

How Do Fire Danger Ratings Assist the Suffolk County Fire Community?

What is Fire Danger & a Fire Danger Rating Area?

Fire Danger is a broad scale assessment that assists the fire manager to determine the potential of overall fire behavior within a geographic area, typically 50,000 to 100,000 acres in size, such as the Central Pine Barrens Area. This geographical area is referred to as a Fire Danger Zone. Due to the size, topographical variance, slopes, aspects, and multiple vegetation types in a typical fire danger zone, fire danger predictions are taken as relative indicators of fire behavior. This means actual fires at the scene will behave in ways that are influenced by local conditions that the model can not predict exactly. It **does not predict the possibility of fire** occurring there. The ignition of wildfires is almost always by careless or intentional actions of children or adults, and can occur during any of the fire danger ratings!

How are Fire Danger Ratings used in Suffolk County, Long Island?

Data on fire weather is an important tool for both prevention and suppression of wildfires. Each day, fire weather data is reviewed from two fire weather stations, one operated by the US Fish & Wildlife Service located in Shirley, Long Island and the other operated by the Central Pine Barrens Commission in Eastport, Long Island. A daily fire danger rating is calculated from weather data and sent to the Suffolk County Fire, Rescue and Emergency Services' Communication Center. The Center broadcasts the information when the fire danger rating is moderate or above at approximately the same time each day to the volunteer fire service to provide general information on what the potential difficulty would be to contain a fire should there be a fire start or ignition. In addition, the fire danger rating is given by radio directly to the first responding chief when their department is activated for a grass or brush fire. This information assists the chief in determining their plan of action (see Fire Danger Rating and Color Code with description)

Fire Danger Rating and Color Code	Description
Low (L) (Green)	Fuels do not ignite readily from small firebrands although a more intense heat source, such as lightning, may start fires in duff or decaying wood. Fires in open cured grasslands may burn freely a few hours after rain, but woods fires spread slowly by creeping or smoldering, and burn in irregular fingers. There is little danger of spotting.
Moderate (M) (Blue)	Fires can start from most accidental causes but, with the exception of lightning fires in some areas, (which are rare on Long Island), the number of starts is generally low. Fires in open cured grasslands will burn briskly and spread rapidly on windy days. Timber fires spread slowly to moderately fast. The average fire is of moderate intensity, although heavy concentrations of fuel, especially draped fuel, may burn hot. Short-distance spotting may occur, but is not persistent. Fires are not likely to become serious and control is relatively easy.
High (H) (Yellow)	All fine dead fuels ignite readily and fires start easily from most causes. Unattended brush and campfires are likely to escape. Fires spread rapidly and short-distance spotting is common. High-intensity burning may develop on slopes or in concentrations of fine fuels. Fires may become serious and their control difficult unless they are attacked successfully while still small.
Very High (VH) (Orange)	Fires start easily from all causes and, immediately after ignition, spread rapidly and increase quickly in intensity. Spot fires are a constant danger. Fires burning in light fuels may quickly develop high intensity characteristics such as long-distance spotting and fire whirlwinds when they burn into heavier fuels.
Extreme (E) (Red)	Fires start quickly, spread furiously, and burn intensely. All fires are potentially serious. Development into high intensity burning will usually be faster and occur from smaller fires than in the Very High fire danger class. Direct attack is rarely possible and may be dangerous except immediately after ignition. Fires that develop headway in heavy slash or in conifer stands may be unmanageable while the extreme burning condition lasts. Under these conditions the only effective and safe control action is on the flanks until the weather changes or the fuel supply lessens.

Additional ways Fire Danger Ratings are used in Suffolk County, Long Island

Today's and Previous Fire Danger Ratings:

http://www.pb.state.ny.us/wtf/fire_land_status.htm

Smokey Bear informs the Public

The fire danger rating is posted on Smokey Bear Fire Danger Signs to notify the public when special precautions above normal safe guards, such as restricting campfires or public access, may be required to prevent wildfires.

Public Lands Management

The weather data and fire danger rating are used by Federal, State and County Park officials in coordination with other local officials through the Wildfire Task Force's Fire Weather Subcommittee, for making decisions about restricting or prohibiting the use of fire and other activities at parks and other public lands in the interest of public safety. A document entitled "**STANDARD OPERATING PROCEDURE FOR INTERAGENCY FIRE AWARENESS NOTIFICATION FOR PUBLIC LANDS**" (SOP) was prepared by the Subcommittee to ensure that public land management agencies in Suffolk County simultaneously receive uniform, accurate, and timely fire awareness information which affects public lands. The SOP facilitates the coordination of consistent public land management decisions with regard to fire danger and public safety during times of high or extreme fire danger levels. To request a copy of this SOP contact the Central Pine Barrens Commission at 631-224-2604.



Wildfire Firefighting

Fire suppression crews use fire weather data and fire weather forecasts to anticipate fire behavior and determine the type and amount of fire suppression forces that will be needed to achieve control of a wildfire. Since deployment of large fire suppression forces and special equipment, such as helicopters for water drops, requires additional time and money, fire weather data is helpful in quickly accessing resource needs.

Additional Fire Weather Information Sources:

Roman Real-time Observation, Monitor & Analysis Network

<http://www.met.utah.edu/roman>

WFAS, the Wildland Fire Assessment System, is an internet-based information system that provides a national view of weather and fire potential, including national fire danger, weather maps and satellite-derived "Greenness" maps (Burgan and others 1997).

<http://www.fs.fed.us/land/wfas/welcome.htm>

National Weather Service Fire Weather Page

Daily Fire Weather Forecast - Upton, NY

<http://www.erh.noaa.gov/okx/okxfirewx.html>



1995 Long Island Wildfires- Extreme Fire Danger conditions



For additional information visit the Central Pine Barrens Fire Weather Program Website

http://www.pb.state.ny.us/wtf/fire_weather_main_page.htm

or call 631-224-2604

Developed by the Central Pine Barrens Wildfire Task Force
Public Education Subcommittee

http://www.pb.state.ny.us/chart_stewardship_main_page.htm

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