

Lookout Show`n Tell #14 – The Weather Station

For sixty years, nearly half of the fire lookouts served also as official U.S. Weather Bureau stations. That familiar white wooden box with louvered open sides, little known by its real name, "Stevenson Screen", was a fixture at three thousand mountaintops across America.



Weather Station



Inside Stevensen Weather Box

Each day at 1:00pm, it was the lookout's job to gather eight weather components: current wind speed & direction; precipitation the past 24 hours; fuel moisture in 1/2" wooden sticks precisely weighed in grams; relative humidity obtained by reading the current temperature on the psychrometer (two thermometers, one dry, one wet); and the state of weather (cloud %, type, raining?, lightning?). Some lookout stations even had a hygrothermograph (time clock measuring the 24-hour high and low temperature and humidity).



Anemometer & Wind Vane



Rain Gauge



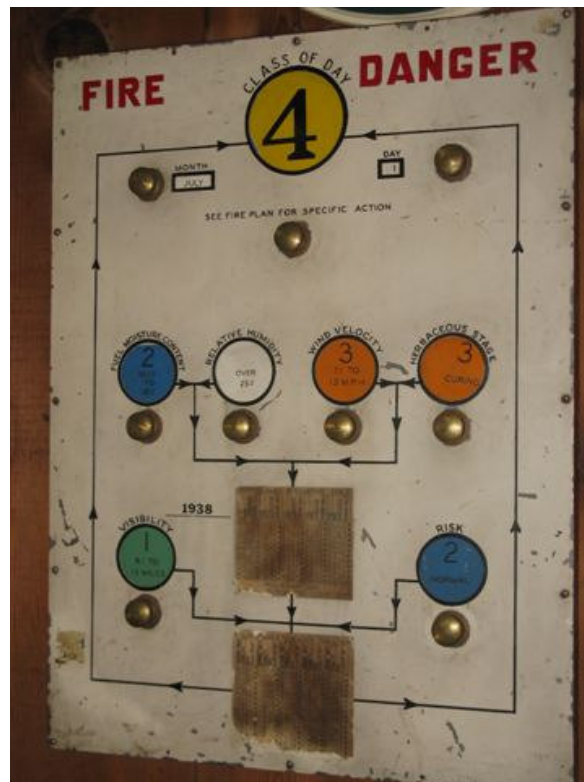
Fuel Moisture Sticks



Measuring Fuel Moisture

This information was sent to one of four regional centers in the nation which calculated what tomorrow's fire danger will be.

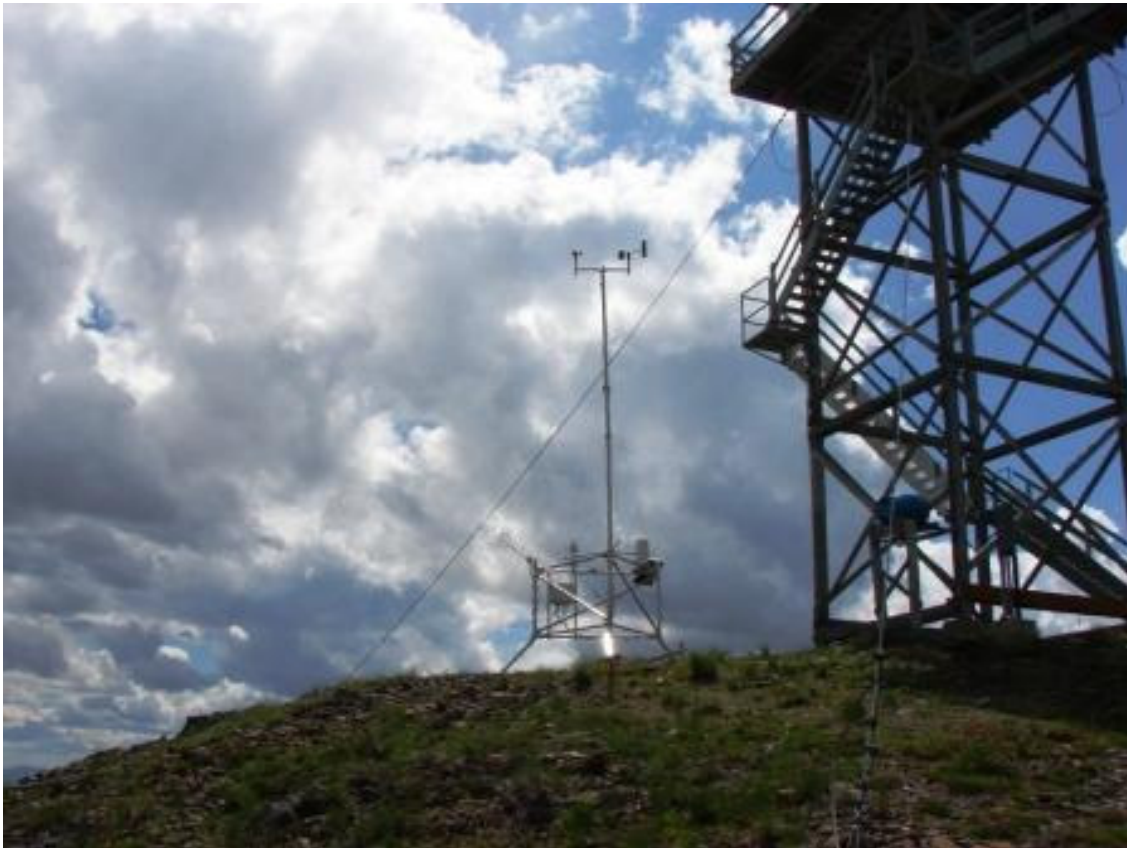
From this input, the local Burning Index (BI), or action needed to cope with predicted fire danger and spread potential, was determined, and distributed on a simple scale developed in 1931 by the nation's first fire scientist, Harry Gisborne.



Gisborne Fire Danger Meter

In 1972, the National Fire Danger Rating System (NFDRS) made it all much more complicated, as Energy Release Component (ERC), Industrial Precaution Level (IPL), Ignition Component (IC), Haines Index, Fuel Models, and a host of other components were introduced.

Then, as could be predicted, the on-site lookout weather observer soon became all but obsolete, when Remote Automated Weather Stations (RAWS) were introduced in 1978. Now, all one needs is a key pad on the radio, or a cell phone, to dial up a number and get the current and predicted weather in more detail than anyone cares to know.



Modern RAWS Station

**Ray Kresek
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