

FIRE BEHAVIOR FORECAST

Fire: County Line	Unit: FL-FNF	Prediction for <u>Day, Swing and Night Shift</u>
Forecast # 04 Issued: 04/11/2012 2000 hrs	Signed: Gary Jarvis 202.379.6993 /S/ GARY JARVIS	Shift Date: Thursday 04/12/2012

GENERAL FIRE BEHAVIOR

Fuels are predominately Fuel Model (FM) 7 (Southern Rough) in the uplands 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.

Indicators of Increased Fire Activity

- | | |
|---|---|
| <ul style="list-style-type: none"> • Relative humidity dropping below 45% • Winds above 10 mph • Heavy fuel loadings | <ul style="list-style-type: none"> • Fine dead fuel moisture 8% or less • Dispersion above 70 |
|---|---|

SPECIFIC FIRE BEHAVIOR Fuels within the perimeter of the "Swamp" consist of a variety of species. Lyonia (Fetter Bush) and Gallberry dominate shrub fuels within the interior and have the ability to cause intense heat buildup along a flaming front. Firebrands can and will come out of these swamps if fire reaches the canopy.

Strands of pine occur near the upland extending into the interior of the swamp. These strands increase the possibility of torching and crown fires as it moves into the upland fuels.

Pine stands with brush understory predominately make up the upland. These stands increase the possibility of torching and crown runs. These fuels are very receptive of spotting.

All Divisions:

Fuel Type	Rates of Spread	Flame Length	Spotting Distance	Firebrand Ignition
Winds at 4 - 10, G 15 mph @ 20'				
Shrub Fuels	40 - 180 ch/hr.	13 - 17 feet	.2 to .5 mile	75%
Southern Rough	19 - 31 ch/hr	5 - 8 feet	.2 - .5 mile	75%
Timber Litter-Reburn	7 - 14 ch/hr.	2 - 4 feet	N/A	75%
Small Pine Plantation w/grasses	23 - 46 ch/hr	5 - 7 feet	2/10 mile	75%

One hour fine dead fuel moisture will drop to around 4%, keeping it at critical levels. 100 hour fuels 8% 1000 hour fuels range from 16%.

Should a fire run(s) occur, expect winds in the area to potentially increase above predicted levels. This would increase Flame Lengths and ROS above predictions. Heavier firebrands can also be lifted higher and further increasing likelihood of spots to max predictions.

In areas where fuels have been herbicided, expect quick ignitions and extreme heat, very fast. Each day the water table is dropping creating more duff layer and organic fuels available for burning and/or reburning.

Air Operations: Heavy smoke predicted in the morning but clearing before noon. It should be a good day for air operations in the afternoon.

SAFETY:

Expect new fire starts and/or spots from existing fire to ignite easily, spread rapidly and burn with great intensity. This alignment of forecasted weather along with dry fuels has the potential to create critical safety concerns for firefighters and the public.

The safety of firefighters and public remain our first priority.