

Common Denominators of Fire Behavior on Tragedy and Near-miss Wildland Fires.

PMS 407 June 1996

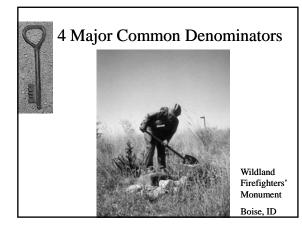


Some Common Denominators Identified

 It is possible to identify some common denominators of fire behavior both in the fatal fires and in the near-miss fires.



Rob Browning's and Richard Tyler's Markers South Canyon Fire 1994



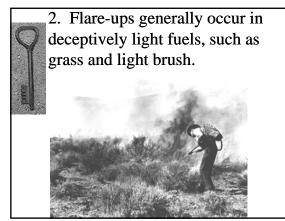
1. Most incidents happen on small fires or on isolated sections of large fires.





Storm King Mountain, Outside of Grand Junction Colorado.

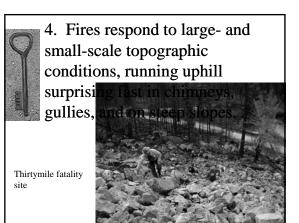
South Canyon Fire 1994: 14 fatalities





3. Most fires are innocent in appearance before unexpected shifts in wind direction and/or speed result in flare-ups. Sometimes tragedies occur in the mop-up stage.

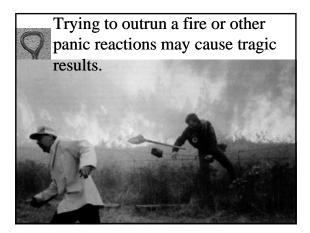


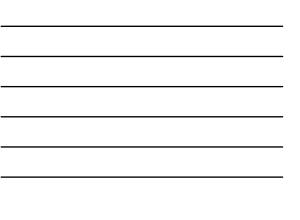






A common assumption is the high-intensity crown fire in timber or heavy brush traps and kills firefighters. Yet, with rare exceptions, most tragedy fires are innocent-appearing, burning in light fuels, just before the flareups.





Four Common Denominators

- 1. Most incidents happen on small fires or on isolated sections of large fires
- 2. Flare-ups generally occur in deceptively light fuels, such as grass and light brush.
- 3. Most fires are innocent in appearance before unexpected shifts in wind direction and/or speed result in flare-ups. Sometimes tragedies occur in the mop-up stage.
- 4. Fires respond to large- and small-scale topographic conditions, running uphill surprising fast in chimneys, gullies, and on steep slopes.

