

A Science Service Feature

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? WHY THE WEATHER ?

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TREES AND LIGHTNING

During the past half century many series of investigations have been made concerning the relative liability of trees of different species to lightning stroke. The general result seems to be that the oak, the poplar and the conifers are especially likely to be struck, while the beech is comparatively favored, though by no means immune.

Entirely apart from the question of species, a tree is likely to be struck by lightning if it is taller than surrounding trees; if it stands in an isolated location or upon high ground; if it is deeply rooted; or if it is wet with rain. Dr. W. J. Humphreys, of the U. S. Weather Bureau, says:

"In general, the trees most likely to be struck are those that have either an extensive root system, like the locust, or deep tap-roots, like the pine, and this for the very obvious reason that they are the best grounded and therefore, on the whole, offer the least electrical resistance."

Further studies of the relations of lightning to trees will doubtless include laboratory experiments on the electric conductivity of different kinds of wood, the possible effects of different kinds of leaf surface, including the presence or absence of hairs, the passage of lightning discharges through trees without causing visible injury, etc.

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