February Skies over the Pinnacles

February 2021

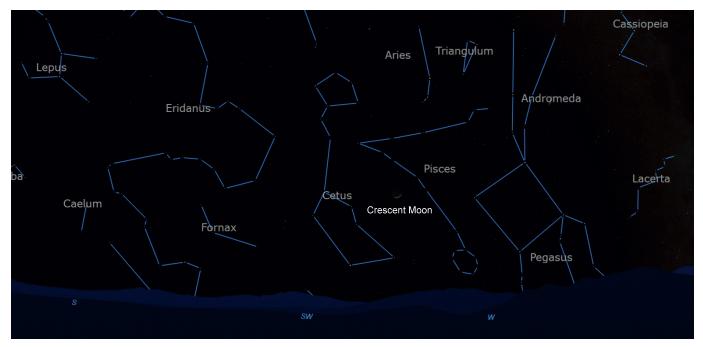
February's four principal phases of the moon

February 4	Last Quarter	
February 11	New Moon	\bigcirc
February 19	First Quarter	
February 27	Full Moon	

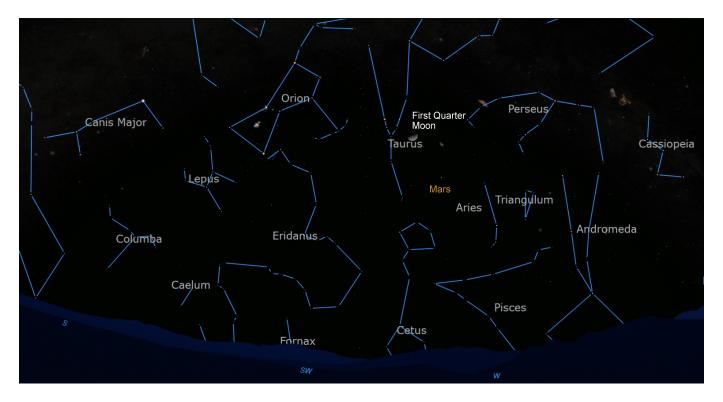
The Moon as a Pointer

Being an astronomy nerd, I love doing public star gazes. These are times when I get to meet a group of interested folks to show off the night sky. This usually begins with a tour of the constellations that are visible above us in the evening. This used to be done while holding a ridiculously bright flashlight that would pierce the dark sky with a shaft of light that could be pointed at an interesting object above. Of course, this method ended up with a few visitors having temporary night-blindness. Yep, that defeated the purpose for anyone who happened to be looking in my direction when I switched on the light. Now, we have night-piercing green lasers as pointers. Care must always be taken to avoid subjecting the pilot of an airplane who might be flying into the intense beam.

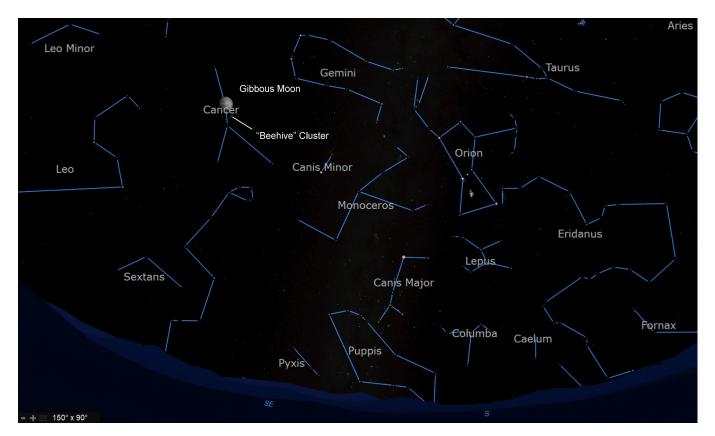
The return to 'live' star-gazing is still several months off so let me take you on a tour of February skies using a different pointer: one that requires no batteries and won't hurt your eyes.



On February 15, the Moon will be noticeable as a crescent low in the southwest around 7PM local time. Below and to the right you might notice a little circle of stars known as the "ringlet" of the constellation of Pisces, the fish. Look further right and you'll see the Great Square, looking like a diamond, in the constellation Pegasus, the winged horse. To the left is Cetus the sea monster



The evening of February 19 will be a treat! Find the first quarter Moon (½ illuminated from our perspective). Just below and to the right you'll see the orange planet Mars. Now, look a little way to the right and you'll see the cluster of stars called the Pleiades, or Seven Sisters. This little grouping is about 440 light years away, so light left these stars when Sir Frances Drake began his attempt to sail around the Earth for Queen Elizabeth I of England. Look to the left of the Moon and find an unmistakable "**V**" shape of stars which forms the face of Taurus, the Bull. Like the Pleiades, this grouping is also a cluster of stars, called the Hyades. The distance to these stars is about 150 light years The bright orange star Aldebaran shines at the top of the left arm of this grouping. Stars are often born in families and the Pleiades and Hyades represent two star 'families'. Look east past the Hyades and you'll land on Orion the Hunter.



On February 24, the Moon's orbit around the Earth places it in front of the constellation called Cancer, the Crab. To the right lies the starry twins known as Gemini and to the left we find the unmistakable "backward question mark" that forms the head and furry mane of Leo, the Lion. If you have binoculars or a small telescope, look just below (south) of the Moon. See anything? If skies are clear enough, you might just spy the star cluster called Praesepe or the "Beehive", 610 light years away.

As I say, I love sharing my love for the starry sky with everyone. Several years ago I met Noreen Grice who is a author and popularizer of astronomy. I must admit that at up to that time I hadn't given much thought to astronomy and folks with visual impairments. Even then as I became "woke" to my shortcoming I still struggled with just how to show the beauty of the heavens to those who couldn't have the experience visually. Recently Ms. Grice published a new book with the title, **Touch the Stars**. As I learned from a review in Sky and Telescope magazine, this book is full of suggestions on how to do just that. There are pages with illustrations specially embossed with raised representations of star maps and even contours of the cloud tops of Jupiter or the rugged craters and mountains of the Moon. Also included is a raised diagram of the lunar phases and the shapes of galaxies.

Noreen Grice's interests lie in helping all people with differing abilities to enjoy astronomy. During a recent conversation with Ms. Grice I learned that there is a special eyepiece that has been developed to allow people with differing mobilities to more easily view directly through large telescopes with ease. There is even such a device specifically built for use with Berea College's Boller and Chivens telescope which is presently atop the old science building on campus. How I would love to see that grand instrument used as a "All-Person's Telescope" for public star-gazing.

If you're interested in obtaining *Touch the Stars*, here is some useful information. Publisher: National Braille Press ISBN: 978-0-939173-84-6 Cost: \$35.00

Attractions in February

- **February 6** At dawn the Moon shrinks to a sliver and will appear very near the bright star called Antares, the heart of the scorpion.
- **February 18** In the evening, the growing (or waxing) Moon appears to pay a visit to Mars. About 7 Moon diameters will separate the two.
- **February 19** Don't miss the Moon's appearance between the Hyades and the Pleiades. See the illustration above.
- **February 25** Get up early to enjoy the graceful trio of Jupiter, elusive Mercury and Saturn in a graceful triangle. See the picture below. Binoculars will help in viewing this event.

