

What is a "Blue Moon"?

For more than half a century, whenever two full Moons appeared in a single month (which happens on average every 2 1/2 to 3 years), the second has been christened a "Blue Moon." In our lexicon, we describe an unusual event as happening "Once in a Blue Moon." This expression was first noted back in 1821 and refers to occurrences that are uncommon, though not truly rare.



On past occasions, usually after vast forest fires or major volcanic eruptions, the Moon has reportedly taken on a bluish or lavender hue. Soot and ash particles, propelled high into the Earth's atmosphere, can sometimes make the Moon appear bluish.

Why "Blue" Moon? For the longest time nobody knew exactly why the second full Moon of a calendar month was designated as a Blue Moon. One explanation connects it with the word "belewe" from the Old English, meaning, "to betray." Perhaps, then, the Moon was "belewe" because it betrayed the usual perception of one full Moon per month. However, in the March 1999 issue of Sky & Telescope magazine, author Phillip Hiscock revealed one somewhat confusing origin of this term. It seems that the modern custom of naming the second full Moon of a month "blue," came from an article published in the March 1946 Sky & Telescope magazine. The article was "Once in a Blue Moon," written by James Hugh Pruett. In this article, Pruett interpreted what he read in a publication known as the Maine Farmers' Almanac (no relation to this Farmers' Almanac, published in Lewiston, Maine), and declared that a second full Moon in a calendar month is a "Blue Moon."

However, after reviewing the Maine Farmer's Almanac, Hiscock found that during the editorship of Henry Porter Trefethen (1932 to 1957), the Maine Farmers' Almanac made occasional reference to a Blue Moon, but derived it from a completely different (and rather convoluted) seasonal rule. As simply as can be described, according to Trefethen's almanac, there are normally three full Moons for each season of the year. But when a particular season ends up containing four full Moons, then the third of that season is called a Blue Moon! To make matters more confusing, the beginning of the seasons listed in Trefethen's almanac were fixed. A fictitious or dynamical mean Sun produced four seasons of equal length with dates which differed slightly from more conventional calculations. So, basically the current use of "Blue Moon" to mean the second full Moon in a month can be traced to a 55-year-old mistake in Sky & Telescope magazine.