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A Science Service Feature

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? WHY THE WEATHER ?

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SEPTEMBER HOT SPELLS

September comes, but summer does not go, in fact seasons are never clear-cut, but always overlap. Spells of stagnant hot weather are quite characteristic of September in the East, and are more noticed than the same heat in August because less expected.

In August and September the Gulf Stream reaches its highest temperature. This favors expansion of air over the warm water, and its overflow above onto the continent, or else a stoppage of westerly winds and consequent building up of high pressures in the eastern states. September pressures here average higher than in any other month. In addition, in September the land is beginning to cool; there is less contrast between land and water temperatures than in August. This lack of contrast favors weather stagnation. Highs are likely to stick in the Appalachians.

Remembering that wind flows outward from a high pressure area and to the right in the northern hemisphere, it will readily be seen that highs centered in the Southeast give warm southerly winds in the North. Droughts are a common accompaniment of these persistent highs, for the air is descending over the land.

But do not imagine September is always high and dry. Last September was particularly cool and wet in the eastern United States, and very wet also in Quebec and parts of the Maritime Provinces. Most of the highs centered in the north and several tropical cyclones passed near or over this region.

(Tomorrow: Thunderstorms Vs Aviator)

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