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? WHY THE WEATHER ?

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SUMMER DROUTHS

July, and perhaps even more, August, are subject to summer drouths; convec-tional rainfall is on the wane and cyclonic storms of autumn strength have not yet begun. In the continental interior, during the early summer the stock of winter moisture has been gradually used up and the air heated to greater and greater heights, making condensation more difficult. In July and August the rainfall may be less than half the average in from 10 to 20 per cent. of all the years in the Eastern United States. West of the Mississippi these percentages are much higher. On the Pacific coast where rain rarely falls during the summer, the "average" is somewhat misleading, for in 80 per cent. or 90 per cent. of the seasons the rain-fall is less than half the average.

The frequency of drouths also has been computed for the states east of the Rockies. For purposes of tabulation a drouth may be considered broken by a 1/4 inch of rain occurring within 24 hours. During 20 seasons, March to September, 20 day drouths of this sort have occurred 25 to 30 times along the Atlantic coast and 30 to 40 times in the Mississippi Valley. Passing westward to the Great Plains drouths increase rapidly in frequency, 65 20-day drouths in 20 years having been recorded in western Texas, Kansas, Nebraska, and the Dakotas, or more than twice the number on the Atlantic coast. In the case of 30 day drouths the difference is still more marked, with over 30 such drouths along the western border of the plains and only 9 to 12 on the Atlantic coast in the 20 year period.

(Tomorrow: Average August Weather)

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