

No. 774

A Science Service Feature

Nov. 3

? WHY THE WEATHER ?

By Dr. Charles F. Brooks
of Clark University.

"FULL MOON EATS CLOUDS"

Although the moon has no established direct effect on the weather, several old sayings regarding the moon and the weather have meteorological significance. One of them, "the full moon eats clouds", is explained thus by Dr. W. J. Humphreys of the Weather Bureau. Often during the afternoon, a layer of high clouds forms across the sky. After the sun has set, they radiate their heat, grow cool themselves and cool the air around them. The cooler air becomes denser, and sinks with its burden of clouds until it reaches a point where the surrounding air has the same density. But the air has warmed while descending until it is of the same temperature as that by which it is now surrounded. Then the clouds, being in contact with warmer drier air, evaporate. Although this type of cloud dissipation is as common in early evening one part of the month as another, it is most conspicuous when the moon is full. Hence arose the common belief that the moon caused the clouds to vanish.

"Clear moon, frost soon" is another saying based on truth, for it is on clear, calm, dry nights, nights when moonlight seems brightest, that most active radiation, or loss of heat into space, is possible. The more active the radiation, the more the temperature of earth and air will be cooled, and the more readily dew or frost can be formed.

(Tomorrow: An Autumn Low Passes)

All rights reserved by Science Service

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