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? WHY THE WEATHER ?

By Dr. Charles F. Brooks  
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THE COLD WAVE

"The cold wave is heralded by a sudden shift of the wind to the west and northwest - a piercing blast, sweeping down from the cold continental interior of western Canada, reducing the temperature 20, 30, 40 degrees, or even more, within 24 hours. If it is raining when the westerly wind begins to blow, the rain quickly turns to sleet, and an icy covering forms on all objects outdoors. If it has been snowing, the snow soon becomes hard and dry. The wheels of passing vehicles, the runners of sleighs and the footsteps of pedestrians 'sing' with a metallic sound. The ice on rivers and lakes tightens its grasp, and cracks and 'booms' with a reverberating sound. The collars of greatcoats are turned up; hands are put into muffs or pockets; people walk more briskly; every preparation is made for a spell of hard cold weather."

When a cold wave is expected, some Weather Bureau stations display a square white flag with a smaller blue square in the center. Not every sudden cold snap is a cold wave. A "cold wave" is defined somewhat differently in the various parts of the United States and at different seasons of the year. Thus, in winter in most northern sections a cold wave means a temperature drop of at least 20 degrees Fahrenheit to zero or lower in 24 hours. In the extreme south, and on the south Pacific coast, on the other hand, a fall of 16 degrees Fahrenheit in 24 hours reaching 32 degrees Fahrenheit in winter, is considered a cold wave.

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(Tomorrow: Local Aspects of Cold Waves)

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