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? WHY THE WEATHER ?

Dr. Charles F. Brooks,  
Secretary, American Meteorological Society,  
tells of:

DRY NORTHEASTERS

It is peculiar to have an ocean wind drier than a land wind, yet when the ocean is as cold as the western North Atlantic has been this summer such has generally been the case. Consequently as ocean winds have blown for much of the time there has been generally dry weather. When the weather changes from warm sunshine and a west wind to cool, cloudy, perhaps foggy conditions, with a northeast wind, we say that chilly, damp weather has arrived. Yet if the weight of water contained in a cubic foot of the hot air were compared with that in the same quantity of the cool air we would find the moisture in the warm air perhaps twice as great as that in the cool air. The reason the cool air feels damp to us is that very little additional moisture is required for saturation.

As this cool air goes inland from the ocean it passes over warm ground and becomes heated. The fog dissipates and the clouds evaporate, and the air becomes dry. The air has nearly as much water in it as before it came inland. Perhaps it has even more by virtue of water added by evaporation from trees and grass. Yet it is now the dry northeast wind, because at its higher temperature much more moisture would be required before saturation would occur. At some distance inland the air temperature of the northeast wind may rise nearly to the point of the previous west wind, when it will be very much drier than the west wind.

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(Tomorrow: Icy Wind Makes Summer Hail.)

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