

Safety Lessons Learned—Sawyer Practice and PPE

“Lessons Learned” is a proven method of sharing important safety messages. Based upon real-life incidents, Lessons Learned examines root causes of why an accident or injury happened and identifies corrective actions or mitigation to reduce the chance of future accidents. Lessons Learned does not identify people by name, nor is it finger-pointing or a way to place blame. It is an honest assessment of a chain of events that helps us find proactive ways to keep us all safer, healthier, and out on the Trail.

The Activity: Sawyers are certified at various skill levels (A Faller, B Bucking & Limbing, etc.). Sawyers wanting to practice their skills at the next higher level of chainsaw operation must do so under the direct supervision of a higher qualified sawyer. This incident occurred during a work event where a lengthy section of trail was being cleared of trees that were bent over in the shape of “spring poles,” but were not actually spring poles because the treetops were not held to the ground under tension by another object. The bent trees were prone to splitting into “barber chairs” as they were felled. A “Level B Bucker & Limber” was working under direct supervision of a “Level B Faller” to gain experience in felling trees at the time of the incident.

What Happened: As the student sawyer was making a cut during the felling process of a bent maple tree, the trunk violently split into a “barber chair” and struck the chainsaw. The force of the reactive tree trunk slammed the chainsaw housing against the sawyer’s right thigh causing a deep muscle bruise, and the rotating chain to strike the sawyer’s chaps along the left shin. The rotating chain climbed up the chaps toward the knee as the chap’s inner fibers finally stopped the chain as they are designed to do. The strike was instantaneous and threw the sawyer to the ground. Photos of the bent trees at the work site, and the sawyer’s damaged chaps, are attached. The sawyer was not cut by the chain.

The Lessons Learned:

- We all hear how fast things can happen when a tree’s energy releases suddenly, but it’s hard to believe just how fast it really does happen until we experience it. There is absolutely no reaction time available. At moments like this, the only thing between us and serious injury (or worse) is our Personal Protective Equipment (PPE).
- The chaps did their job. Without them, this would have been an unthinkable horror. Good, serviceable PPE will save a life, but only when it’s worn. Chaps lose their ability to function properly when rips/tears, excessive sweat, dirt, and oil compromise the fibrous linings that bring a chain to full stop within a split second—the difference between a grievous wound vs only a bruised shin. If your chaps should be replaced, be sure to make that happen before your next chainsaw use. Also, chaps are intended to overlap the boot top by approximately 2-inches. The photo shows why that is important.
- Although the sawyers were wearing PPE, working as a mentor-student team as allowed by policy, and all other safety protocols were being followed, this accident still

happened. The mentor stated that the trees being felled were prone to “barber chair.” Knowing this, we must ask ourselves if sufficient planning and risk management practices were followed during the work event. In Lesson 7 of *Trail Safe!* (Decision Making) there is a lengthy discussion on the 7-Step Operational Risk Management (ORM) Cycle.

In short, the steps in the process are: 1) Define the Task, 2) ID Hazards, 3) Assess Risks, 4) ID Options, 5) Evaluate Risks vs. Gains, 6) Implement Plan, 7) Monitor Situation.

Reaching Step #7 and discovering that so many trees were expected to “barber chair” would call for us to pause and reassess the risk in front of us. At that point we’ve discovered a new risk, and we need to go back to Step #3 to adjust our plan. Is the risk worth the gain (NO)? Can we somehow mitigate the risk (POSSIBLY)? Do we need a different plan of action to accomplish the goal (YES)? Some additional reassessment and planning on how to move forward was appropriate before reengaging with Step #6 of the ORM Process.

Accepting Unnecessary Risk is a form of “Outcome Based Behavior” discussed in Lesson #3 of *Trail Safe!* (Error and Accident Causation).

Thank you to everyone for not only building and caring for the Ice Age National Scenic Trail, but for also working together to keep each other safe and healthy along the way. Be Trail Safe!

