



Talking about glading ...

By David Adshead, Falling Safety Advisor, who has visited active glading sites near Golden and Revelstoke



Following the previous edition of Forest Safety News, we received a number of phone calls from fallers and other readers wanting to find out more about the practice, as well as trap trees.

We asked Falling Safety Advisor, David Adshead, to share his responses here for everyone's benefit.

Where does the term, glading, come from?

I hope to shed light on some of the questions around glading, which leads me to the definition of Glade; "an open space in a forest" with origins from old Norse (glaor) and Middle English (glode) "bright space in a wood".

What is the definition of glading?

Glading is an alpine skiing term for skiing through trees off trail. The activity of glading is the enhancement of skiing lines through forested areas on ski hills and back country tenures.

Glade skiing is popular for several reasons. Forested areas reduce exposure to the avalanche hazards of open areas, are typically lower in elevation and are in a separate risk and avalanche rating than above tree line slopes.

Skiing in the trees is attractive because the snow conditions are often pristine since the forest shelters the snow from sun and wind. The trees are also better for low visibility conditions such as white out or heavy snowfall. Many people also like the peaceful solitude and feeling of being in the trees rather than in wide open areas.

How do fallers go about glading?

The process of glading – creating or enhancing openings in the forest for ski lines – starts with identifying appropriate areas, planning the work and applying for a cutting permit, similar to other forestry operations.

Removing timber for glading comes with strict parameters regarding how much timber, type and size of timber and size of openings. Crews tie natural openings or glades together to enhance the flow of a skiing line by targeting danger trees, low wildlife value dead trees, and some low value merchantable trees. The goal is to keep with the natural fall line while not creating straight lines down the slope that increase avalanche risk and lose the benefits of glade skiing. Factors considered include wildlife habitat values, terrain, forest density and access.

Fallers use natural openings or create openings to fall the targeted trees within the run boundaries. The felled trees typically are not harvested but are limbed and bucked to lay with the terrain. For smaller operations the faller will do the falling and bucking. For larger operations,

crews consist of Fallers, Buckers and Brushers. Fallers chose which trees to fall, fall them so the buckers can follow a safe distance behind to do the limbing and bucking. Brushers typically run brush saws and remove the underbrush and saplings in and around the natural "glades".

Natural glade skiing popularity led operators to develop a way to enhance tree skiing and open up an incredible amount of new terrain previously unavailable. Back country tenure operations and ski hill developers use glading to enhance the forested areas within their tenures to increase usable land and provide another popular type of ski or boarding experience.

Switching gears over to Trap Trees

Trap trees are used to help stop the spread of insect infestation in certain tree species. Healthy individual trees around an affected site are selected to be felled. The trees then produce a hormone which attracts the insects. The trees are left on the ground until close to the time the bugs develop into flying insects. The trees are then harvested along with any identified affected trees in the area.

The harvesting may be select or clear cut depending on the development plan. Quite often trap trees are done within a proposed cutblock and then harvested along with the rest of the cutblock.

The timing of using trap trees is crucial to stopping an infestation. Trees must be removed from the forest and processed prior to the insect's development into flying pests.

Trap tree falling is trees being felled in the standing timber, with all the risks that activity brings. Trap trees are often done pre-development so access is more restrictive. 🚧

Falling Technical Advisory Committee (FTAC) discusses hearing tests

A consistent OHSR cited for falling and bucking is around hearing tests – either initial or annual and lack thereof. And, compared to the construction industry where mobile clinics are funded to go to sites to carry out the tests for "free" as a result of an additional levy being built into construction CU rates, the question was posed by FTAC, why not a similar arrangement for all forestry occupations that arguably have high risk exposure for

all workers? It was recognized that some falling shows are so far off the beaten track, in-camp testing would be unlikely but at many points each year all forestry workers are close to larger centres. A good question that Rob Moonen, CEO of the BCFSC, will discuss further with WorkSafeBC to explore all the possibilities and related actual costs and implications, and report back to FTAC at their next meeting. 🚧

WorkSafeBC provided FTAC with updated inspection information

WorkSafeBC's Terry Anonson, Supervisor Prevention Field Services provided an update to the March 2019 meeting of the Falling Technical Advisory Committee (FTAC) and said there had been 485 annual falling and bucking High Risk Strategy inspections in 2018.

The top 5 OHSR Sections cited were:

- » OHSR 7.8(1)(b) – Hearing tests (every 12 months)
- » OHSR 26.22.1(2) – Falling supervisors for forestry operations
- » OHSR 26.2(2) – Planning and conducting a forestry operation
- » OHSR 26.24(5)(c) – Responsibility for falling and bucking (sufficient holding wood)
- » OHSR 7.8(1)(a) – Hearing tests (initial)

In the first few weeks of the new year, up till February 20, 2019, there had been 53 manual falling and bucking inspections completed. The planned inspections target number for the full 2019 calendar year will be similar to 2018, which was 414.

Top 5 OHSR Sections cited were:

- » OHSR 4.14(2) – Emergency procedures (exit routes)
- » OHSR 7.8(1)(b) – Hearing tests
- » OHSR 3.17(1) – First aid procedures (written procedures)
- » OHSR 3.16(1)(a) – Basic requirements (First aid)
- » OHSR 26.4(2) – Notice of project

The dedicated WorkSafeBC falling team had inspected 25 hand fallers in 2019 up till February 20, 2019 and the top 3 OHSR Sections cited were:

- » OHSR 26.24(5)(b) Responsibility for falling and bucking (undercut)

- » OHSR 26.22.1(2) Falling supervisors for forestry operations
- » OHSR 26.22.1(3) Falling supervisors for forestry operations

New conversation guide for officers in development on phase integration

Terry also shared a 2019 Forestry High Risk Strategy Enhancement related to phase integration. He, and WorkSafeBC colleagues, Darcy Moshenko, Industry Specialist Forestry, and Carole Savage, Occupational Safety Officer (OSO), had developed a draft document to help OSOs have consistent conversations on forestry worksites about phase integration, and the risks of phase congestion.

Draft terminology devised to consistently define phase integration and phase congestion

Phase Integration: A management model that incorporates the operation of more than one phase at the same time within a single operating area, creating a multi-phase worksite.

Phase Congestion: When poor integration of phases in a forestry operation creates risk to workers.

The reason why this topic is still a critical issue is that Phase Congestion:

- has resulted in serious injuries and fatalities
- is recognized as an industry wide problem, but
- not effectively addressed by industry

- relates to OHSR 26.2 Planning – and is the 3rd highest order count in FHRS
- is often difficult to detect/anticipate.

WorkSafeBC has developed a draft forestry phase integration conversation guide for use during inspections. This resource is for officers to help guide their conversations with forestry prime contractors (or their representatives) about their understanding of the risks and hazards associated with multi-phase operations. Identifying risk, threats, controls, and critical controls will be a key part of the conversation. In using the guide it is anticipated that the level of awareness and the degree of implementation of effective controls to prevent phase congestion will be increased to support the overall goal of reducing serious injury and fatal industry rates in the top risk exposures categories in forestry operations.



WorkSafeBC's Terry Anonson discusses phase integration at the March 2019 FTAC meeting.

The status of this project is that a pilot is underway with a small team of officers to test in-field and provide feedback. What will follow in the second quarter of 2019 will be analysis of the feedback from the pilot as well as industry feedback to allow for the tool to be finalized, and then a planned rollout to all WorkSafeBC officers in the third quarter of 2019 as a "phase integration guide".

Terry shared the current draft with FTAC members for their interest, cautioning that it was still in draft format and would not be circulated beyond the pilot use until the document was finalized. At that time it would be broadly shared. 📢

Updated timeline on new faller competency-based training program development

Marla Gulbrandsen, BCFSC's Senior Falling Program Coordinator, provided the Falling Technical Advisory Committee (FTAC) with an updated timeline on the revised new faller training program below:

BC Faller Standard Update

In the interim, it is anticipated that the BCFSC will offer two tuition-based courses using the current approved curriculum in 2019 – one in the Spring and one in the Fall 2019; and that six participants will complete the 30-day program with an Industry Training Partner.

Marla said that two Qualified Faller Trainer courses were also being planned for 2019, provided a variance was secured from WorkSafeBC to allow the training to proceed. 📢

January - June 2019: Finalize resources

April 1 - 5, 2019: FTAC Subcommittee review of entire program.

June 2019: Submission of BC Faller Standard to WSBC.

June - August 2019: WSBC review of the Standard - approval to pilot.

September - October 2019: Pilot with Industry, Oil & Gas and BC Wildfire Service.

October - November 2019: Apply any final changes to the Standard.

December 2019: Submit to WSBC for final approval



Falling

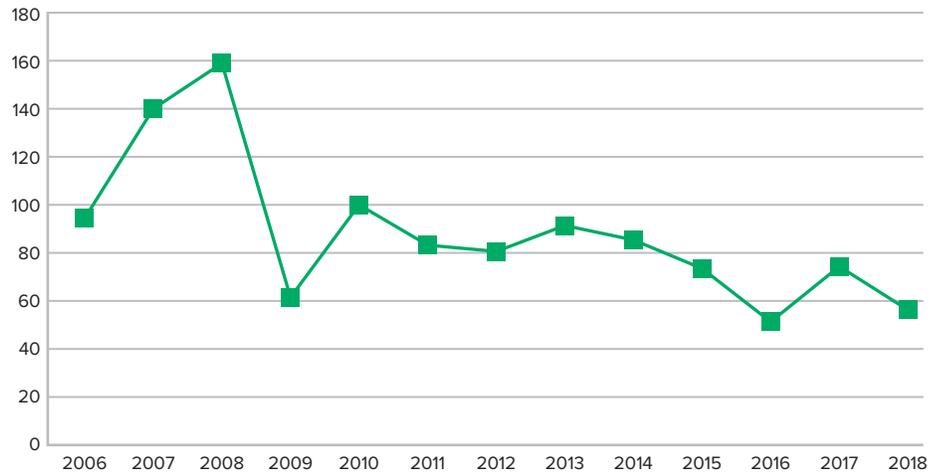
Falling Safety Advisor activities

Lead Falling Safety Advisor, Scott Rushton, provided the Falling Technical Advisory Committee (FTAC) with an update on Falling Safety Advisor activities this year. 2019 FSA Activities (as at March 1, 2019):

- 2 Faller Certifications (1 New Faller Trainee, 1 challenge)
- 4 Falling Supervisor Certifications
- 50 Faller Visits
- 1 Certified Falling Supervisor Quality Assurance Visits
- 3 Certified Falling Supervisor Visits
- 1 Trainer Quality Assurance Visits. 📍

Falling Supervisor Training update

Falling Supervisor Participants



The chart shows how many participants have taken the five-day falling supervisor training course. It is anticipated that the average in the next couple of years will be around the 60 per year mark.

Gerard Messier, Director of Training and Program Development at the BC Forest Safety Council (BCFSC) provided the Falling Technical Advisory Committee (FTAC) with an update on falling supervisor training.

He said the cost for the current five-day training course was \$1,680 which was prohibitive for some in both the cost and the length of time participants had to be away from work. He said as a result they were looking at combining online training with in-person training to shorten the course and were using subject-matter expert (SME), FTAC member and course trainer, Doug Harrison, and SME and falling safety advisor, Jeff McKenzie, to review the proposed revised course outline and content.

It is anticipated that the new course which would be rolled out later in 2020, could have an approximately two day online component that would be completed at the trainee's own pace and then a 2 or 3 day in-person, in-field portion. FTAC will receive regular updates on progress. 📍

Sample of quick and simple anonymous close call reporting

During a round table discussion at the Falling Technical Advisory Committee meeting, Interfor's Gary Bauer, shared that Interfor is having success with improved close call reporting thanks to a very simple tech solution they have implemented. It provides anonymous, quick (minutes or seconds depending on how fast you type with one finger or text savvy thumbs) and easy reporting, and was developed in-house, using a freely available online form-building tool.

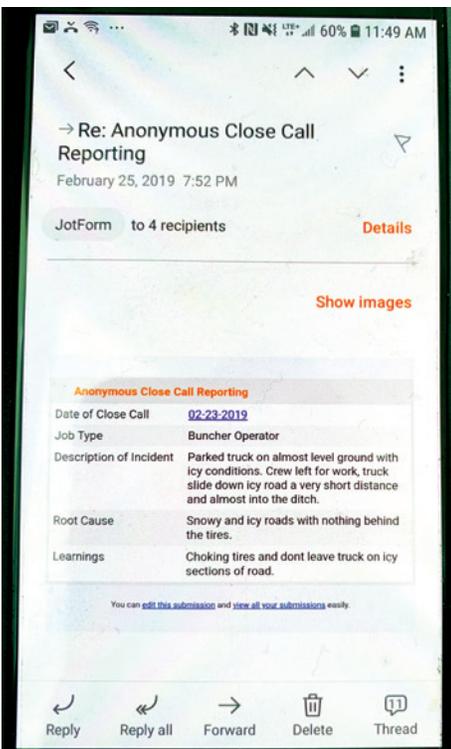
One may access the form in three ways -- via an app on a phone, online website address, or via a QR code. The form has two drop down pre-populated choices for date of incident, and type of work, and then one can type in short sentences to

describe the incident, the root cause, and the learnings, and hit "send".

The completed form goes to the company's designated email addresses anonymously for review and immediate action as/if required. For example, if a particular faller or piece of machinery operator had shared something that could benefit being seen by all fallers or machine operators at Interfor, the email recipients can immediately forward the email to all those workers and / or their supervisors / contractors to be advised of the close call so that they can use that information to help prevent a similar close call or incident.

The form, website link and QR code link were designed by Interfor's IT department using the jotform.com form service.

The service is free for most users and nominal for large users who expect to see thousands of forms a month. 📍



A screen capture of the what the email recipients see of the anonymous close call report.