

Johnson Bar Fire - Fireline Learning Opportunity

August 16, 2014

Nez Perce - Clearwater National Forests



“Safety is a collaborative responsibility, consisting of communications from the Crew Supt. to the first year firefighter, both up and down the chain”- Crew Superintendent.

Summary:

The Johnson Bar Fire was spotted on Aug 3rd, 2014 and was quickly responded to by local forest I.A. resources. The fire was located mid-slope on a heavily timbered east aspect, with heavy accumulations of dead and down on the forest floor. Large diameter firs and cedar comprised the over-story making this fire difficult to contain in initial attack operations. It soon became evident that this fire was not going to be contained during initial attack.

On August 7th a Type 2 incident management team was ordered to assist with the management of the fire. A strategy utilizing indirect attack and point protection was determined to be the safest and most effective way to engage this fire due to the rugged terrain and numerous hazard trees within the fire area.

On August 12th, thunderstorms that had developed over the fire caused the fire to experience significant growth, almost doubling the fire in size to approximately 6500 acres. Two large spot fires also were started to the north of the fire, one of which had spotted across the Clearwater River to the north.

Crews worked the spots north of the fire in the following days, while new indirect lines were started along road systems and ridges to broaden the containment area now needed to accommodate the increase in the main fire's size. After containing the two spot fires, crews were redeployed, joining other resources in assisting with prepping indirect lines adjacent to the main fire. Prepping consisted of removing small diameter trees (four inches and less), and limbing up larger diameter trees. This work was to be completed adjacent to dozer lines and existing road systems. The goal was to create a shaded fuel break that would allow firefighters to burn off from, thus containing the fire.

On August 15th, four Type 1 Crews were assigned to Division "L" to begin line prep along a dozerline that would follow a ridgeline east to the Selway River. Shortly after beginning work a firefighter was struck by a small diameter green tree being felled by a qualified agency sawyer. The sawyer was unaware that the firefighter who was assisting in "pulling" brush had even been hit by the tree. A few moments after the firefighter was struck, he began to experience shoulder and neck pain.

"I felt the tree hit my hard hat, and at first I didn't think that it had caused any harm". One of the crew members said that they noticed a "grimace" on my face, so they told me to step out for a moment. It was then that I began to experience pain in my neck, shoulders and lower back. I felt like I would be fine, but the crew decided quickly that I should be checked out". – Joe Firefighter.

Precautionary medical transport of the injured firefighter was then initiated by the crew and Division Supervisor. The injured firefighter was transported via ambulance to the local hospital. After examination by emergency room doctors, the firefighter was released back to the incident that evening and was cleared for full duty.

Narrative:

August 15th a.m., after completing a crew briefing covering the day’s assignment, our crew began fire line preparation work along a dozer line that was being established partway down a ridgeline headed east towards the Selway River. We were doing this in conjunction with 3 other crews on the division. Our instructions were to remove all small diameter trees “4 inches or less”, and to limb up larger diameter trees to create a shaded fuel break along the dozer line. Our crew tied in where a crew had finished the night before, and began working.

There was a substantial amount of work to be done, as the canopy was very tight and the understory was very thick.

“I don’t think that the tree could have hit me more square on the hard hat. My hardhat did what it was supposed to do”. – Joe

The method that we employed was “chaining”. We had 4 sawyers cut the small standing trees and buck up debris, and then 4-6 crewmembers would hand the cut portions up the chain to the other side of the fire line. “We had been doing this on every fire this roll”. This had been working well so far, and proved to be an efficient method to accomplish this task. We had the 4 saws running on a bit of a stagger, with the rest of the crew chaining the debris out to the edge of the line. Naturally, at the start we were all kind of bunched up, but after a bit, we would end up dispersed out and things would be running very smoothly.

At the time Joe was struck he was bent over picking up cut debris to pass up the line. Some of the crew members saw what had happened, but since his hardhat didn’t get knocked off, it did not seem that he was injured. “I did not see the tree fall towards me, since I was bending over to pick up another load of debris”. “I felt the bump, and someone asked if I was ok”.



Figure 1. Stump of tree that struck injured fire fighter.



Figure 2. View of shaded fuel break adjacent to dozer line.

We had only been working for about 10 or 15 minutes when Joe was struck on the hardhat by a small diameter green tree that was being felled while creating the fuel break. The tree that struck him was only about 4" in diameter and 20' tall. The part of the tree that struck him was about as big around as your wrist. Initially after the incident we acknowledged what had just happened; and things seemed fine, so we started back to work.

"Shortly thereafter someone noticed that I might be in pain. They asked me to step out for a second, and that was when I noticed that I might be injured".

Our crew superintendent was notified of the incident, and he communicated with the division supervisor regarding this. It was decided to initiate the preplanned "incident within an incident" response. Medical personnel assigned to the fire came to our location and evaluated Joe. Joe appeared fine, he could walk on his own, had a full range of motion in his neck, but he did have some neck, shoulder and lower back pain. Because of the mechanism of injury, we decided that a precautionary medical transport should take place. Joe was placed on a backboard with c-spine collar in place, and then driven via ambulance to the nearest emergency medical facility, which was about an hour away. "All in all, the medical response went quite well. If needed we could have done it even quicker".

Lessons Learned by Those involved

- "It is ok to have a few folks standing around waiting until we get spread out doing our task". "It is possible that there is a mentality that we all need to start working right away". "After the incident we toned things down and slowed up a bit, making sure folks were talking, communicating, etc."
- "It may be better to have two saws up front doing all the falling, and having two other saws behind doing the bucking for folks chaining the debris". "This would build in the distance needed between the fallers and the crew".
- "Bottom line..., 2½ tree lengths is something we say we do, but do we always do it?" "We do with big trees but maybe not so much when dealing with small trees". "We need to stay vigilant".
- Take the time to size up small trees and the cutting situation.
- Maintain communications throughout the cutting assignment.