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A Science Service Feature

? WHY THE WEATHER ?

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WHAT IS A RAINBOW?

It is an interesting example of the way words wander from their original and literal meanings that science nowadays applies the term "rainbow" to certain optical phenomena not due to rain. Some are caused by fog. The fog-bow is classed as a rainbow when the fog in which it is formed consists of water droplets. In such a case the bow, though sometimes described as white, shows, if bright enough, a certain amount of color; generally a reddish outer border. Another kind of fog-bow is formed in fogs consisting of ice crystals. It is generally pure white, but is at times slightly reddened at the inner border. This phenomenon belongs to the numerous family of halos, and is sometimes called Bouguer's halo.

The prismatic circles or arcs seen in the spray of waterfalls and lawn sprinklers are classed as rainbows, because they are formed, in the same manner as the ordinary rainbow, by water drops. Lastly, a light fog occasionally deposits droplets of water on a film of oil lying on the still surface of a lake, and these droplets may give rise to a "horizontal rainbow".

All the things that are scientifically called "rainbows" in English are known to French science as "arcs-en-ciel" (arches in the sky), even when, as noted above, they are seen somewhere else than in the heavens. Scientific terminology recognizes the sound maxim that "a name is a name, and not a definition".

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