

USFS-R2 Fire Operations Guidance in Bark Beetle Stands

Due to altered fuel conditions, personnel operating within the bark beetle environment should be aware of the imminent danger presented by dead and dying trees, falling at an increasing rate across a broad forested landscape.

Purpose and Intent

Fire Operations Guidance is mindful of Foundational Fire Suppression Doctrine in the Forest Service. The first principle is: No resource or facility is worth the loss of human life, however the wildland fire suppression environment is complex and possesses inherent hazards that can---even with reasonable mitigation---result in harm to fire fighters engaged in fire suppression operations. In recognition of this fact, we are committed to the aggressive management of risk.

This guidance provides a collection of potential hazards unique to bark beetle forests, including appropriate practices that have evolved over time within the wildland fire service. It does not provide absolute solutions to the unlimited number of situations that will occur.

This guidance within bark beetle stands was provided with the intention of being used in conjunction with existing fire risk management documents. No further protocols or rules are necessary to make informed risk management decisions for fire operations in bark beetle stands.

The following hazard guidance is provided:

Tactical Hazards

- Withdrawal and/or reassessment should be considered if any of the following are present:
 - Thunderstorms in the immediate vicinity.
 - Wind speeds are strong enough that canopy movement is observed¹ (Consider that wind speeds at eye level in sheltered areas may not indicate the much greater winds aloft)
 - Reliable communication cannot be established with the appropriate Dispatch Center and remain in place 24/7 when resources are engaged.
- Due to limited ingress or egress in remote areas or in terrain without vantage points, consider using an aerial platform for risk assessment and size up.

Potential Fire Behavior Hazards

- Due to increased potential of extreme fire behavior, when ERCs approach the 90th percentile, air reconnaissance should be on scene within 1 hour of detection.
- The following situations, though possible on any wildfire, may be accentuated in bark beetle stands:
 - Accelerated transition to crown fire (when needles are present)
 - Increased rate of spread (Surface fire)
 - Resistance to control (Heavy dead and down)
 - Frequent spotting, including long range (>.25 miles)

¹ Beaufort Scale for Estimating 20-FT Wind speed, 2010 IRPG page 77