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A Science Service Feature

? WHY THE WEATHER ?

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THE LITTLE KNOWN RAINBOW

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It is an interesting paradox that some of the commonest manifestations of the rainbow remain unfamiliar to people who see rainbows at frequent intervals throughout their lives. There is, for example, a widespread impression that double rainbows are rare, so that the sight of two bows in the sky is likely to be mentioned as an extraordinary experience. As a matter of fact, when the smaller or primary bow is seen, at least parts of the secondary are usually visible outside it.

Below the inner edge of the primary rainbow there are usually one or more distinct bands in which some of the rainbow colors are repeated, and similar bands are less frequently visible just outside the secondary. These bands are known as "supernumerary" bows. Though usually visible and even conspicuous in a bright rainbow, they are so unfamiliar that the student of nature who notices them for the first time is quite likely to suppose that he has made a remarkable discovery. Strange to say, several letters in which this commonplace phenomenon is described as if it were rare and unknown to science, have been published in scientific journals.

Last but not least, perhaps because of misleading statements once found in school books the confident assertion is often heard that the rainbow always shows seven distinct colors. There is really an indefinite number of color gradations, and different bows differ considerably in their colors, but as a rule, with a rainbow before your eyes, you can hardly be sure of seeing more colors than blue, green, yellow, and red; and sometimes not so many.

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