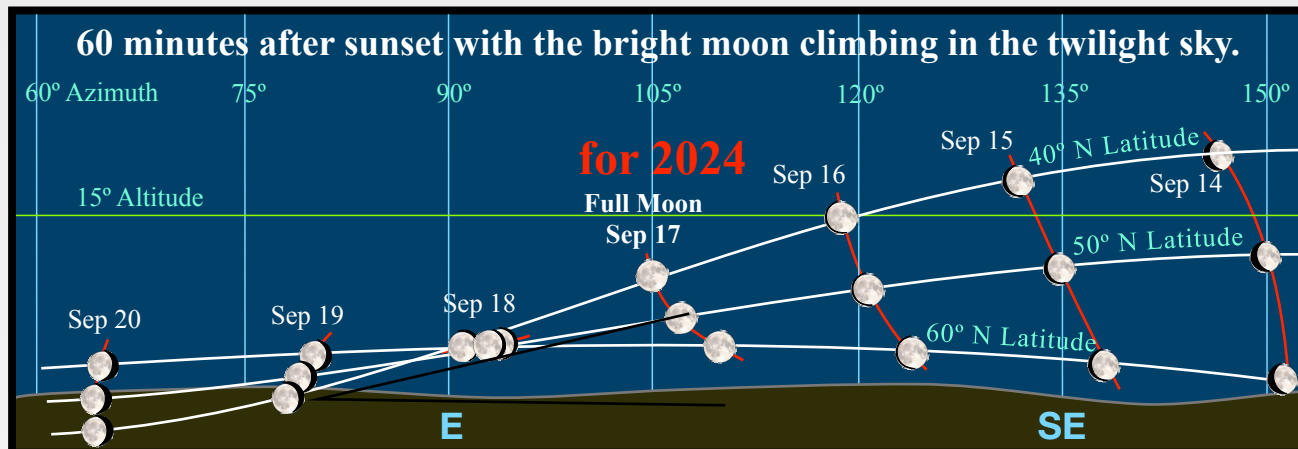




When is the Harvest Moon?

*Roughly a week long period
from mid September through early October.*



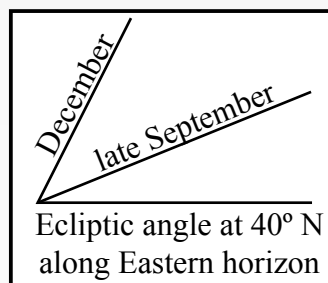
What is the Harvest Moon?

When September's full moon falls within two weeks of the equinox (Sep 22 or 23), a special set of circumstances arise in the sky.

By the time evening twilight begins to deepen, the mid September to early October full moon has risen high enough in the east to provide needed additional light for a few more hours to help farmers harvest crops. Hence, the term "**Harvest Moon.**" Bright moonlight also occurs on the following few nights, still during twilight. And, as with any full moon, this also happens on the few nights leading to full moon. So, farmers have a week or so of evenings with extra, helpful light.

The 11 and 18 day old gibbous moons are half as bright as full moon.

Why? Shortly after sunset in mid September through early October, the ecliptic makes a rather shallow angle with the eastern horizon. Each night around full moon, most of the moon's motion is northward as it moves another 12–15° along the ecliptic, while not much of it is eastward, i.e., toward the horizon. Therefore, the moon doesn't rise much later than it did the previous evening. As a result, a bright gibbous moon still rises shortly after sunset, again lighting the twilight sky for a few more nights.



This effect is accentuated in latitudes farther north because the angle the ecliptic makes with the eastern horizon is even shallower. At 66° N, the moon actually rises *earlier* in the evenings after the Harvest full moon. (At 40° N, the value is 25 minutes, at 50° N, it is 18 minutes, and at 60° N, it is 5 minutes.)

The Southern Hemisphere experiences similar circumstances, but from mid March through early April.

Mid to late October's full moon, the Hunter's Moon, shows a similar but not as dramatic effect.

