

GREEN SHEET

California Department of Forestry and Fire Protection (CAL FIRE)

Informational Summary Report of Serious CAL FIRE Injuries, Illnesses, Accidents and Near-Miss Incidents



Shasta Trinity Unit Tree Felling Accident – Near Miss

February 4, 2011

Buckhorn

11-CASHU-000840

California Northern Region

A Board of Review has not approved this Summary Report. It is intended as a safety and training tool, an aid to preventing future occurrences, and to inform interested parties. Because it is published on a short time frame, the information contained herein is subject to revision as further investigation is conducted and additional information is developed.

Lookout

Communications

Escape Routes

Safety Zones

SUMMARY

Below is the Informational Summary Report of an incident in which an inmate firefighter sustained a minor injury due to a falling limb during a tree felling operation.

CONDITIONS

Weather obtained from the Oak Bottom RAWS site located six miles east of the accident site at 1030 on February 4, 2011:

- Temperature 62° F
- Relative Humidity 35 %
- Mostly Sunny
- Calm Winds
- Fuel Type – Oak Woodland
- Topography – Approximately 2% slope in the immediate cutting area of the accident.
- Equipment – Chainsaw with full required PPE in use.

SEQUENCE OF EVENTS

On Friday February 4, 2011, Trinity River Conservation Crew (TRCC) #4 was assigned to a CALTRANS project along Highway 299 approximately 15 miles West of Redding, California. The project consisted of tree and brush removal including falling conifers and oaks. A Job Hazard Analysis/IIPP-2 had been completed for the project. The supervising Fire Captain (FC) briefed and reviewed the site safety plan with the crew, emphasizing tree falling safety.

At the time of the accident, the saw team was working in a stand of dormant Black Oaks with intertwined crowns. The work area consisted of felling class ‘B’ type trees, averaging 10” Diameter at Breast Height (DBH) and stood approximately 60 feet high. Larger and more difficult trees were identified and were to be felled by a class ‘C’ faller at a later date.

The FC assigned the saw team a work area and observed the saw team size up, discuss, and make a plan for felling. The target tree was a 16” DBH Black Oak, approximately 70’ in height. The FC positioned himself to prevent anyone from walking into the tree felling area and directed the sawyer to fell the tree. The sawyer made his initial warning, “clear the area”, and proceeded to make the undercut. The sawyer began his back cut after shouting his “back cut” warning. As the tree began to move, the puller yelled “tree” and the sawyer began to remove his saw.

As the FC observed the target tree falling slowly away from the sawyer he looked back over his shoulder to make sure no one was entering the falling area. The sawyer was struck by a falling limb. The puller immediately alerted the FC that the sawyer was injured. Emergency medical treatment was initiated and both the ECC and camp were notified.

The inmate was alert and oriented. He was transported to a local hospital by ground ambulance where he was treated and release for minor injuries.

INJURIES/DAMAGE

The inmate firefighter sustained minor injuries consisting of shoulder and back pain. The inmate was transported to a local hospital where he was evaluated and released to California Department of Corrections and Rehabilitation (CDCR) custody.

Upon inspection of the sawyer's helmet, the headband suspension was collapsed with damage to the attachment points. There were no marks or scuffs on the helmet exterior. The limb glanced off the helmet before striking the sawyer on the shoulder.

SAFETY ISSUES FOR REVIEW

- Be aware of complacency due to repetition, specifically when conditions and/or environments change.
- Conduct proper size up of tree.
 - Widow makers
 - Intertwined limbs
- **Utilize** predetermined escape routes.

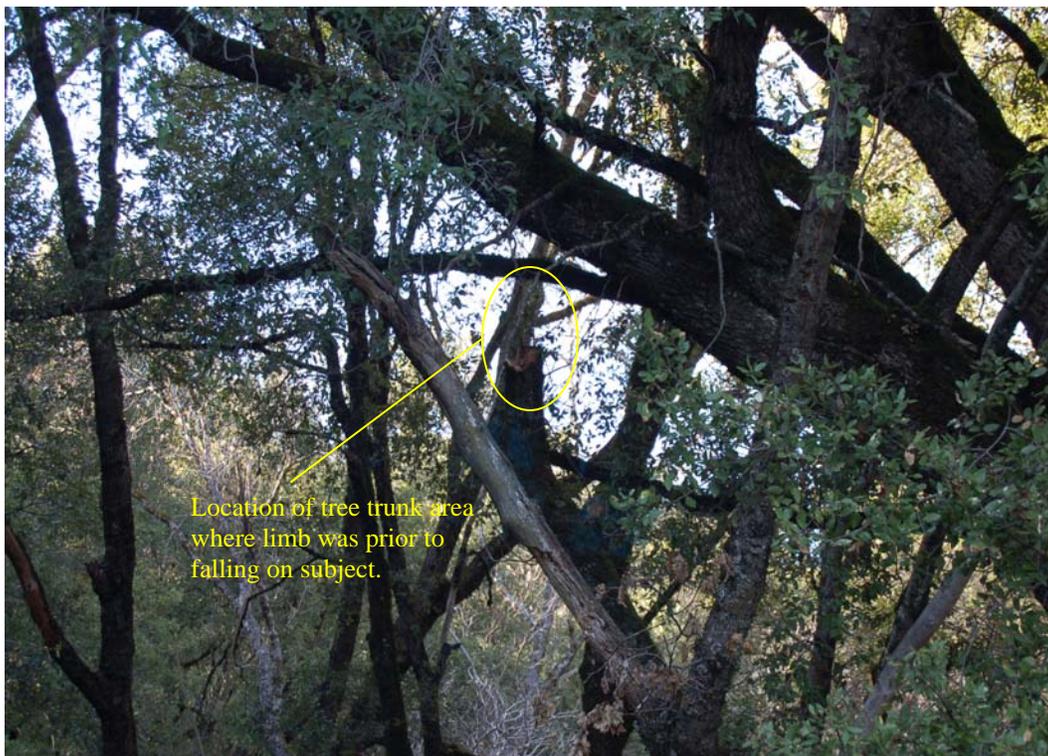
INCIDENTAL ISSUES/LESSONS LEARNED

(For Near-Miss and Non-Serious Accidents)

- PPE is a significant factor in the prevention of a serious injury.
- Maintain situational awareness in all circumstances where conditions and environments change.



Target tree with broken limb on ground.



View of where branch was connected to tree trunk.



Rotted base of broken limb



Damaged suspension attachment points

Helmet with collapsed suspension