

## FIRE BEHAVIOR NOTES

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The Pebble Hill Fire Plots were set up in longleaf pine-wiregrass forests on Pebble Hill Plantation near Thomasville, Georgia in 2005, to test the effects of different fire regimes on vegetation, soil, fuel loads, and fire behavior. Results to date suggest that changes in the structure of fine fuels (dead grass, pine needles, and leaves), in addition to the amount of fuel, influences fire behavior. It was expected that an accumulation of fine fuels with time since last fire would result in increasing fireline intensity (FI = heat released per length of fire line), reaction intensity (RI = heat released per unit area), heat per unit area (HUA), and flaming residence time (RT = length of time that fuels burn). However, fireline intensity has remained fairly constant with increasing time since fire, and reaction intensity has actually decreased (Fig. 1A). Rate of fire spread has also remained fairly constant (not shown). Meanwhile, heat per unit area and flaming residence time have increased (Fig. 1B), in part because there is more fuel to burn up.

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