

Released upon receipt  
but intended for use  
August 25, 1934

A Science Service Feature

? WHY THE WEATHER ?

Mailed August 18, 1934

DROUGHT INJURY TO TREES

By Charles Fitzhugh Talman,  
Authority on Meteorology.

In the drought-stricken regions of America many people are now predicting a general destruction of trees; but the fears on this score, based on a widespread browning of the leaves, are doubtless much exaggerated. In the summer of 1925 there was a severe drought in the hardwood region of the southern Appalachians, and a careful study of the effects on trees was made near Asheville, N.C., by the U.S. Forest Service. E.H. Frothingham, of that Service, writes:

"The Asheville observations showed that browning or fall of leaves during a drought does not necessarily mean that the trees are dead. Although a great many trees on ridges and upper slopes in western North Carolina turned brown in the summer of 1925, and some species shed their leaves in August, the majority of the trees put out new foliage the next spring. On many of the trees the browning was confined to the topmost branches, and there was a difference between the species as to the extent of browning. Dogwood, sourwood, and chestnut, for example, appeared to suffer more severe browning than white ash, black locust, and pignut hickory. Leaves of chestnut oak were only moderately or slightly injured by the drought, and by the following spring the chestnut oak trees appeared to be quite normal. Black oak, scarlet oak, and red oak, on the other hand, showed severe leaf injury during the drought period, and with few exceptions trees of these species that were heavily browned were dead by 1929. Hickory leaves were not seriously browned, the principal response to the drought being an early shedding of the leaves. In most cases the recovery of the hickories was complete. Regardless of species, trees with large scars caused by fire or logging showed more severe browning of the leaves than trees with sound boles."

(All rights reserved by Science Service, Inc.)

-----  
SCIENCE SERVICE  
21st and Constitution Ave.  
Washington, D.C.