The National Institute for Occupational Safety and Health (NIOSH)

Promoting productive workplaces through safety and health research NIOSH

Choker Setter Killed by Falling Tree – South Carolina

FACE 9505

SUMMARY

A 26-year-old male choker setter (the victim) was struck and killed when he walked into the path of a falling tree. The victim was walking from his work area to a landing for a routine lunch break. While en route to the landing, he took a shorter route through a brushy area in the vicinity of felling operations being conducted by a co-worker. The other worker had just finished cutting a gum tree, using a feller machine as the victim approached the felling operation. The co-worker backed the machine from the felled tree to allow it to fall. The victim walked into the tree fall zone and was struck on the head by the falling tree. A co-worker notified the emergency medical service via 911. The EMS responded within 5 minutes and the victim was transported to a local hospital where he was pronounced dead from massive head trauma.

NIOSH investigators concluded that to prevent similar occurrences, employers should ensure that:

- employees remain a distance of two tree lengths of the trees being felled from mechanical-felling operations, until the machine operator has acknowledged that it is safe to approach more closely
- employees use designated safe routes of travel when leaving their work areas
- consider the use of high-visibility clothing as personal protective equipment.

INTRODUCTION

On December 6, 1994, a 26-year-old male choker setter was struck and killed when he walked into the path of a falling tree. On December 14, 1994, officials of the South Carolina Occupational Safety and Health Administration (SCOSHA) notified the Division of Safety Research (DSR) of the incident and requested technical assistance. On January 24, 1995, a DSR safety engineer reviewed the SCOSHA investigative file and visited the incident site.

The employer in this incident was a logging company with 29 employees. The company had been harvesting pulpwood and sawtimber at the incident site since November 21, 1994. Normal work days started at 7:30 a.m. and continued until 5:00 p.m., five days a week.

The victim had worked for the company for 3 weeks and had been trained according to the company's written safety policy. The employer conducted weekly safety meetings and biweekly safety inspections. Company policy also required use of appropriate personal protective equipment, face shields, chaps, hearing protectors, gloves, hard hats, and safety shoes. This was the company's first fatality.

INVESTIGATION

On the day of the incident, the logging crew consisted of a feller choker setter (the victim), skidder operator, and a feeler operator/foreman. Logging operations began about 7:30 a.m. and proceeded normally, with the.victim,and co-worker trimming and gathering logs prior to skidding them to the landing for loading. The feller operator/foreman was engaged in felling trees in an area 150 to 200 feet from the victim. Since the jobsite was located on soft ground, the foreman was cutting small trees and brush and laying them in the muddy areas of the tract to prevent rutting by the mobile equipment. At about 11:55 a.m., the foreman ceased cutting and drove the feller to the landing. Once there, he told the victim and co-worker to break for lunch, then drove back to his work area. When he returned to the work area, he started the blade on the feller, allowing a 2-to-3 minute warm-up, and then began cutting a 15- inch-diameter by 20-foot-tall gum tree. During this time, the victim and co-worker had started walking from their work area to the landing for lunch. The co-worker walked along a skid road located on dry, elevated ground. The victim followed him for a short distance, then took a shorter route through lower, softer ground which led toward the foreman's felling area (Figure). The visibility along this route was restricted by waist-to-head- high brush. The foreman cut through the tree, visually checked around his machine and the tree-fall zone, and then backed away from the cut tree, allowing it to fall to the ground. As the tree fell, the victim was emerging from the brush and walking into the tree-fall zone. As the victim traversed this area, the tree struck him in the head. The foreman dismounted his machine and went to the victim. A truck driver notified the local EMS via 911, which responded within 5 minutes. The victim was transported to a local hospital where he was pronounced dead at 2:00 p.m.

CAUSE OF DEATH

The medical examiner specified the cause of death as massive head trauma.

RECOMMENDATIONS/DISCUSSION

Recommendation No. 1: Employers should ensure that employees remain a distance of two tree lengths of the trees being felled from mechanical-felling operations, until the machine operator has acknowledged that it is safe to approach more closely.

Discussion: OSHA regulation 1910.266 (h) (v) , requires that: No employee shall approach a mechanical felling operation closer than two tree lengths of the trees being felled until the machine operator has acknowledged that it is safe to do so.

Recommendation No. 2: Employers should ensure that employees use designated safe routes of travel when leaving their work areas

Discussion: The route used by the victim to depart his work area led directly in the fall zone where the feller operator/foreman was felling trees. Additionally, while walking through the brush, he was hidden from the view of the foreman. According to the foreman, both the victim and skidder operator were visible when they started walking to the landing along the skid road. As they were walking out, the skidder operator could see the felling machine. It is not known why the victim changed his route from a skid road on dry, elevated ground to a route on lower, softer ground. It is possible that when he left the skid road, he lost visual contact with the feller and exited the brush in an unintended location. Due to the nature of the logging environment, workers are often out of visual and auditory contact with each other, and may not be aware of changes in co-workers' work areas or their precise location. Designating safe travel routes prior to work could ensure that workers remain clear of hazards such as tree-fall zones.

Recommendation No. 3: Employers should consider the use of high visibility clothing as personal protective equipment.

Discussion: The brush in the area in which the victim was traveling, was both thick to moderate and waist-to-head high, and greatly reduced visibility. Use of high-visibility-orange safety clothing, such as that used by hunters, could significantly increase visibility of workers in moderate-to- thick brushy conditions.

REFERENCE

29 CFR 1910.266 Code of Federal Regulations, U.S. Government Printing Office, Office of Federal Register, October 12, 1994.

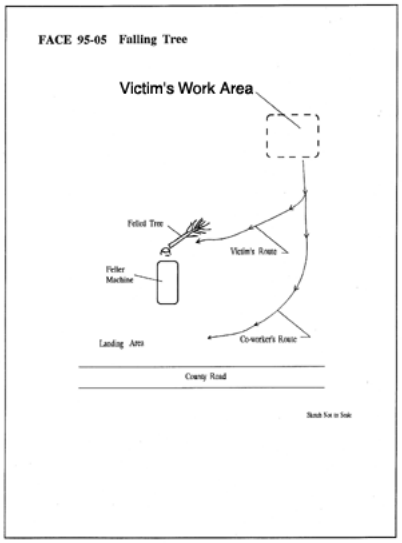

Figure.

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Last Reviewed: November 18, 2015