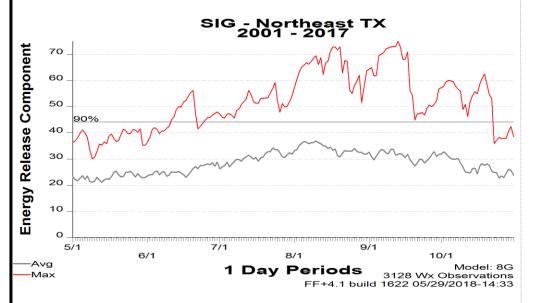
Fire Danger: Northeast Texas Predictive Service Area



Critical Fire Weather Thresholds:

Relative Humidity: 30% or less

• 20' Wind speed: 15 mph or greater

Temperature: 90° or greater

Critical Dead Fuel Thresholds (10th %):

10-Hr: 7100-Hr: 131000-Hr: 15

Critical Live Fuel Moisture Thresholds (10th %):

Loblolly Pine: 120Red Oak: 85Juniper: 91Yaupon: 102

Critical NFDRS Indices (90th %):

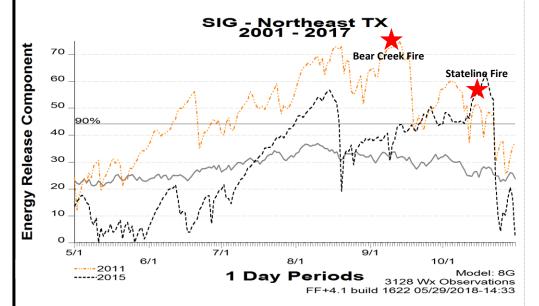
Energy Release Component: 47

Burning Index: 51

North<u>east Texas TFS Fires and Acres Burned May-October</u>

	May	Jun	Jul	Aug	Sep	Oct
Fires	12	8	40	62	45	38
Acres	50	100	250	250	400	150

Years to Remember: <u>2011</u> <u>2015</u>



Fuel Model G – Short Needle (Heavy Dead)

Remember what Fire Danger tells you:

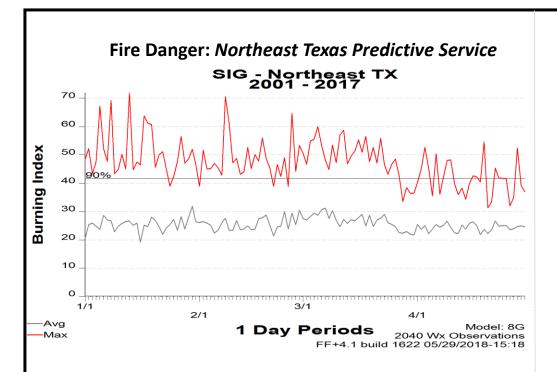
- Energy Release Component gives seasonal trends calculated from 2 PM temperature, humidity, 24-hour Min and Max Temperature and Relative Humidity, and Precipitation.
- ✓ Wind is NOT part of the ERC calculation.
- Watch local conditions and variations across the landscape –Fuels, Weather and Topography.
- ✓ Stay informed of local fire weather forecasts, especially WIND.

Past Experience:

The Bear Creek fire occurred in Cass County on 9/4/2011 burning 41,050 acres and destroyed 92 homes. Strong subsidence from tropical storm Lee and an approaching cold front from the NW provided a strong boundary of instability and extremely critical weather. Significant factors also included high risk pine plantation fuels and extreme fuel dryness. North wind sustained at 15 with gusts to 35, RH near 30% and temps near 95 degrees were observed at the Gilmer RAWS. Longview ASOS observed N-NE wind at 20-25mph with gusts to 40, RH near 30% and temps about 92 degrees. Live fuel moisture measured from loblolly pine in Cass County was 140%. The 10th percentile for loblolly pine in the Northeast Texas PSA is 120%.

Responsible Agency: Mike Dunivan, Texas A&M Forest Service May 2018





Critical Fire Weather Thresholds:

- Relative Humidity: 25% or less
- 20' Wind speed: 15 mph or greater
- Temperature: 90° or greater

Critical Dead Fuel Thresholds (10th %)

10-Hr: 7100-Hr: 131000-Hr: 15

Critical Live Fuel Moisture Thresholds (10th %):

Loblolly Pine: 105Live Oak: 78Juniper: 77Yaupon: 86

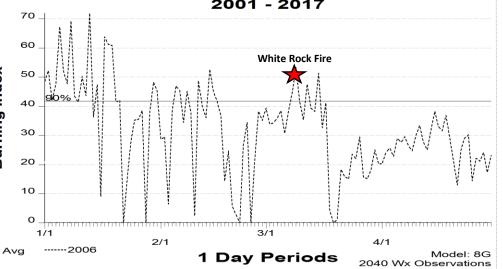
Critical NFDRS Indices (90th %):

- Energy Release Component: 44
- Burning Index: 41

Northeast <u>Texas Normal Fires and Acres Burne</u>d January-April

	Jan	Feb	Mar	Apr
Fires	36	36	45	20
Acres	350	565	300	130

Years to Remember: <u>2006</u> SIG - Northeast TX 2001 - 2017



Burning Index

Fuel Model G – Short Needle (Heavy Dead)

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Remember what Fire Danger tells you:

- Burning Index gives day-to-day fluctuations calculated at 2 PM temperature, humidity, and wind.
- ✓ Wind is part of the BI calculation.
- Watch local conditions and variations across the landscape –Fuels, Weather, and Topography.
- Stay informed of local fire weather forecasts, especially WIND.

Past Experience:

Remember: Any change in wind speed or direction will have an immediate impact on flame lengths and rate of spread on fires in fine fuels. When grass fuels are cured, rapid rates of spread can be expected on windy days when 10 hour fuel moistures are below 7%. ERC values (FM - G) above 40 exceed the 90th percentile. In general, live woody fuel moistures less than 120% can contribute to single and/or group tree torching in southern yellow pine.

Responsible Agency: Mike Dunivan, Texas A&M Forest Service May 2018

