Safety Lessons Learned—Chain Sawyer and Swamper

“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: Working with chainsaws is a common activity along the Ice Age Trail, and arguably comes with more potential risks than any other volunteer task. This is equally true for those who are assisting sawyers as “swampers” to remove slash and bucked materials. The following is an Ice Age Trail example of a Near Miss accident which could have easily resulted in serious injury.

What Happened: A work project was underway that included several sawyers, and numerous “swampers” who were helping to clear away the cut material. Many of the trees that were being cut down were very small, but at a certain point one sawyer was attempting to cut down a larger tree. The tree was estimated to be 25-30 feet tall, with a diameter breast height (dbh) somewhere between 7-10 inches. The tree had a severe lean of possibly as much as 45 degrees. The tree had been notched, and the final felling cut was underway when the sawyer noticed a swamper moving into the intended drop zone to pick up some other branches already on the ground. The sawyer stopped cutting and tried to warn the swamper to move away, but his calls went unheard. Moments later, the remaining holding wood on the tree failed, and the tree broke free earlier than anticipated. It fell to the ground, missing the swamper by an estimated 6 inches.

The Lessons Learned: There are a number of things that came into play in the course of events leading up to this Near Miss—most involving Communications:

- The sawyer and swamper both agree that a safety briefing was performed at the beginning of the project, but during follow-up interviews neither could recall any specifics on what had actually been said. For a safety briefing to actually help everyone work safer, we need to deliver clear and consistent messages, engage in active listening, and restate what we think we’ve just heard to ensure we all have a “shared mental model” of what the safety protocols will be for the day
- There was ineffective control of the safety zone. The sawyer was doing his best to watch out for people in the area, but it wasn’t enough to avoid near tragedy
- The routine of many small trees being felled caused the swamper to assume that was all that was still happening. Repetitive tasks can lead to diminished awareness when sudden changes occur
- Going forward, we need to ensure that whenever a tree is being felled that a designated person is keeping the area clear of all other people—creating a safety zone of 360
degrees, including possibility for downhill roll—since a tree can fall in any direction at any time

- Recommended Trail Safe! review lessons can be found at www.nps.gov/iatr, including Lesson #5 that discusses diminished awareness, Lesson #6 that explains the importance of “shared mental models” and the difference between “complacency errors” vs “skills errors,” and Lesson #8 that covers effective communications and the importance of safety briefings

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!