

Once in a blue moon, we'll find that our conversations take an interesting tangent here in the lab. Like recently, for example, when the idea of "once in a blue moon" got us to thinking about full moons in general and, of course, blue moons specifically. So, we did a little digging as we often do, and decided to shoot the moon with the topic of this *GeoSampler*. Hope you love it (pardon the expression) to the moon and back.

OVER THE MOON

Look up in the sky on a clear night and you're likely to see the Moon. Depending on the time of month, it could be a little fingernail-clipping shape or a full, round orb illuminating the night sky. Why?

Well, the apparent change in shape is known as its phase. While the entire Moon is there, the phases we see are caused by the position of the Moon, the Earth, and the Sun. As the Moon itself produces no light, what we actually see is illuminated by other sources, primarily the sun (though the Earth produces some amount of "Earthshine," which sounds like it could have been the name of a 70s-era disco song to us).

When the moon is between the Earth and the Sun in its orbit, the back side of the Moon is being lit up and the side facing the Earth is in darkness. This has nothing to do with a Pink Floyd album and is called a new Moon. When the Moon is on the other side of the Earth compared to the Sun, the near side of the Moon will be fully lit up; hence, full moon.

Things would be a little less complicated if the Moon paid any attention whatsoever to our Earthbound calendar. Instead, it takes the Moon about 29.5 days to go through all of its phases. This is why some months actually have TWO full moons. This is when our heads exploded here. The SECOND full moon in a month is considered a blue

moon. AHA!

New month, new moon?

Over the millennia, various cultures have assigned meaning to each month's full moons. These lunar terms come to us primarily via Native American culture, which use the phases for timekeeping. In fact, today's Gregorian calendar is derived from the lunar cycle, so you can offer your gratitude every time you accept an Outlook invitation.

January: Wolf Moon

In midwinter, food is scarce, which is why the first full moon of the year is named for the hungry, howling wolves in search of a meal.

February: Snow Moon

It's a pretty obvious name based on the weather here in North America.

March: Worm Moon

The last full moon of the winter was named by Native Americans for the worm trails that would routinely appear in the newly thawed ground. (It's also been referred to as the sap moon after the tapping of maple trees, but makes for a less interesting story.)

April: Pink Moon

Northern Native Americans named this after a species of early blooming wildflower.



"When French people swear, do they say 'Pardon my English?'"



LET'S PLAY TWO

When Jimmy Pearsall hit his 100th home run in 1963, he ran the bases in the correct order but facing backward to celebrate.

During World War II, the U.S. military designed a grenade to be the size and weight of a baseball, since "any young American man should be able to properly throw it."

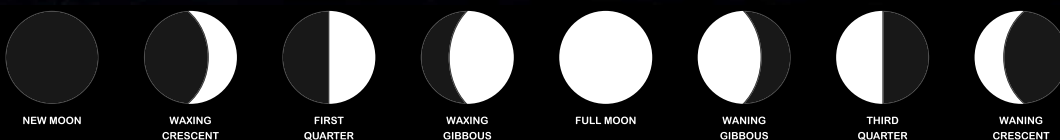
Bank robber John Dillinger was once a professional second baseman, although he never made it to the major leagues.

Geddy Lee from the band Rush had a huge collection of autographed baseballs from the Negro Leagues; he donated over 200 balls to the Negro Leagues Baseball Museum in 2008.

Ralph Kiner is the only player ever to lead the league in homers for seven years in a row — his first seven years as a major league player.

Pitcher Dock Ellis says he threw his June 12, 1970, no-hitter while under the influence of LSD.

Johnny Bench could hold seven baseballs in one hand.



May: Flower Moon

The abundant blossoming happening during May inspired many cultures to call this the flower moon. (Please note Mayflower has nothing to do with April showers in lunar-speak.)

June: Strawberry Moon

The traditional monthly harvest gives way to this nomenclature in North America.

July: Buck Moon

Male deer, which shed their antlers every year, begin to regrow them in July, hence this term.

August: Sturgeon Moon

Fishing tribes named this for the time the species appeared in great numbers.

September: Full Corn Moon

No, it's not back-to-school moon. At least, not yet. Instead, this is a celebration of the crops gathered at the end of the summer season. During this time, the Moon appears particularly bright and rises early, allowing farmers to continue harvesting through the night.

October: Hunter's Moon

After the harvest comes the season to celebrate deer, fattened up from the summer's offerings.

November: Beaver Moon

Here's where we get into a little linguistic lunar controversy. Some say it comes from Native Americans setting beaver traps during this month, while others say the name comes from the heavy activity of beavers building their winter dams.

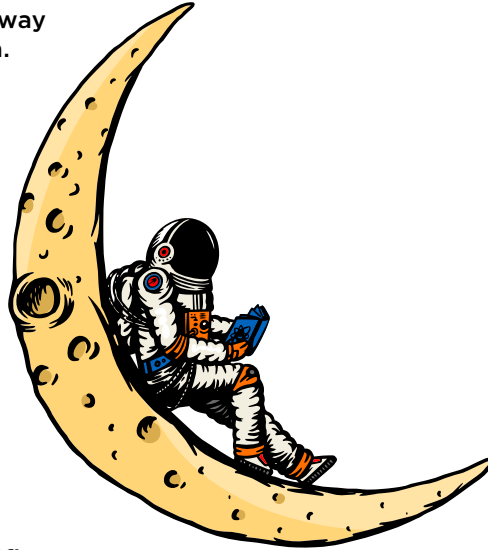
December: Cold Moon

Again, not an exceptionally creative name, but one that seems pretty fitting for the last full moon of the year.

So, you may ask, again referring to classic rock, what about the "Harvest Moon?" Well, this is technically the full moon nearest the autumnal equinox. The light late in the evening allows farmers to continue their work, with or without a Neil Young soundtrack. Typically, this occurs in September.

So, this brings us full circle back to the blue moon. As the Moon completes its full cycle in about 354 days, the difference adds up to a 13th full moon in some years. Hence, the rarity of its occurrence.

Just in case you missed the most recent blue moon on August 31, 2023, fear not. You can always look out for the next ones: August 19, 2024; May 20, 2027; August 24, 2029; August 21, 2032; and May 22, 2035. In fact, go ahead and mark your Gregorian calendar.



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