

A Science Service Feature

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? WHY THE WEATHER ?

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Authority on Meteorology.

A WET LAND WITH LIGHT RAINFALL

In an interesting description of northwestern Alaska by P.S. Smith and J.B. Mertie, Jr., of the U.S. Geological Survey, the authors call attention to the paradoxical fact that although the precipitation (rain and snow) is so light that, on this basis alone, the region would be classified as arid or subarid, there is actually "water, water everywhere." We read:

"The surface of the country during the summer is commonly wet and swampy, and water stands on the surface in ponds and lakes. The streams, unless they traverse a broad belt of limestone, show no marked diminution of volume but constantly increase in size toward their lower courses. All these features are due in large measure to the permanently frozen condition of the subsoil, which makes removal of surface water by percolation and by underground migration impossible. Furthermore, the low elevation of the sun, even during the summer, prevents rapid evaporation. The rainfall or snowfall thus stands on the surface or collects in the low areas where the slope is not sufficient to induce surface run-off. Then again, the upper six to eighteen inches of the frozen zone melts during the summer and thus produces wet, soggy footing that is most unlike any preconceived idea of a dry country. Furthermore, the precipitation does not come in deluging cloudbursts, separated by long intervals of low precipitation, as in the countries more often referred to as arid, but comes in numerous light showers or heavy mists."

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