

## A Few Notes About Blue Moons

Howard L. Cohen

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On Wednesday, 2023 August 30, the Moon will be “blue” for many people.

Unfortunately those affected by Hurricane Idalia will probably not see it. Not to worry. This so-called “blue super full moon” will appear to most observers like any other rising Full Moon; its extra size and brightness hardly noticeable by most. And it won’t look “blue” as some believe.

Abundant articles exist about these “blue moons” especially the Blue Moon of August 30, 2023. This is due to the Moon’s proximity to perigee this month (closest to Earth) and promoted by media as a “blue supermoon.”

But both Blue Moons and Supermoons are steeped in hype, folklore and misconceptions. (Unless a “normal full moon” and a “super full moon” are side-by-side, nearly everyone will not see the difference.)

Years ago I wrote several articles about Blue Moons, their origins and meanings for our local astronomy club. I dug into my files to see what I had written forgetting that I had also proposed a half-baked idea about why we call the Moon “blue.” Enough has been written about Blue Moons so I will take only a few snippets from my notes including my original “origin hypothesis.”

First, know that some believe a “Blue Moon” really appears blue. This is false, of course—almost. The Moon is seldom colored blue. The Moon mostly appears always whitish, yellowish or reddish (when just rising or setting) even when called a Blue Moon.

Nevertheless, do you know blue appearing moons may now become more common? Hadn’t realized this!

Atmospheric particles from large volcanic eruptions or even forest fires can filter out reddish light turning the Moon’s color bluish (whether in a full phase or not). Historically large erupting volcanoes have occasionally turned the Moon blue. Now, with increasing numbers of massive forest fires, we may see increasing reports of blue colored moons! Still, seeing a Moon looking blue, will likely remain rare for many.

In addition, Blue Moons have other meanings as the popular song “Blue Moon” written by Richard Rodgers and Lorenz Hart (1934). This includes feelings of being sad, lonely, depressed, gloomy, etc. (May ring true for those influenced by Hurricane Idalia!)

To alleviate this unhappy feeling, some may want to resort to another idea—reference to *Blue Moon*, a Belgian-Style white beer from the Molson Coors Brewing Company! This is a beer with an orange-amber color and cloudy appearance because it is unfiltered. This beer also has a more noticeable orange taste compared with other similarly styled beers. Try it if you must.

However, the origin of the Moon's connection with "blue" or sad remains muddled. Nevertheless, in 1991, I proposed my own unique "origin theory." (See end of article.)

But first, the most common reference to Blue Moons occurs in the popular phrase, "Once in a Blue Moon" meaning infrequent, hardly ever, rare or now and then.

For many people the most common meaning of a "blue moon" is likely the "calendrical" Blue Moon and is *not infrequent*. However, many also do not know two definitions exist:

**Calendrical Blue Moons:** The **Second Full Moon** occurring in a calendar month.

This tradition has now become the most widely understood meaning by most people. Simplicity has helped make this so.

Note that only February cannot have two Full Moons since Full Moons occur about every 29-1/2 days and February has only 28 or 29 days. The following list gives examples of calendrical Blue Moon dates. These Blue Moons occur about every 2-1/2 years.

2020 Oct 31 • 2023 Aug 31 • 2026 May 31 • 2028 Dec 31 • 2031 Sep 30 • 2034 Jul 31

**Seasonal Blue Moons:** The **Third Full Moon** occurring in an astronomical season having four Full Moons as determined by equinoxes and solstices. (Usually a quarter year has only three Full Moons.)

This less well-known definition predates the calendrical Blue Moon meaning. This tradition probably dates from the *Maine Farmers' Almanac* for 1937.

And many sources get the seasonal tradition wrong by stating this Blue Moon is the fourth (or even second) Full Moon in a season rather than the third.

The choice of a third Full Moon rather than a fourth in a quarter year probably was done to avoid mislabeling traditional names for each monthly Full Moon.

(A common Native American name for the August Full Moon is "Sturgeon Moon" due to the many sturgeon fish occurring this month though many other names exist as Corn, Summer, Fruit, Women's, Yellow Flower, Autumn, Time of Freshness, Wheat, etc.)

Example list of dates with seasonal Blue Moons:

2021 Aug 22 • 2024 Aug 19 • 2027 May 20 • 2029 Aug 24 • 2032 Aug 21 • 2035 May 22

Note either the calendrical or seasonal definitions illustrate Blue Moons are common and occur every few years.

Finally, we have an early reference to a Blue Moon apparently connecting blue with "absurd" through a 1528 proverb (*Oxford English Dictionary*) that states, "If they say the moon is blue, then we must believe that it is true."

Although as already noted, a Blue Moon could be blue colored (rare as already noted), why do other definitions refer to a “blue” moon rather than something else?

Making up origins is sometimes easy although they are not necessarily true. In 1991, I suggested, for example, a hypothetical, farcical connection between lunar events and the idea that blue relates to unlucky. I wrote:

A second Full Moon in a calendar month or four in one season gives thirteen Full Moons in a calendar year. Since some consider the number thirteen unlucky, people might view the occurrence of this “extra” Full Moon in a year with displeasure or gloom.

Therefore, because people often connect the word "blue" with hopelessness, melancholy or despair, it is possible this extra Full Moon became associated with the color blue.

Believe it (or not)!

