

No. 98

A Science Service Feature

Sept. 3

? WHY THE WEATHER ?

Dr. Charles F. Brooks,  
Secretary, American Meteorological Society,  
tells of:

COURTESY COPY

His newspaper report is sent to you  
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privilege of publication.

COOL SPOTS ON HOT NIGHTS

In driving through the country on a still, clear, warm evening one occasionally passes into a zone of coolness. The effect upon the body may be one of real chilling, so sharp is the contrast on entering the colder, damper air. The mercury fall may be as much as 10 degrees in a few rods of highway.

Two influences cause this phenomenon. The less important is that the bottom of the hollow to which the condition is confined passes out of direct sunlight into the shadow earlier than the land about it, as does also the slope next the sun. The more important cause, however, is the drainage of cool air from the slopes into the hollow. The higher land gives forth its heat more quickly than the lower land, this cooling action being in evidence soonest on the slopes which entered the shadow early or were shaded by dense trees. The air in contact with the ground or in the woods becomes cool and therefore heavier than the warmer air below, and slides down hill into the lowlands, materially reducing their temperature. On still evenings the moisture from evaporation collects over damp lowlands, and humidity becomes so high that a relatively slight decrease in temperature may bring the air below its dewpoint and form a fog.

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(Tomorrow: The Brocken Spectre)

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