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A Science Service Feature

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? WHY THE WEATHER ?

Dr. Charles F. Brooks,
of Clark University,
discusses:

RAINFALL INTERCEPTION BY TREES

One of the first rules of rainfall observation is to put the rain-gauge twice as far from trees or buildings as they are high. A few years ago, however, a hydraulic engineer, Mr. R. E. Horton, deliberately put several rain-gauges under different kinds of trees to see how much of the rain and snow did reach the ground in the woods.

A tree can hold a certain amount of water on its leaves or branches and will also continue to evaporate water from these surfaces during a rain. If the shower is a light one, a tree with thick foliage will intercept nearly 100 per cent. of the rainfall and serve as a good shelter. But with heavier rains of longer duration, trees will on the average keep only about 25 per cent. of the rain from reaching the ground. Needle-leaved trees, such as pines and hemlocks, will intercept more rain than broad-leaved trees. The difference is particularly noticeable in winter when the evergreen boughs hold more snow than the bare branches of other trees.

(Tomorrow: Forests and Stream Flow)

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