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A Science Service Feature

? WHY THE WEATHER ?

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HOW FAST DO RAINDROPS FALL?

Only raindrops of appreciable size can fall rapidly enough to reach the earth. Smaller drops, such as fog or cloud particles, will settle very slowly at best, on account of the relatively greater friction they encounter, and may even be carried upward by rising air currents. Fog particles average only .01 mm., or less than .004 inch, in diameter and will fall only 30 or 40 feet per hour. But if the particles reach drizzle size, with a diameter 20 times as great, they may descend at the rate of 1-3/4 miles in an hour. In thecase of light rain the drops may be 0.4 to 0.5 millimeter, about 102 inch, in diameter, which, falling at the rate of 4-1/2 miles per hour will take only 5 minutes or so to reach the ground from a cloud of moderate height. Drops of 3 millimeters, about 1/8 inch, in diameter, which occur in very heavy rains, attain the maximum speed of fall of about 18 miles per hour. If they become larger than this, they are retarded by flattening in the air and are likely to form rings and split up into smaller drops.

(Tomorrow: Ask the Weather Man)

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