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? WHY THE WEATHER ?

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MEASURING DROUGHT

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The meteorologist is often asked by the layman whether a certain drought was more "severe" than another; or, for example, whether the drought of 1930 or that of the present year or some other should be regarded as the most "severe" in North American history. How can we measure the severity of a drought, in order to make such comparisons?

The extent of territory affected, the total deficiency of rainfall over the area and the duration of the drought are obviously factors to be considered in estimating its severity. The disastrous effects of a drought depend more upon the time it lasts than upon the total shortage of rain; hence, according to some authorities, severity increases as the square of the duration. These effects are, however, still more dependent upon the kinds of crops and other vegetation exposed to the drought, the stage of plant growth at which it occurs, and other non-meteorological circumstances.

Thus the task of measuring the severity of a drought is one for the economist rather than the meteorologist. We can say categorically whether a certain drought was more costly than another, but whether or not it was more severe in a physical sense is often a difficult question to answer.

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