

Intended for use  
Jan. 8, 1926

A Science Service Feature

? WHY THE WEATHER ?

Mailed Dec. 31, 1925

By Dr. Charles F. Brooks  
of Clark University

COLD-SNOW- COLD

Snow doesn't come till the cold weather, and very cold weather doesn't come till there's snow. The first proposition is obvious you can't have snow till it's cold enough. The second, that very cold weather doesn't come till there's snow, refers to well known chilling effect of snow on the lower air. A small radiation of heat cools any light surface layer of snow to a very low temperature for there is so little heat in snow and the opportunity for more heat to come from warmer layers below is so restricted by the numerous minute air spaces. A difference of 30 degrees Fahrenheit has been observed between a snow surface and a layer of snow but one inch under it. Almost without exception, so long as there is no snow cover the escape<sup>of</sup>/stored heat from the ground effectively prevents a fall in temperature to very low points.

The coming of the first general zero weather in the northern and central United States this season was very definitely associated with the immediately prior occurrence over much<sup>of</sup>/the area of the first snow cover of moderate depth.

So long as there is snow on the ground, temperatures can rise usually but little above freezing, but can readily fall to low points.

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B and 21st Sts.,  
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