

SUPPLEMENTAL SERVICE TO BE USED TO MEET SPECIAL WEATHER CONDITIONS IN YOUR CITY

(These notes may be used instead of regular Why The Weather releases on particular days or they may be incorporated in weather stories which you prepare. Credit Dr. Brooks with authorship or not just as you prefer.)

? WHY THE WEATHER ?

By Dr. Charles F. Brooks
of Clark University.

FIRE WEATHER

While lightning starts many forest fires, the weather conditions favoring the rapid growth of fires are generally of more concern to the fire warden. Low relative humidity, or dry air, is essential for the development of a big forest fire. Studies have shown that forest fires do not spread if the relative humidity is above 60 per cent., that is, if more than 60 per cent of the possible moisture is present in the air. Humidity between 40 and 50 per cent. allows fires to pick up and spread slightly. Humidity below 30 per cent. tends to make even small fires spread beyond control.

A dry, descending wind ventilates and fans a fire and helps to spread it. Such winds commonly are present with low humidities. On the Pacific coast, north-east and north winds from the interior are the chief fire winds. In the East, westerly or northerly, or even northeasterly winds may cause fire weather. A large fire provides its own wind, as the intense heat causes a strong indraft from all sides. Such local fire winds have sometimes been heavy enough to overturn wagons and break down tall trees.

All rights reserved by Science Service

SCIENCE SERVICE,
B and 21st Sts.,
Washington, D.C.