

## What's all this Talk about Blue Moons

Isn't a Blue Moon the 2nd full Moon of a calendar month?  
What happened this month?

We had two Blue Moons in 2018, one on January 31 and the second on March 31. Both were the second of two full moons to fall within a single calendar month. The Blue Moon of May 18, 2019, was a seasonal Blue Moon, that is, the third of four full moons in one season.

**In recent years, people have been using the name Blue Moon for these two different sorts of moons: second of two full moons in a calendar month, or third of four full moons in a single season.**

Blue-colored moons in photos are usually made using special blue camera filters or in a post-processing program such as PhotoShop.



Let's talk about seasonal Blue Moons first. A year has 12 months, and months – or “moonths” – have lengths more or less based on a single orbit of the moon around Earth. What we call a season – winter, spring, summer, fall – typically lasts three months, and typically has three full moons.

If a season has four full moons, then the third full moon may be called a Blue Moon, according to the old Maine Farmer's Almanac. There was a Blue Moon by this definition on November 21, 2010, another on August 20-21, 2013, and another on May 21, 2016 and, of course, the latest one on May 18, 2019.

The best-known and most popular definition of Blue Moon is that it describes the second full Moon of a calendar month. By this definition, there was a Blue Moon on July 31, 2015, January 31, 2018, and March 31, 2018.

The time between one full moon and the next is close to the length of a calendar month. So the only time one month can have two full moons is when the first full moon happens in the first few days of the month. This happens every two to three years, so these sorts of Blue Moons come about that often.

The idea of a Blue Moon as the second full moon in a month stemmed from the March 1946 issue of Sky and Telescope magazine, which contained an article called “Once in a Blue Moon” by **James Hugh Pruett**. Pruett was referring to the 1937 Maine Farmer's Almanac.

Later, this definition of Blue Moon was also popularized by a book for children by **Margot McLoon-Basta** and **Alice Siegel**, called Kids' “World Almanac of Records and Facts”, published in New York by World Almanac Publications in 1985. The second-full-moon-in-a-month definition was also used in the board game Trivial Pursuit.

Very rarely, a seasonal Blue Moon (third of four full moons in one season) and a monthly Blue Moon (second of two full moons in one calendar month) can occur in the same calendar year. For this to happen, you need 13 full moons between successive December solstices for a seasonal Blue Moon – and, generally, 13 full moons in one calendar year for a monthly Blue Moon.

This will next happen in the year 2048, when a monthly Blue Moon falls on January 31, and a seasonal Blue Moon on August 23.

Then 19 years later, in the year 2067, there will be a monthly Blue Moon on March 30, and a seasonal Blue Moon on November 20. In this instance, there are 13 full moons between successive December solstices – but only 12 full moons in one calendar year and no February 2067 full moon.

Today Blue Moons have become part of folklore. As the folklorist **Philip Hiscock** wrote in his comprehensive article Once in a Blue Moon:

**'Old folklore' it is not, but real folklore it is.**