

A Science Service Feature

Released upon receipt
but intended for use
July 6, 1934

? WHY THE WEATHER ?

Mailed June 29, 1934

WIND

By Charles Fitzhugh Talman,
Authority on Meteorology.

What makes the wind blow? There is no better elementary answer to this question than the following, which was written by Dr. W.J. Humphreys for the Boy Scouts of America:

"The wind, which is just air in motion, is caused by a push -- a greater push on the air in one direction than another. The air starts to flow in the direction of this push, but the course it takes over the surface of the earth is modified by the fact that the earth is rotating. However, it is this push, greater in one direction than in any other, that makes the air move at all. Now, this greater push is owing to an unequal distribution of the quantity of air above the surface. Where this quantity is greatest, there the pressure on the surface, and consequently the equal push sidewise, is also greatest. Where the one is least, so also is the other. Finally, the quantity (not in volume but in mass or weight) tends to become greatest where the air density is greatest (that is, where the temperature is lowest), and to become least where the temperature is highest. In short, then, differences of temperature over the surface of the earth cause a corresponding unequal distribution of the mass of the air. This makes the pressures, sidewise as well as down, unequal. And unequal sidewise pressures or pushes set the air in motion, and air in motion is wind."

(All rights reserved by Science Service, Inc.)

SCIENCE SERVICE
21st and Constitution Ave.
Washington, D.C.