A Science Service Feature

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? WHY THE WEATHER ?

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WHAT IS HAIL?

The above question is timely, as the hailstorm season has now begun. Hail is an episode of the thunderstorm, and therefore occurs mainly in warm weather.

A distinguishing feature of true hail is that it consists partly of ice and partly of snow. Large hailstones frequently show several alternate layers of these substances. This peculiar structure is explained by the fact that hail is formed in a region of turbulent air at the front of the thunderstorm, where it makes several journeys up and down between relatively warm and relatively cold levels of the atmosphere. Most hailstones are approximately spherical or somewhat conical, but other and very striking shapes are sometimes found. Occasionally the surface is encrusted with curious crystalline growths.

There are two other forms of frozen precipitation to which the name "hail" is often wrongly applied. One takes the shape of little snowballs, about the size of coarse shot, which crumble easily, and were once known as "soft hail", but are now preferably termed "graupel". The other consists of pellets or angular fragments of clear ice - frozen raindrops - to which the United States Weather Bureau and the Meteorological Service of Canada apply the name "sleet". Graupel and sleet fall only in cold weather.

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