Blue Friday (Or Not)?

Howard L. Cohen

The second full moon of August 2012 occurs on the last day of the month. But is this a "blue moon"?

Should you drink some *Blue Moon Beer* this Friday?

Most of the world will have a second full moon this Friday, August 31, 2012. (Location is important so, for example, New Zealand must wait until September to have two full moons.)

According to a definition that became common during the second half of the last century, most people call the second full moon in a calendar month a "blue moon."

This is possible since the lunar cycle of phases is approximately 29-1/2 days but all of our calendar months are longer except February.

However, blue moons like this have little in common with the expression, "once in a blue moon" since these calendrical blue moons are not rare coming about once every 2.7 years. The last occurred December 31, 2009 (a "New Year's Eve Blue Moon"), the next blue moon July 31, 2015.

Want another blue moon on New Year's eve? Be patient. This will not occur until December 31, 2028 when a total lunar eclipse will also take place. (Unfortunately, people in the eastern U.S.A. or South American will not be in the eclipse path.)

Rarer are years with two blue moons. This happened in 1999 (January and March) and will not occur again until 2018 (again January and March), about nineteen years later.

But is this right? The tradition of blue moons probably dates back to the *Maine Farmers' Almanac for 1937.* R. W. Sinnott, D.W. Olson, and R. T. Fienberg, writing for *Sky & Telescope*, discovered the original calendrical meaning for a blue moon: the third full Moon in a quarter of the year when the quarter has four full Moons. (Usually a quarter year has only three full Moons!)

Note that this blue moon is the third of four full moons in the quarter not the fourth. (Some writers get it wrong.) This allows the names of the other full Moons to fall at the proper times relative to our solstices and equinoxes. Full moon names are often given to each moon in a season. Various names have been used for August full moons. Common names include Green Corn, Grain and Sturgeon. September's full moon (on the 19th) will be this year's Harvest Moon.

Complicating matters, the *Maine Farmer's Almanac* used fixed dates for the seasons rather than actual dates. So, according to the Almanac's definition, the next "blue moon" is actually 2013 August 20 or 21 (depending on your time zone).

Finally, in 1946 *Sky* & *Telescope* somehow got it wrong, and gave us the now common meaning of two full moon in a calendrical month, a definition different from its original meaning but simpler to understand. This definition has now come into the main stream of modern culture so few are now familiar with the former meaning of a "blue moon."

So, will this Friday be a "blue moon day" or not? You decide.

And, for the technically minded, this second full moon of the month occurs Friday, 2012 August 31 at 9:58 a.m. EDT. x

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