

FIRE BEHAVIOR FORECAST

Fire: County Line	Unit: FL-FNF	Prediction for Day Shift
Forecast #14 Issued: 04/22/2012 2000 hrs	Signed: Gary Jarvis 202.379.6993 <i>/s/ Gary Jarvis</i>	Shift Date: 04/23/2012

GENERAL FIRE BEHAVIOR

Fuels are predominately Fuel Model (FM) 7 (Southern Rough) in the uplands also referred to as "Flatwoods" and FM4 (heavy brush) in the swamp. Large to moderate acreage tracts of commercial timberland are mixed in throughout the entire perimeter surrounding the forest. Fast moving wildfires with extremely high flame lengths and rapid rates of spread can occur within the swamp. As fire transitions to the upland, torching and crown fires are common. Long Range spotting is possible if fire becomes plume dominated although distances are generally 50 feet or less but some as far away as 200 feet could be observed.

Critical fire behavior thresholds

20 ft Windspeed >10 mph, RH <45%, fine dead fuels moisture <8% and dispersion index >70.

Today - 74 degrees and 25% RH + unshaded fuel = 5% fine dead fuel moisture which exceeds critical threshold.

All thresholds will be exceeded today

SPECIFIC FIRE BEHAVIOR

Weather forecast for 4/23 was used when calculating fire behavior below. All forecasted low to extreme indices were used when calculating outputs.

Fuel Type	Rates of Spread	Flame Length	Spotting Distance	Firebrand Ignition
Temp 70-74, RH 25%, Winds 10-15mph in AM and gusting to 30 mph afternoon				
*Shrub Fuels	51 - 176 ch/hr.	8 -20 feet	.2 mile	88%
**Southern Rough	20 - 62 ch/hr	4 - 9 feet	.2 mile	88%
Timber Litter-Reburn	6 - 17 ch/hr.	2 - 4 feet	N/A	88%
Small Pine Plantation w/grasses	22 - 65 ch/hr	4 - 8 feet	.2 mile	88%

In stands with palmetto present:

*Use the calculations for shrub when palmetto exceeds 4 feet in height.

**Use the calculations for southern rough when the height of the palmetto is about 3 feet high or less.

Rate of spread and intensity become critical when the RH drops to 45% or below but active burning in flatwoods can be observed with RH's of 80 percent. When the RH's fall to 45% or lower the flanks and rear of the fire can exceed the ability of tractor plow lines to hold without additional support.

Expect to see reburn when pines needles and hardwood leaves start to fall due to scorching.

Initial Attack - In areas where fuels have been herbicided, expect quick ignitions and extreme heat, very fast. Most private land has not had any fuel reduction treatments so expect heavier fuel loading when IA on these lands. Do size up before IA and consider flames lengths and ROS with current and expected weather.

Air Operations: High winds could keep smaller aircraft from flying today.

SAFETY:

Major common denominators of fire behavior on fatal and near-fatal fires.

Such fires often occur:

1. On relatively small fires or deceptively quiet areas of large fires.
2. In relatively light fuels, such as grass, herbs, and light brush.
3. With unexpected shifts in wind direction or wind speed.

Red Flag Warning Today