A Science Service Feature

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? WHY THE WEATHER ?

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LOCAL COLD SPOTS.

Is your house in a cold spot? Does your thermometer on clear quiet mornings always read lower than the "official" coldest reported? Valleys and lowlands, and, especially, pocket-like depressions in which cold air collects, are cold spots in winter. It is indeed fortunate for the ice man that this is so; otherwise he would not get his ice twelve inches thick almost every winter. True, such localities are usually more protected from the wind than hilltops, but the temperatures experienced at night are considerably lower. When nocturnal cooling begins, the surface layer of cold heavy air tends to slide down slopes into lowlands, where a considerable thickness accumulates.

The cold spots are most pronounced on clear calm nights when there is no cloud blanket to reduce the loss of heat and no wind to stir up the air and eliminate local differences. Extreme local cold is also favored by fluffy snow-cover, for under such conditions cooling to very low temperatures can occur without much interference by small amounts of heat emitted from the blanketed ground. A temperature difference of 10 or 15 degrees Fahrenheit between the top and bottom of a 150 foot hill is common, while a contrast of 30 degrees may be observed under the most favorable circumstances.

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