

Preliminary Investigative Report
Daddy's Ridge Fire
November 10, 2001

Summary:

On November 10, 2001 at 6:31 p.m., Hairold Strode, a seasonal Division of Forestry employee, was killed when a wildfire overran his crew near the top of a narrow hollow on the **Daddy's Ridge Fire** near Crawford, Tennessee in Overton County. One other firefighter received minor burns and injuries in the fire. Strode, 46, had worked three years with the Division and was an experienced firefighter. He was a member of a six-person crew working on this incident.

At the request of the Division of Forestry's Fire Chief, an investigation team consisting of members from the Tennessee Department of Agriculture's Division of Forestry and Agricultural Crime Unit were assembled. The team received oversight and guidance from the U.S. Forest Service.

The team met at the site on the morning of November 11th. Dispatch and weather records were reviewed, and crew members interviewed. The team completed its investigation on November 15, 2001.

A final report will be prepared and distributed by December 31, 2001. The following are some preliminary findings of that investigation:

Fire Progression:

The Daddy's Ridge fire started on 11/09/2001 around 3:00 pm CST and was contained about 10:00 pm CST the same day at 40 acres. After noon on Saturday, November 10, the fire escaped the control line and by 3:05 pm CST, the fire was within 100 yards of the road that located on the top of Daddy's Ridge. By 3:05 pm CST the head of the fire had crossed the Daddy's Ridge road and the right flank was moving toward the drainage where the incident occurred. The fire at this time was approximately 100 acres. Around 6:30 pm CST, the fire made an extremely fast run up the drainage where the victim and 3 other crew members were working. Suppression resources continued to fight the fire after the incident occurred and as of 6:00 pm CST on Wednesday 11/15/01, the fire was contained at approximately 2400 acres.

Weather:

No weather observations were taken on the incident. Manual observations from the Standing Stone weather station were taken at 1:00 pm CST. Temperature was 61 degrees, humidity was 41% and the wind was west at 4 mph.

Predicted weather for the afternoon from the National Weather Service Office in Nashville was: Temperature 63-67 degrees, Humidity 33%, Winds North @ 3 shifting to the West @7 in the afternoon.

Fire Behavior:

The fire behavior fuel model for the area is a Fuel Model 9, which can be described as loose hardwood litter under stands of oak, hickory, maple and other hardwood species in the East. Both long-needle conifers stands and hardwood stands, especially the oak hickory types, are typical. No conifer stands were in the area of the incident. Although a Fuel Model 9 would be the normal fuel type, the fuel bed on the fire has had little to no rain on it since leaves have fallen from the trees during the fall, which allowed it to burn with rates of spread similar to a Fuel Model 9 but with flame lengths of a Fuel Model 2. As the fire moved up the slopes, rates of spread observed were similar to a Fuel Model 9 but where the incident occurred, the rate of spread would be similar to Fuel Model 2 as it created a draft up the chimney type drain. Several witnesses explained the fire behavior at the time of the blowup to be a rolling fire that totally engulfed the drainage within a matter of seconds.

Environment Factors Contributing to the Incident:

- Incident occurred in a west-facing drainage.
- The area was abnormally dry for the time of year.
- Low fuel moisture content, slope and flashy light fuels were the main contributors to fire spread.
- The bottom of the drainage was full of large boulders and rocks making movement in drainage difficult.
- The drainage was relatively flat and about 30 feet wide near the head of the drainage.
- Moving down the drain, the width reduced to about 8- 10 feet with the slope on the left being in excess of 70 % and over 60% on the right side.
- The drainage elevation dropped approximately 45 feet per 100 feet.