

FIRE BEHAVIOR FORECAST

Fire: County Line	Unit: FL-FNF	Prediction for <u>Day and Night</u> Shift
Forecast # 07 Issued: 04/14/2012 2000 hrs	Signed: Gary Jarvis 202.379.6993 /s/ Gary Jarvis	Shift Date: Sunday 04/15/2012

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

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| <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 |
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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 8 - 12, G 15 mph @ 20'				
Shrub Fuels	40 - 150 ch/hr.	8 -13 feet	.2 mile	50%
Southern Rough	16 - 39 ch/hr	4 - 7 feet	.2 mile	50%
Timber Litter-Reburn	6 - 17 ch/hr.	2 - 4 feet	N/A	50%
Small Pine Plantation w/grasses	19 - 65 ch/hr	4 - 8 feet	.2 mile	50%

One hour fine dead fuel moisture will drop to around 7%. 10 hour fuels 10% 1000 hour fuels 16%.

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

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.

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: Inversion lifting by 1000 today. Mixing heights will be 6500 feet. Air operations will be effective after the inversion lifts.

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.