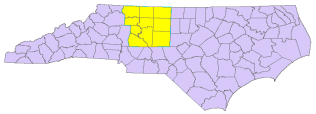
FIRE DANGER
POCKET CARD (SUPPLEMENTAL)

Local Thresholds
Watch out!

Combinations of any of these 3 factors can greatly increase fire behavior.

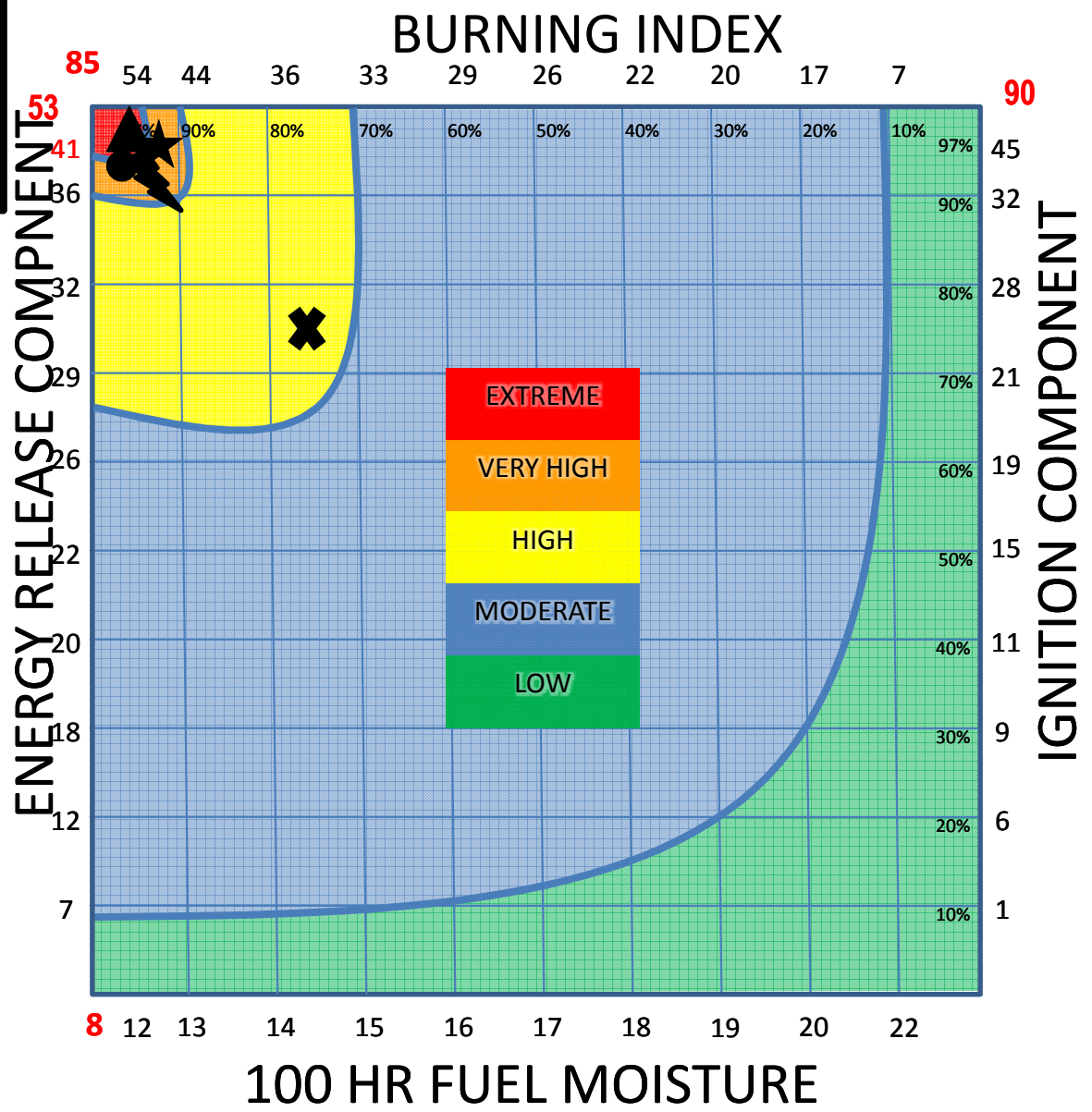
Wind speed *over 7 mi/h*
RH *less than 35%*
Temperature *over 55*



DISTRICTS 10
FUEL MODEL G
SHORT NEEDLE (HEAVY DEAD)

NWS Forecasting Offices
Raleigh, NC
Blacksburg, VA
Greenville/Spartanburg, SC

RAWS Stations
Lexington-314602



Valentine's Day
District Wide
872 Acres
02/14/2011
IC- 68
BI- 68
ERC- 35
100HR - 13%

Black Sunday
District Wide
161 Acres
02/10/2008
IC- 65
BI- 78
ERC- 35
100HR- 12%

Tower Ridge
Stokes County
363Acres
3/25/2008
IC- 61
BI- 64
ERC- 37
100HR- 12%

Merritt Creek
Surry County
730 acres
11/1/00
IC- 19
BI-22
ERC 29
100HR -14%

Saddle Mountain
Surry County
484 acres
3/1/2006
IC- 33
BI-51
ERC 36
100HR -11%

Fuel Model G Short Needle (Heavy Dead)	IGNITION COMPONENT			BURNING INDEX			ENERGY RELEASE COMPONENT			100 HR FUEL MOISTURE		
	Average Seasonal Value	Average Highest Value	Highest Value Observed	Average Seasonal Value	Average Highest Value	Highest Value Observed	Average Seasonal Value	Average Highest Value	Highest Value Observed	Average Seasonal Value	Average Lowest Value	Lowest Value Observed
January	18	23	61	29	39	77	21	32	43	17	15	10
February	22	30	88	33	44	78	22	32	45	17	14	9
March	24	33	76	32	50	75	21	37	53	17	13	8
April	25	32	90	34	44	85	24	33	45	16	14	9
May	14	20	58	27	32	62	26	34	43	16	14	10
June	15	25	39	27	38	55	29	41	47	15	13	9
July	14	18	41	27	33	55	29	40	48	16	14	11
August	13	27	41	25	39	52	26	43	50	17	13	10
September	14	28	49	23	41	62	22	42	49	18	14	12
October	13	21	46	21	35	59	18	33	44	18	16	12
November	14	22	54	21	34	57	18	32	41	19	16	11
December	12	18	47	19	29	58	16	25	39	19	16	11

REMEMBER WHAT FIRE DANGER TELLS YOU

✓**Ignition Component (IC)** – the probability a firebrand will cause an "actionable" fire, & requires suppression. **IC** is more than just a probability of a fire start. It has to have the potential to spread. **IC** can aid in assessing spotting potential. An **IC value of > 21 + is a critical threshold value**. Values at this level are critical during March and April as firebrands can initiate spot fires very easily.

✓**IC** gives day-to-day fluctuations calculated from 2 PM temperature, humidity, state of the weather and wind.
✓Wind speed is part of **IC** calculation.

Burning Index (BI) - relates to the contribution of the fire's behavior in containing the fire. **BI** is derived from the SC + the ERC. **BI** is a cross reference of fireline intensity & flame length. It accesses spotting & crown fire potential as well as suppression resource needs & tactical considerations. In pine plantations, **BI's > 30 +,** are exceptional intense fires with much spotting. The doubling of the **BI**, 20 to 40 can increase flame length from 2 to 4 ft. yet, this is a 5 fold increase in fireline intensity.

✓**BI** gives day-to-day fluctuations calculated from 2 PM temperature, humidity, wind, daily temperature and RH ranges, and precip duration.
✓Wind speed is part of **BI** calculation.

Energy Release Component (ERC) is a number relating to the available energy released from forest fuels (BTU / ft²) at the head of a fire's flaming front. **ERC** is a composite of all live & dead fuel moistures. It is a very good reflection of drought conditions. It is a "build up" type index. Given a fire start in a fuel with a high **ERC**, fire containment can be expected to be difficult. **ERC** is very valuable in assessing the depth of a burn, consumption of the various fuel sizes, residual burning , and mop-up requirements.

✓**ERC** gives general seasonal trends calculated from precip, temp, and RH.
✓Wind speed is not part of the **ERC** calculation.

100 Hour Fuel Moisture (100 HR) The 100 hour fuel moisture value represents the modeled moisture content of dead fuels in the 1 to 3 inch diameter class. It can also be used as a very rough estimate of the average moisture content of the forest floor from three-fourths inch to 4 inches below the surface. A **100 HR** fuel moisture **<15%** indicates when response to initial attack fires begin.

✓**100 HR** gives general seasonal trends calculated from precip, temp, and RH.
✓Wind speed is not part of the **100 HR** calculation.

April 2012

This card is based on 12 years of data