare themselves. Winter brings fewer daylight hours and often that means vehicles are operating in reduced visibility with poor, dark conditions. This can lead to greater fatigue which ultimately can affect the safety of the driver, other road users and impact production efficiency. A good safety culture and operational planning will take adverse conditions, like reduced daylight hours, into consideration providing more time for journeys and operations with the aim of reducing fatigue and the stress of trying to maintain targets that may be challenging during winter conditions.

Preparation Tips: Ensure your vehicle is properly equipped for winter conditions which will vary depending on your location. Consider the following:

- Correct temperature-rated oils, fuels, lubricants, coolants, fluids and windshield washes
- Supply of de-icers and windshield scrapers
- Cleaning supplies for lights, windows and licence plates
- Winter emergency supplies such as water, food, blankets, etc. for more remote journeys
- More scheduled oil changes and vehicle service maintenance
- Correct winter tires
- Correct size chains and traction aids
- Good working battery

Safety

When operating in remote locations, especially in winter, it is worth considering the risk factor and whether a journey is necessary at that moment. Before you go, ask these questions:

- What is the weather forecast?
- How are the road conditions?
- What are avalanche conditions?
- Have the roads been plowed / maintained?
- What is the driver's experience level for the conditions ahead?
- Should the driver travel alone?
- Should we send two drivers?
- Can the load be lighter?

Many operations that work in mountainous winter conditions enact protocols for lone drivers that require shorter check-in durations, GPS tracking, further driver training, a higher degree of experience, satellite communications, cold weather gear and equipment, etc. These safety protocols ensure workers are as safe as possible during the journey and during work operations occurring in more exposed weather conditions such as cold temperatures and snow fall. The environment workers are being placed into should be a vital consideration and adapting plans and operational procedures will assist in keeping them safe on their journey. The reality is, if environmental conditions make it harder for workers or an

operation to travel, it also makes it harder for Emergency Transport Vehicles and other rescue services to travel as well.

Tires & Traction

Using the correct seasonal tires is extremely important. When winter conditions are upon us, vehicles should be equipped to handle driving conditions. Using winter tires or studded tires/chains is imperative. Regular all-season, mud-terrains and all-terrains are not specifically designed to operate in colder conditions, typically below 7 Celsius. The compounds in these tires have far less ability to provide traction on colder surfaces; they stiffen and have less capability to mold to the ground and provide the traction needed. When considering the weight distribution of the entire vehicle is spread amongst four contact patches (the part of the rubber contacting the ground), there is actually very little surface area for the vehicle to gain traction and control. The rubber compounds in winter tires are built for colder temperatures and more difficult road conditions and it is important to use the correct ones. Consider this data: at 30km/h a winter tire will stop 6m shorter on loose snow and 9m shorter on ice than non-winter specific tires. Those numbers increase exponentially with speed. Studded tires can be a great solution but are more suited to compact snow, iced snow and ice.

Tire chains are one of the best solutions in industry and for those travelling regularly in winter conditions. They do come with challenges though and good training in tire chaining is essential for safety. When it comes to chains, consider the following:

- V-bar ladder-style chains often seem to be the best, most durable and most effective. However, they are heavy and more expensive.
- Four is better than two and frankly a must. If you only have two, consider where you should put them – on the rear for climbing hill (for drive traction)? on

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the front descending (to aid steering and braking)? The challenge of making that choice is that terrain always changes and by not having four chains, or only using two, there may be loss of traction when you need it most. For example, chains on the front tires will cause the rear of the vehicle to break traction and spin around, fast. Two chains on the rear tires can greatly reduce steering and stopping distances.

- Ensure the chains are the correct size for your tires.
- Ensure chains are installed correctly. Secure extra chain and ensure there is no conflict with brake lines, axles, wheel speed sensors and so on.
- When driving with chains, drive slower and don't manoeuvre as tightly or at least try and have the vehicle moving slowly when steering.

Driving

In winter driving, conditions change quickly and we need to adapt our driving style to suit them. A key aspect in adapting to winter conditions is driving slower than we normally do. Levels of traction can change very quickly, our stopping distances are increased and our ability to react in an emergency situation can be dramatically affected. As a driver, we need look even further ahead, braking sooner when negotiating the roadway, being smoother and gentler on applying the brakes and throttle to avoid any kind of wheel spin or slide. It is good technique to slow the vehicle down well before entering a corner so the weight of the vehicle is distributed more evenly across the four tires, giving it more overall traction. Braking in a corner loads the front tires with more weight, which means a greater chance of traction loss and control in winter conditions. The same can be said with accelerating. Wait until you are clear of the corner to avoid tire spin and oversteering/understeering.

Roadway positioning is an important consideration while driving in winter conditions. Think about the camber / pitch of a road and where your vehicle might deviate in poorer conditions. When travelling straight, the flatter the vehicle the better, and on a corner, a little correct (not adverse) camber can help negotiate the corner.

Other road users are also important to think about while travelling. Evaluate oncoming vehicles, the vehicles in front and behind you and at intersections and

act appropriately to give them space as necessary and to allow them to stop and negotiate terrain in relation to their size and weight.

Four Wheel Drive & Traction Control / ABS & Other Aids

The conversation around using four-wheel drive or staying in two-wheel drive is very common. In a nutshell, any time you are travelling on a surface with lower traction, you should have your vehicle in four-wheel drive. High or low range depends on how steep or complex the terrain is. Low range is for deep snow, steep terrain and where you require greater control allowed by the lower speeds in low range. There is a common misconception that four-wheel drive is tough on the vehicle and doesn't allow as much control. Modern vehicles are designed to operate in four-wheel drive in all conditions, at most speeds, other than on good traction surfaces such as pavement. The modern drivetrain is built to handle these conditions. By using four-wheel drive, you have all four tires providing traction to propel you AND more importantly, four wheels slowing you when using the transmission correctly to slow you down or descend grades. Another misconception is that Traction Control and ABS (Anti-Lock Braking System) are not good systems. To the contrary, they will far outperform any human in terms of dynamics and effectiveness when propelling or slowing a vehicle. Traction Control is a system designed to redistribute drive torque to tires with better traction than those that maybe starting to spin. When you have mastered its use in your vehicle, it is a brilliant tool. ABS will slow you far faster than cadence or on/off (pumping) braking manipulated by your foot. ABS actually achieves the same outcome but at a far faster rate, and as modern vehicle technology improves, so do these systems. ABS essentially ease up on individual brakes if it senses loss of traction, allowing the tire to rotate again and regain traction before re-applying brake force. This happens hundreds of times a second. ABS can also assist with steering under heavy braking by modulating brake force across each brake independently depending on steering direction input.

One important feature that many light trucks and four-wheel drive vehicles are equipped with is a locking differential. This mechanical device, usually locking the rear axle as one, can allow for more traction.

However, it is important to understand and use this only in straight lines, in deep rough terrain and only when needed, and PRIOR to the moment you might need it. Driving with the differential locked on a winter road as a matter of common procedure can be very dangerous as it dramatically reduces steering capability in low traction environments. Only use it when needed!

Hazards

Winter driving and summer driving have similar hazards but with their own characteristics that need to be managed. Such hazards may include, but are not limited to:

- Terrain, camber, steep hill grades, reduced sight line distance from snow encased trees or full foliage trees
- Frost lines in corners / shadows
- Low sun level causing potential blinding
- Avalanche or slide paths
- Sudden warming, run off, softening of road surface, pooling of water
- Blinding from oncoming lights and glare of snow / ice
- Lack of visibility in snowstorms, snow or flying debris, or dust clouds behind vehicles
- Less traction, longer stopping distances
- Less experienced road users
- Debris falling from other vehicles (ice accumulation or mud on mud flaps, etc.)

Other Considerations

Whenever you drive, an important reminder is to ensure pre & post-trip vehicle inspections are thorough and should include any additional equipment and/or supplies necessary for winter driving conditions or any conditions with challenging conditions.

Take into consideration the load you are transporting. If conditions are severely adverse, distribute the load across more units to lighten it which will allow for shorter stopping distances and more chance of success on variable grades.

Lastly, as with any skill, good driver education and prior planning is recommended for a successful trip.

Learn more about the [Resource Road Light Truck Driver Program](#) or visit the BCFCSC website for more information on [Winter Driving](#). 🚗