


# November Skies over the Pinnacles

November 2021

## November's four principal phases of the moon

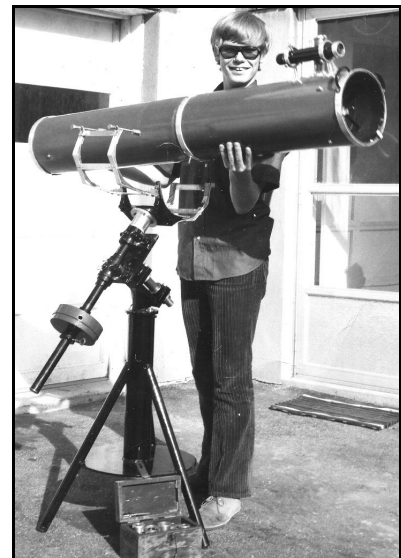
November 4	New Moon	
November 11	First Quarter	
November 19	Full Moon	
November 27	Last Quarter	

## With [A lot of] Help from my Friends

As I write this, our most recent star party at the Forestry Outreach Center was on October 20. I was happy to learn that a total of 60 visitors arrived to share the beauty of the night sky. It was encouraging to learn that so many of the young people there were eager to learn about telescopes and the Cosmos from Dr. Hodge's astronomy students. Thank you to all who help make these events a success!

With November comes the celebration of Thanksgiving and the opportunity to reflect on our blessings and those who made them happen. I recall two young people that evening who were full of enthusiasm and questions for Donna Abner, my skillful telescope assistant and I about all things astronomy. The privilege of being there to answer questions and to guide these new scientists is keenly felt. I was introduced to astronomy by my father when he took me to the historic Cincinnati Observatory when I was 12 years old. When my dad passed away a year later there were others who chose to step forward and guide me into what has turned out to be a lifelong interest.

First to help was a kindly retired machinist named George April. From Mr. April I learned much about telescope building. After months of patient coaching we produced my first telescope, seen below with its proud owner in 1972. With this telescope I could clearly see the rings of Saturn and startling detail on the Moon. Here I am with my first telescope.



The Apollo space program coincided with my early years of astronomy. NASA had put the call out to amateur astronomers to help them select possible landing sites for future lunar landings. By this time there was still a debate about the Moon's craters: were they all from impacts from asteroids or were some from volcanos? Another new acquaintance, Mr. John Ventre, was using a telescope owned by the Cincinnati Astronomical Society to study lunar craters, called "dark halo" craters, that might be leftovers from volcanos. We learned that NASA just might decide to have a future Apollo landing near one of these craters for closer study. I remember many cold nights with Mr. Ventre making sketches and notes while at the eyepiece of the telescope. It was an Alvan Clark refracting telescope that was once offered as a donation to Berea College.



A rare daytime image of the Clark telescope configured for viewing the Sun.

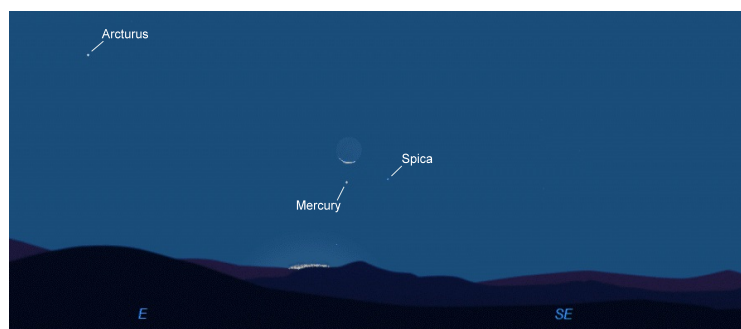
Early on I met Dick Wessling. Mr. Wessling had the ability to create high quality optics used for telescopes. He, too, guided me in the art of telescope making. Two of the telescopes I still use have his objective mirrors, the precisely ground, polished and silvered part of the telescope that gathers light. The largest one, 16 inches across, was completed by Mr. Wessling a year before he passed away.

Finally, I include Dr. Smith T. Powell and Dr. Thomas Strickler both of whom introduced me to the discipline of astronomy when I enrolled as a student at Berea College in 1974. Here I had the privilege of using the 16-inch Boller and Chivens telescope as part of my labor assignment with the physics department. See the July, 2021, installment of "Skies over the Pinnacles" for the story of its rescue from demolition.

## Attractions in November

### November 3

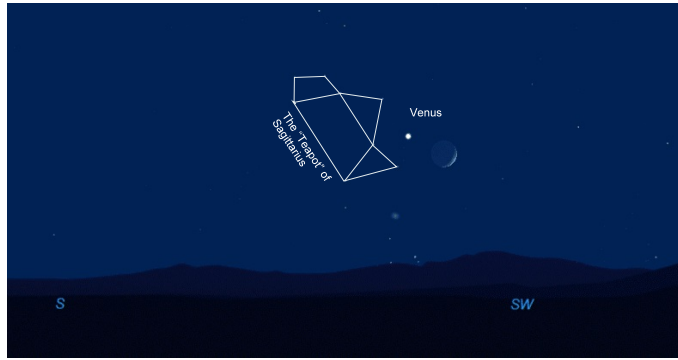
Get up early to catch a rare glimpse of thin sliver of a Moon, the planet Mercury and the bright blue star Spica in the east before the dawn.



Tonight is also the night of a Star Party at the FOC. See you there!

**November 7**

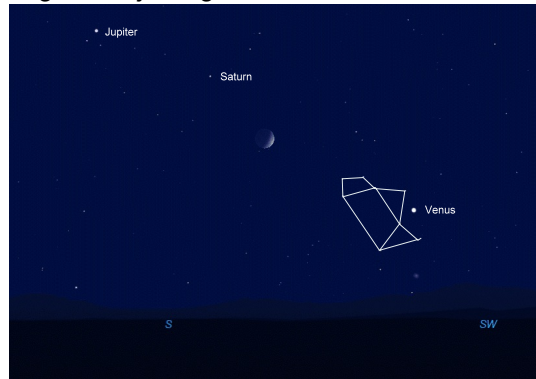
At dusk, check out the crescent Moon, now in the west as it appears about 2 finger-widths (3.5 degrees) from brilliant Venus.



November 7 is also the end of 'Government Nuisance Time', also called Daylight Savings Time.

**November 9**

Solar system parade. As soon as it gets dark, look to the southwest and take in Jupiter, Saturn, the Moon and Venus, all marching toward the west with Sagittarius joining in.



**November 17**

Earth will be passing through the swarm of space rocks that give us the annual Leonid meteor shower. Just like last month's Orionid meteor shower, the nearly full Moon will make the night sky too bright to see many "shooting stars".

**November 19**

The Moon's own orbit around the earth will take it part way through the shadow that Earth casts into space. This is called a lunar eclipse. We'll see the Moon take on a copper color starting at 2:18AM EST and will be darkest at about 4AM EST. Just like I recommend for meteor watching, it's best to go to bed early and wake up by 2AM to catch the most interesting part of the eclipse.

**November 19**

Look for the Moon during in Taurus, the Bull, nearly sandwiched between the beautiful star clusters called the Pleiades and the 'V'-shaped Hyades.



**November 25**

Happy Thanksgiving!