



Stay Safe; Stay Well

By Rob Moonen, BCFSC CEO

In the December 2019 issue of FSN, I wrote an article titled “Using the past to predict the future...”. One of the points conveyed in the article was that it was safe to conclude that applying science to predict the future of the perfect storm facing our industry was leaving many of us to ask the question of “what’s next?”.

At the time, none of us could have predicted the answer to “what’s next?” was going to be a global pandemic that would change every aspect of our lives.

In possibly one of the first times in the last century, the pandemic has resulted in a global effort to prioritize and protect the well-being of the general public at all costs. Countries have been put into lock-down, schools closed, industries shuttered, millions working remotely from home and emergency funds released. No economic cost has been too large to reduce the transmission of the virus.

For many of us, the pandemic and resulting isolation have forced us to look at ourselves and the world differently – some for the good and some for the bad.

While the long-lasting effects of the pandemic will be felt for years to come, the coordinated, collaborative response where governments, businesses and individual citizens work together and cooperate to effectively control the greatest public health crisis in the past hundred years provides some positive insights.

As an industry, we have worked hard to improve our safety record. These efforts have required similar efforts where government, businesses and individual workers work together and cooperate to ensure the safety of forestry workers. While we have made positive strides in reducing the number of injuries and work-related deaths, there are some important key takeaways for all of us.

While it’s too early to predict when this pandemic will end and when we will see operations resume, let’s take the opportunity to learn from this life-altering event and remember that when we work collectively and collaboratively, our goal to ensure every forestry worker returns home safely at the end of every workday becomes one step closer to becoming reality. 🙏

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@bcforestsafesafe.org or call 1-877-741-1060.

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Manufacturing Advisory Group (MAG) Comes Together During COVID-19

As soon as COVID-19 was declared a pandemic by the World Health Organization in early March, the Manufacturing Advisory Group (MAG) started to work together and share resources to support each other in slowing the transmission of COVID-19.

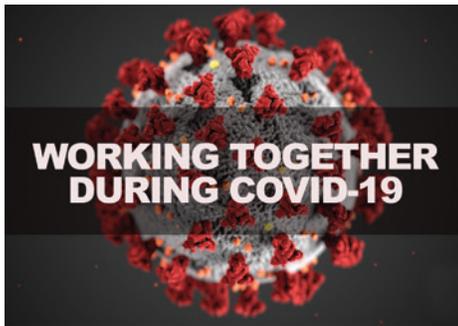
In support, the BC Forest Safety Council created a dedicated COVID-19 webpage for MAG members to share and access these resources. Individually, MAG companies dedicated a lot of time, energy and resources into developing safe work practices for their worksites and workers. When the BCFSC asked if they could use the shared material to build a resource webpage to share with the rest of the forest industry, they were met with total support and a resounding “yes”.

“How quickly our MAG members and BCFSC staff responded to COVID-19 has made me think back to the tragic

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2012 mill explosions. Back then, MAG was a more casual group and only loosely tied to BCFSC resources. Each MAG operation scrambled to figure out how to address the issue within their own organization. There was no time or structure to share the burden amongst peer-to-peer safety professionals. Solving the combustible dust problem evolved into a community-shared process since each of us had a stake in tackling the issue. Industry, operations, unions, HSAs, regulators and government forged trusting relationships while learning how to address combustible dust risk together.

When the COVID-19 pandemic hit, MAG members already had a solid collaborative structure in place and effectively used the BCFSC as the means to share the necessary resources amongst stakeholders. Collectively,

we have been better prepared with information to face this dynamically changing issue rather than keeping to our silos and each ‘reinventing wheels.’” says David Murray, Corporate Safety, HR & Environment Manager, Gorman Group and MAG Committee Chair “

A dedicated BCFSC team worked diligently behind the scenes and around the clock to expand these resources and make them available to the rest of industry as soon as possible, all while addressing their own challenges learning to work effectively and efficiently as a team while working remotely. Rob Moonen (BCFSC CEO) led the team which included Michele Fry (Communications Director), Cherie Whelan (SAFE Companies Director), Bill Laturus (Senior Safety Advisor, Manufacturing), David Murchie (IT Support), Teresa Hansen (IT Support) and Tammy Carruthers (Administration Support) to review and compile the industry-shared resources and post on a dedicated webpage for 24/7 industry and public access. The group researched and used safe practices from the BC Centre for Disease Control, Canadian Health, World Health Organization, WorkSafeBC, other industry stakeholders and other health & safety associations to further enhance the resources provided by the MAG Group.

“Developing a collaborative portal where forestry companies have access

to shared information has been critical to the success of our response measures during these unprecedented times. The BCFSC continues to support and promote collaboration and information sharing amongst safety representatives of MAG to identify best practices for the various phases of this pandemic.” says Kristen Gammel, Vice President & General Manager Corporate Services, Conifex Timber Inc.

BCFSC COVID-19 Webpage:
www.bcforestsafesafe.org/node/3460

Posted resources on the dedicated BCFSC COVID-19 webpage are checked daily to ensure all links and information are current. Content is updated as required with current directives from the BC Public Health Officer.

“COVID-19 has created so many unknowns, uncertainties and added anxiety for everyone around the world. One certainty I have realized from this unprecedented situation is knowing how responsive and adaptable industry is and how we are able to deal with just about anything that is thrown our way when we work together” says Cherie Whelan, Director SAFE Companies.

The BCFSC is also providing additional support to help companies use the information to create safer workplaces. To contact the BCFSC for assistance or for more information, please email us at info@bcforestsafesafe.org.



Wildfire on the Worksite

By Douglas MacLeod, MacLeod Forest Services

You are well into a two-week hot spell, the twigs on the ground crunch and snap as you step on them and you can smell the bush drying out. Everyone is talking about when the worksite will shut down. You are thinking maybe you might get a summer holiday this year.

Once or twice in your career you will get the dreaded call on a forestry worksite during these conditions: “I have a fire here...” Hearts race, voices rise, minds go blank and people start to move fast. Forestry crews and supervisors may have to take action on a worksite fire for hours or even days with minimal BC Wildfire Service (BCWS) support. Pre-planning is essential to ensure adequate preparedness, to verify

prevention measures are in place, and, if necessary, a safe and effective response.

The following are some regulatory requirements and good practices I recommend. It is not a complete list and some information may not be applicable to all areas.

Pre-Work Planning and Fire Season Preparedness

A predictable fire season is a thing of the past. The fire season should now be considered to be any time critical fire weather is occurring. In addition to inconsistent weather patterns, factors such as fuel, topographical conditions and

proximity to communities will also increase the risk.

The pre-work plan must take into account the risk of fire and what your company will do in the event that one occurs. Some considerations for planning are as follows:

- “High Risk” worksites (i.e. sites with mechanized equipment) must have a water delivery system or other method of suppressing a fire. The Wildfire Act and Regulations say the system must be able to “deliver a sufficient volume of water to effectively fight a fire of a reasonably foreseeable size” (reference Interpretive Bulletin). The type and capabilities of the required water system will vary considerably depending on the terrain and type of work. For instance, a coastal yarder site will require different water systems than an interior harvest site. If working in close proximity to higher



values or during periods of elevated fire danger, the response time will need to be reduced accordingly. Falling and bunching often take place well ahead of other activities. Assess the risks and ensure an adequate water delivery system is available to these activities.

- The pre-work plan during fire season should include identification of water supplies. If natural water is limited, additional measures, such as water trucks, portable tanks or rock trucks with removable tanks will need to be planned.
- Pumps should be pre-connected if possible, checked regularly and have required hose, nozzles and other fittings attached and ready for use. A spare pump, extra hose and fittings should be kept in the shop truck or other central location.
- Nozzles must have a shut off and variable opening. Red fog nozzles do not allow for reducing the volume of water used and should be avoided unless a very large water supply is available. For pumping from a tank, use a Hansen-style nozzle or econo hose and nozzles to increase the efficiency and extend the duration of the water supply.
- All workers operating equipment during fire season must have fire extinguishers, backpack pumps or other water system and hand tools on board their machine, in good condition and readily accessible.
- Prepare your Emergency Response Plan and ensure that all workers know what the plan contains and what they are expected to do.
- Train your crews appropriately, including the S100 and S185. Conduct crew training and drills to practice response and identify any possible opportunities for improvement.
- Communicate annually with local BCWS staff to ensure any interactions during a response go as smoothly as possible. Share your capabilities and limitations.
- Obtain BCWS safety alerts from the previous season for review with your crew. Request information on any determinations or penalties from person-caused wildfires.
- Check your insurance and update if necessary.
- Develop and enforce a smoking policy.
- Ensure a preventative maintenance program is in place and document machine inspections, cleaning and repairs.

- Ensure that all radios in all heavy equipment have RR channels.
- Assess tool and water delivery requirements based on the *Fire Danger Rating*, site conditions, risk assessment and limiting factors. Improve as necessary.

Prevention

Many workers and contractors who have experienced large worksite wildfires comment on how fast the fire grew and exceeded their capabilities to suppress. There are all kinds of pressures that may encourage work to continue as fire danger increases. However, if fire prevention isn't prioritized, any gains may quickly be eroded even by a small worksite wildfire. Lost production, damage to equipment and adjacent values, and time spent any investigation can all lead to substantial costs even if there are no actions by regulatory bodies.

- Worksite fuel and topographic conditions need to be assessed and evaluated for their effect on ignition potential and control difficulty. Document this process.
- In recent years, work has been taking place closer to communities and other values. Proximity to structures, utilities, equipment, felled and standing timber, regenerated stands, etc. should be part of the risk assessment and increased prevention and preparedness measures established as necessary.
- The daily *Fire Danger Rating* should be monitored and required restrictions fully implemented as outlined in the Wildfire Regulation. Subscribe to the BCWS weather group for regular updates including Fuel Moisture Codes and Fire Behavior indices. Review the critical thresholds as per the S100 manual.
- Recognize critical weather and worksite conditions. Take on-site weather readings through the day, especially where the work is occurring. Don't be lulled into complacency by recent weather. Slash, grass, brush and diseased stands can dry to dangerous levels in a few warm days. The *Fire Danger Rating* may not reflect these conditions.
- Maintain equipment and keep machines clean and leak free, inspecting the undercarriage(s) regularly.
- As fire danger increases on-site, adjust operations and hours as necessary and minimize work on the forest floor. Avoid starting new blocks away from the crew and fire suppression system and check

the previously worked area regularly for smoke. Conduct fire watch when required.

Suppression/Response

If a wildfire starts on or near your worksite, the first few minutes will be crucial. Swift, coordinated actions will improve the chances of keeping crew safe and the fire manageable:

1. Engage your Emergency Response Plan and immediately broadcast an initial report to the site supervisor and all site workers
2. Verify that all workers have received the message and have stopped operations
3. Determine if you and the site workers are at the head or above the fire. If you think the fire exceeds your capabilities or you are unsafe, move all workers to rear of the fire. Watch for increasing flame length, increasing smoke volume, smoke turning from white to grey / black and igniting spot fires.
4. Report the fire to BCWS as soon as possible. Provide as much information as possible including location, size, rate of spread, values at risk, directions, on-site radio frequencies, current suppression activities, water supply location and low bed staging area information.
5. If the fire is small enough to safely manage, immediately attack it with your containment resources such as your water delivery system, on-board backpack tanks, smother it with dirt, surround it with a control line and extinguish any spot fires. Constantly evaluate it and go to Plan B if necessary.
6. Develop and communicate a safe plan. Identify who is in charge, Lookouts –**Anchor**s- **Communications**-**Escape Routes** (2)-**Safe Zones**, hazards/risks/controls, current situation, current and expected fire behavior, objectives, individual work assignments, first aid and emergency procedures.

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7. Continue to assess the fire and report details to the site fire crew and the BCWS as they become available or as change is observed. Monitor and anticipate changing conditions and revise plan and operations as required. Most entrapments occur within 20 minutes of a wildfire starting to blow-up.
8. When BCWS arrives, give them a briefing. Limit discussions to the fire response activities and discuss a decision regarding turnover of the fire to BCWS.

Resources

Fire Prevention Information for Industry and Commercial Operators:

www2.gov.bc.ca/gov/content/safety/wildfire-status/prevention/for-industry-commercial-operators

Restrictions on Industrial Activities based on the Fire Danger Rating:

www2.gov.bc.ca/gov/content/safety/wildfire-status/prevention/for-industry-commercial-operators/high-risk-activities

Wildfire Ranking:

www2.gov.bc.ca/gov/content/safety/wildfire-status/about-bcws/wildfire-response/fire-characteristics/rank

Wildfire Response Page:

www2.gov.bc.ca/gov/content/safety/wildfire-status/about-bcws/wildfire-response

Working on Wildfires:

www.bcforestsafesafe.org/node/3352

Wildfire Risks:

www.bcforestsafesafe.org/node/2992

BC Wildfire Interpretive Bulletin:

www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/wildfire-status/prevention/prevention-industry-comm-ops/bcws_wildfirereg_interpretivebulletin.pdf

A 43-year forestry industry veteran, Douglas MacLeod has experience in silviculture, harvesting, planning and wildfire. His experience ranges from wildland fire response officer for a volunteer fire department, forest service fire warden, contract fire crew supervisor, line locator & heavy equipment supervisor and wildfire instructor specializing in preparation, prevention, suppression, operations and crew training. 🍷

Bear Mauling During an Archaeological Field Assessment Near Williston Lake, BC

By Kyle Belanger and Lucas Towstego, Circle CRM Group Inc.

Like others in the BC and Alberta forestry industry, archaeologists spend much of their field season assessing vast forestry blocks in remote areas where wildlife encounters are almost a daily occurrence. Bears are high on the list of animals we come across. As a safety coordinator for my organization, Circle CRM Group Inc., I teach bear awareness to our staff and to other organizations. Our organization ensures all field staff are trained for these encounters. We carry the proper personal protective equipment such as bear spray, air horns, and one of our biggest assets, our loud voices. Most often, these encounters are innocent enough; the bear moves off faster than you can get a good look at them. However, there are occasions when these encounters can become too close for comfort.

Last fall, two of our workers had a serious encounter with a black bear while working near Mackenzie, BC. One of the workers was surprised and mauled.

The Incident:

On September 29, 2019, Lucas Towstego was completing an archaeological field assessment with co-worker Duncan Trippel. As they were making their way back to their crew vehicle, they unwittingly headed into a precarious bear encounter. Lucas explains:

I have worked in the BC interior for six years conducting ground surveys of forestry blocks for archaeological potential west of Williston Lake and have most often been without incident. On this particular day, the weather was sunny and clear, slightly overcast, but no wind. Duncan and I had finished for the day and were making our way back to the truck at around 3:45 pm. We were heading along the northern project boundary, climbing over some deadfall. I stopped for a moment to check our location. As I did so, I heard several loud huffing sounds coming from behind an alder bush approximately 5-10 m away. I warned Duncan that there was a bear, then took a step or two backward away from the bush and reached for my bear spray. By that time, the bear had emerged from the bush and rushed directly at me. I was holding a shovel in the hand that was nearest to my bear spray so I could not easily get to it, but frankly there was no time to grab it as the bear was closing in fast. Without thought, I grabbed my shovel with both hands as the bear was coming down on top of me. I directed the shaft of the shovel into its mouth to deflect a direct bite; but this left me unable to defend myself against its front paws. The bear clawed the back of my head and my survey vest. During this, my co-worker was too far back (approximately 10 m with several fallen trees in between us) to be of any physical assistance, so he started shouting at the bear. This prompted me to shout as well (I was mainly just repeating "holy #\$#!" before that!). I then gave the bear a forceful shove using the shovel to try and push it away. This, combined with our shouting, was enough for it to take off back the way it had come. The entire incident, from when I heard the initial huffs to when the bear ran off, all occurred within a span of about 10 seconds.

In the first moments after the attack, Duncan and I prioritized several things. First, we both drew our bear spray in case of a second attack and then made a lot of noise to further scare it off. Duncan then administered some rapid first aid to my most severe injury, a large gash along the back of my head. With some rough bandaging applied, we quickly discussed our next course of action. We decided it would be quicker to continue on our planned course east to the road, but this

would take us along a similar path that the bear had gone. In light of that, we chose to cut south to the creek and follow it east to the previously harvested block where our truck was parked. This doubled our distance but put us in the opposite direction of the bear.

What followed was a bit of a harrowing 1.5 km walk. I was bleeding heavily from my head wounds and we were both on high alert for the bear returning. We made a lot of noise, shouting and banging our shovels, and tried to be aware of any sounds of the agitated bear. I was forced to stop several times along the way as I was dizzy. Due to this, we discussed that should I lose consciousness, Duncan would set off our SPOT device and continue making noise and administering first aid as needed. We managed to make it back to the truck where Duncan re-administered first aid, thoroughly bandaging me as best he could.

We drove back to the main road, discussing our response plan and getting in contact with family and co-workers on the way. To be honest, my first text was to my wife: "Don't freak out, I'm ok, but I was attacked by a bear." Next, I called my direct supervisor to let him know about the attack. It was agreed that Duncan would drive me straight to the Mackenzie Hospital & Health Centre as the first-aid administered was managing the injuries well and we determined paramedic assistance was not immediately required. This decision is the only slight error we made in my estimate. When we checked distance to the hospital from our location on Google, the results showed it was closed and did not indicate there was a 24/7 emergency room. Thinking the hospital was closed, we drove to Prince George instead. Although it turned out fine in the end, had my injuries been more severe, the extra time to get to Prince George could have been costly.

We arrived at the Prince George Hospital at approximately 7:00 pm, three hours after the attack. They got me in right away and cleaned up my wounds. I had a large gash along the back of my head, another above my right ear, a puncture on the top of my head and several gashes on my forehead. I received approximately 40 stitches and staples all combined. I related my story to a conservation officer in the ER who was kind enough to keep me company while I was there as my co-worker was busy booking hotels, making phone calls, and sending texts to family and co-workers.

The physical injuries were relatively minor considering. We spent the next several days recovering from the incident at a Mackenzie hotel and trying to determine our next steps. Our decision was made when my co-worker had an anxiety attack while walking out behind our hotel which is backed by a small wooded area. This spurred us both to address our mental health due to the incident. Duncan drove home and I spent a few more days physically recovering at a company townhouse in Williams Lake before making my way home to Vancouver Island. Since then we have both been seeking counselling through WorkSafeBC's Critical Incident Response program.

We are both happy to be home with our loved ones and our company has been incredibly supportive. There are a few takeaway points from our story.

1. No matter how much experience you may have in the woods, incidents can happen in the blink of an eye, at any time, and you need to be prepared. Have an Emergency Response Plan (ERP) in place with specific instructions on



what to do when someone is injured and how to best access emergency medical services. A complete first aid assessment for the worksite will identify any barriers to getting first aid and medical help in case of an injury.

2. You can't control these incidents but you can control your response. For us, we had safety measures in place before entering the woods; our company knew where we were going to be that day and we always carry a SPOT device for emergencies. We both have extensive emergency situation training through our employer including bear aware and first aid. Also, level-headed, critical thinking was important; we didn't panic, we took it all one step at a time and relied on our training and experience to make the right decisions.
3. Lastly, it was critical that I was not alone when the incident played out. I may have been seriously injured or killed, or unable to get myself to safety had I been on my own. We always work in pairs but sometimes it "makes sense" to separate for short periods of time. Had this been the case at the time of the attack, it would have ended very differently.

I want to shout out to my co-worker Duncan, without whom I would've never made it out of there. His calm and collected response to the situation saved the day. I'd like to thank my family and co-workers for their moral support through my recovery. Lastly, I'd like to urge everyone who works in bear country to brush up on your bear awareness and make sure you're staying safe out there.

The Outcome

After the encounter, Circle CRM Group Inc. called for a safety stand-down and all field operations in that area were suspended until further notice. An incident investigation was carried out to understand the root cause so we could implement corrective actions and procedural changes.

If your organization works in remote areas where there is a risk of wildlife/bear encounters, learn more about bear safety:

BCFSC Bear Safety: www.bcfsc.org/bear_safety.html 🐻