

Oct. 8

? WHY THE WEATHER ?

Dr. Charles F. Brooks,
Secretary, American Meteorological Society
Explains:

PROTRACTED RAINY SPELLS

Occasionally, a large region, such as the middle plains and parts of the South during the past warm season, is afflicted with a period of protracted rain, when it seems to humanity as if the clouds would never stop forming, and the sun would never shine again for whole days at a time. This condition is usually caused by the presence of a great deal of moisture in the atmosphere covering a great area of country. A "cyclone" or "low" may become stalled, and remain nearly stationary, instead of pursuing a customary course across the continent. Much of the water vapor in the highly humid air condenses into clouds and rain. There may be a partial clearing permitting the sun's heat to cause further convection and pump more moisture-laden air aloft, thereby producing more rainclouds, and this process may be repeated over and over again. Perhaps the moisture is replenished by the arrival of damp winds blowing from the Gulf Stream or Gulf of Mexico, further protracting the wet weather. Finally the excessive moisture is carried off in the rivers or is blown away by dry westerly or northerly winds, and the sun again shines.

Another cause of long-continued wet weather is a succession of energetic "lows", following close one upon another, each with its excessive rains, sometimes producing dangerous floods. It was such a condition that caused the destructive floods in northern Ohio in 1913, when the rivers rose 10 to 16 feet higher than had ever before been recorded, and caused loss of life and vast destruction of property.

(Tomorrow: Winds for Gliding)

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