



# Wildfires

Fire circa 1920s. (Photo courtesy of COMM Fire Department.)

## IS CAPE COD AT RISK FOR WILDFIRE?

The Cape is no stranger to wildfires. In the past many wildfires have begun and spread quickly throughout large tracks of pitch pine forest and large salt marsh areas in which *phragmites* is prolific. *Phragmites* is an invasive plant that has taken over many of the Cape's salt marshes. Even the salt hay itself would be quick to burn and is considered susceptible to wildfire.

Cape residents and visitors are certainly fortunate to have these natural resources and must simply take extra precautions and be diligent to prevent fires from starting in or threatening these areas. Wildfires can be started in these areas naturally, such as from a lightning strike, but more often they are started as a result of human carelessness or intervention.

## RAGING WILDFIRES - COULD THEY HAPPEN HERE?

The answer is yes and no. Western forests differ from most eastern forests because they contain mostly evergreen

trees that have a lot of resin in their needles. This resin burns readily, creating an explosive flame that rages up the crown, where it jumps easily from tree to

tree. Because of the Cape's extensive pitch pine, we are vulnerable to these types of burns, particularly when the Cape faces drought conditions.

Western and eastern forests differ in one more important respect - precipitation. Many western forests are extremely dry. Because of the dry climate, the West is also plagued by "dry lightning" - electrical storms without rain that often spark fires. While the Cape does not tend to have huge, rampant fires like the West, there have been serious wildfires here in the past and there likely will be again.

## WHEN ARE WILDFIRES MOST LIKELY ON CAPE COD?

Wildfire season usually begins in March in coastal and southern New England, gradually extending to central, western and northern areas. The wildfire season usually ends in late November. The majority of wildfires usually occur in April and May, when home owners are cleaning up from the winter months, and when the majority of vegetation is void of any appreciable moisture making

them highly flammable. Once "green-up" takes place in late May to early June, the fire danger usually is reduced somewhat.

## BE PREPARED!

- Have an evacuation plan.
- Make sure everyone in your family knows the plan.
- Have all your evacuation needs (papers, medications, Family Disaster Kit, etc.) together.
- As with any disaster, don't forget to plan in advance for your pets.

## WHEN WILDFIRE THREATENS

**Evacuate immediately if requested!**  
**Follow all directions given by emergency personnel.**

### If time allows:

1. Close all windows and doors.
2. Close heavy drapes, blinds or hurricane shutters.
3. Remove lightweight curtains.
4. Move flammable furniture away from windows and glass doors.
5. Back the car into the garage.
6. Disconnect the automatic garage door opener.
7. Turn off fuel supplies at the connection.
8. Connect a garden hose with a nozzle to an outside tap.

### Sources:

[www.nesec.org](http://www.nesec.org);  
Cape Cod Brush Breakers Pictorial History  
[www.capecodfd.com/PAGES%20Special/Breakers00.htm](http://www.capecodfd.com/PAGES%20Special/Breakers00.htm);  
[www.fs.fed.us/na/durham](http://www.fs.fed.us/na/durham).



In the spring of 1964 a huge brush fire raged in the area of Boardly Road and Hog Pond Road, in South Sandwich, MA.

(Photo by Gordon Caldwell, Cape Cod Times, courtesy of COMM Fire Department.)

## **KEETCH-BYRAM (SOIL MOISTURE) DROUGHT INDEX (KBDI)**

The KBDI is a mathematical system for relating current and recent weather conditions to potential or expected fire behavior. This system is based primarily on recent rainfall patterns. The result of this system is a drought index number ranging from 0-800 that accurately describes the amount of moisture that is missing; 0 = no moisture deficiency and 800 = maximum drought possible.



**A view from Onset of the great 1907 forest fire in the Bourne-Sandwich area.**

*(Photo courtesy of COMM Fire Department.)*

### **Drought Index/Fire Danger Expected Conditions**

#### **0-200/Low**

Soil and fuel moisture is high. Most fuels will not readily ignite or burn. However, with sufficient sunlight and wind, cured grasses and some light surface fuels will burn in spots and patches.

#### **200-400/Moderate**

Fires more readily burn and will carry across an area with no "gaps". Heavier fuels will still not readily ignite and burn. Also, expect

smoldering and the resulting smoke to carry into and possibly through the night.

#### **400-600/High**

Fire intensity begins to significantly increase. Fires will readily burn in all directions exposing mineral soils in some locations. Larger fuels may burn or smolder for several days creating possible smoke and control problems.

#### **600-800/Extreme**

Surface litter and most of the organic layer is consumed. Stumps

will burn to the end of roots underground. Spotting from snags is a major problem if close to line. Expect dead limbs on trees to ignite from sparks. Expect extreme intensity on all fires, which makes control efforts difficult. With winds above 10 miles per hour, spotting is the rule. Expect increased need for resources for fire suppression. Direct initial attack is almost impossible. Only rapid response time to wildfire with complete mop up and patrol will prevent a major fire situation from developing.



**In 1965 a huge forest fire, which started on the MMR/Otis, jumped Route 6 and burned down into Sandwich's center.**

*(Photo courtesy of COMM Fire Department.)*