

A Science Service Feature

Released on receipt  
but intended for use  
October 1, 1926

? WHY THE WEATHER ?

Mailed September 24, 1926

By Dr. Charles F. Brooks  
of Clark University

HEAVY DEWS

When it is not cold enough for frost, the heavy dews of autumn are often brought unpleasantly to the attention of those who traverse unfrequented paths in the early morning. In the long grass and leafy underbrush it seems that we have efficient shoe washers and clothes sprinklers awaiting our passage. Whether or not there is more dew at this season, the grass weeds and bushes would make it seem so.

Dew is formed from atmospheric vapor that has been chilled to the point of condensation. With it is commonly also the water exuded from live plants, which does not evaporate readily in the damp hours. It follows that the more vapor there is to be chilled and the more chilling, the heavier will be the dew. Considering the seasons, we find that summer and autumn have the most vapor, and autumn and winter the longest nights. Autumn thus presents a fine combination for making dew: much vapor and long nights. Not only are the nights long, but also they are often clear. This is a condition which favors considerable loss of heat by radiation from objects exposed to the sky, and consequent deposition of dew on their chilled surfaces.

In some places the nightly deposition of dew is so great that it does not all evaporate by day, and some soaks into the ground. Thus in its small way dew formation may assist locally in the general drying of the lower air as temperatures fall towards winter's levels.

(All rights reserved by Science Service, Inc.)

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