

A Science Service Feature

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? WHY THE WEATHER ?

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By Charles Fitzhugh Talman,
Authority on Meteorology.

"LIGHTNING RINGS" IN TREES

In a recent account of the various injuries and defects produced by atmospheric agencies in trees Prof. E. E. Hubert, of the Idaho University School of Forestry, calls attention to the little known phenomenon of "lightning rings".

Lightning is responsible for several conspicuous kinds of damage in the forest, such as setting trees afire and splitting or shattering their trunks and branches, but the effects of minor discharges are often hidden beneath the bark and revealed only as scars in the annual rings. These may take the form of false rings, which, in common with those due to frost and other pathological agencies, are a common source of error in counts of annual rings made to determine the age of a tree or to fix the date of some event in its life history.

"Lightning rings," says Prof. Hubert, "are common in certain species of tree and in trees growing in lightning zones. Sitka spruce, prized for its strength and light weight in aeroplane construction, frequently shows these false rings caused by lightning. As defects in aeroplane wood or woods requiring rigid strength for other purposes, these hidden injuries are of considerable economic importance, since failure under stress is most likely to take place along a false ring."

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