

Case Study Student Activity

Directions: Read the following report. Hi-lite anything that stands out as contributing to the incident. Use the knowledge gained to complete the last page of this activity.

Case: 02WV040-01Release

Date: March 19, 2003

Logger in Training Dies After Being Struck by a Previously Felled Tree Which Rolled off of a Bank in West Virginia

SUMMARY

On December 3, 2002, an 18-year-old male logger (the victim) died of injuries sustained when he was struck from behind by the section of a felled tree which rolled off the bank directly above him. He was positioned on the skid road with his back to the bank and was trimming the butt of a white oak which had been felled by a coworker. Just prior to the incident his coworker had felled the forked white oak which was located approximately 30 feet above the skid road on top of a 10 foot bank. Both sections of the forked oak fell across the skid road and remained attached to each other. The victim then topped both tree sections. A dozer operator, needing access to other timber, attempted to push the sections out of the road and off the bank. In doing so, the tree forks separated at the base and one of the two sections fell from the bank and landed parallel to the skid road. The other section remained diagonally upon the bank directly above the first. The dozer continued down the skid road and parked. The owner and victim were walking past the precariously elevated section when the victim decided to trim the butt of the other tree section which was down on the road. With his back to the elevated butt, he began his cut. The owner, realizing what he was doing, turned towards the victim. At that point the elevated log began to slide off the bank. The owner yelled to warn the victim, who not hear his warning, but continued cutting, and was struck from behind. The falling tree pushed the victim down placing his head between the two trees as they contacted one another. Witnessing the incident, the owner responded by telling another worker in the area to run down the hill and summon EMS. The owner noted the massive head trauma, checked for vital signs, but found none. EMS arrived shortly thereafter pronouncing the victim dead at the incident scene.

INTRODUCTION

On December 3, 2002, an 18-year-old male logger (the victim) died of injuries sustained when he was struck from behind by a section of a felled tree which rolled off the bank directly above him. On December 4, 2002, the West Virginia FACE Investigator was notified of the death by a newspaper clipping service. The FACE Investigator contacted the West Virginia Division of Forestry (WVDOF). The incident was reviewed with the WVDOF representative, who then accompanied the investigator to the site where an investigation was conducted on December 17, 2002. The victim's employer, who witnessed the incident, was interviewed as well as the dozer operator who was in the immediate vicinity. The incident site was examined and photographed. Other informational sources and contacts included: death certificate, medical examiner's report, newspaper articles, WVDOF, and OSHA.

The employer in this incident was a commercial logging company which had been in business for 5 years. The land was privately owned and was being selectively timbered. At the time of the incident, the workforce totaled 5 including the victim and the owner. The company had a designated safety director (owner). Safety meetings were held twice a month. It was reported that new workers were not permitted to work alone and were paired with an experienced worker for ongoing instruction and guidance. There was no written safety program or task-specific work rules.

The operation had a certified logger at the site. Certified Logger status in West Virginia. [Note: The Logging Sediment Control Act of West Virginia (1992) requires that each timbering operation in West Virginia be supervised by a certified logger. To become a certified logger, an individual is required to successfully complete training and pass a test for best management practices (a soil erosion prevention plan) and chain saw safety as well as possess a current first aid card.¹]

The victim's job at the time of the incident was that of topping trees being felled by his mentor. He had little logging experience and some chainsaw experience. He had only been with the company for approximately two weeks when the incident occurred. The victim was wearing a hard-hat, hearing protection, face screen, and chaps. He had just returned from lunch shortly before the incident.

INVESTIGATION

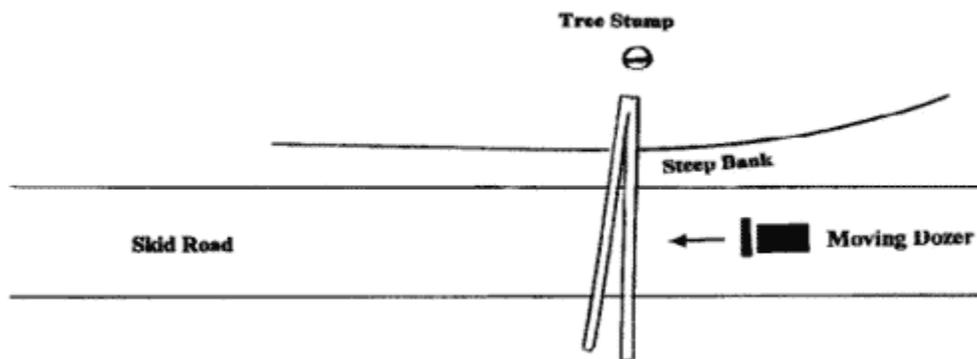
On December 3, 2002, an 18-year-old male logger (the victim) died of injuries sustained when he was struck from behind by the section of a felled tree which rolled off the bank directly above him. He was positioned on the skid road with his back to the bank and was trimming the butt of one of two sections of a forked white oak which had been felled by a coworker. Just prior to the incident, his coworker had felled the forked white oak which was located approximately 30 feet above the skid road on top of a 10 foot bank (see [Figure 1](#)). Both sections of the forked oak fell perpendicular across the skid road and remained attached at the butt. The victim then topped both tree sections. A dozer operator, needing access to other timber,

attempted to push the sections out of the road and off the bank. In doing so, the tree forks separated at the base as the trees pivoted. One of the two sections fell from the bank and landed parallel to the skid road. The other section remained diagonally upon the bank directly above the first (see [Figure 2](#)). The dozer continued down the skid road and parked. The owner and victim were walking past the precariously elevated section of tree when the victim decided to trim the butt of the other tree section which was down on the road. With his back to the elevated butt, he began his cut. The owner, realizing what he was doing, turn towards the victim. At that point the elevated log began to slide off the bank. The owner yelled to warn the victim who did not hear his warning, but continued cutting, and was struck from behind (see [Figure 3](#)). The falling tree pushed the victim down placing his head between the two trees as they contacted each other (see [Figure 4](#)). Witnessing the incident, the owner responded by telling another worker in the area to run down the hill and summon EMS. The owner noted the massive head trauma, checked for vital signs, but found none. EMS arrived shortly thereafter pronouncing the victim dead at the incident scene.

CAUSE OF DEATH

The medical examiner's report listed the immediate cause of death as cranial cerebral crush injury.

ILLUSTRATIONS



**Figure I. This illustrates the tree's position as felled and topped.
Note the segments are still attached at the base.
Dozer is about to attempt to push the tree off the bank and road as one unit.**

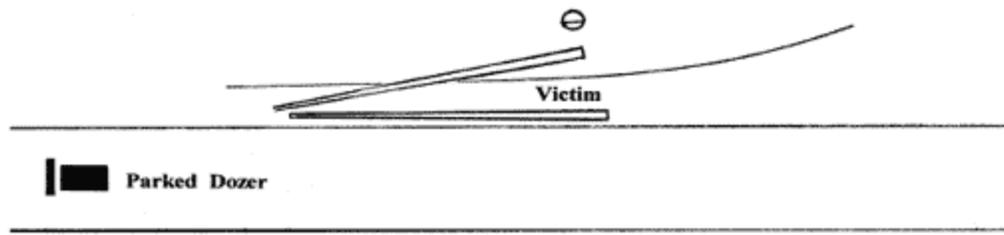


Figure 2. This illustrates the parked dozer, final position of the tree segments, and the victim's position under the precariously elevated tree segment.



Figure 3. This photo shows point where the victim was struck.



Figure 4. The arrow points to the chainsaw kerf left by the victim as he attempted to butt the log. From this perspective, the victim was standing on the opposite side of the lower log, facing the camera, and reaching over beginning his cut when he was struck from behind.

Student Report-Back Sheet

List 3-5 things that you identified as contributing to this worker's death.

1. _____

2. _____

3. _____

4. _____

5. _____

Develop 3-5 recommendations to prevent a similar incident.

1. _____

2. _____

3. _____

4. _____

5. _____
