

# May Skies over the Pinnacles

No telescope needed, well, mostly!

Much is happening in the skies over the Pinnacles in May. This month we'll be treated to two celestial dances by the planets and an introduction to a nearby planet that you've probably never even seen. More on that later. If you have a binoculars, you even will have a chance to catch a comet!

## May's four principal phases of the moon

May 7	Full Moon	
May 14	Last Quarter Moon	
May 22	New Moon	
May 30	First Quarter Moon	

## Dance of the Planets

Both the planets Venus and Mercury are known as “inferior planets”. This means that their respective orbits are inside that of the Earth, nearer the sun. To us on *this* planet, Venus and Mercury go through phases, just like our Moon. Look at the two pictures below. The image on the left is one I took with a regular camera of the crescent Moon. The image on the right is a picture I took in mid-April of Venus through my telescope. The image of Venus magnified about 200 times.

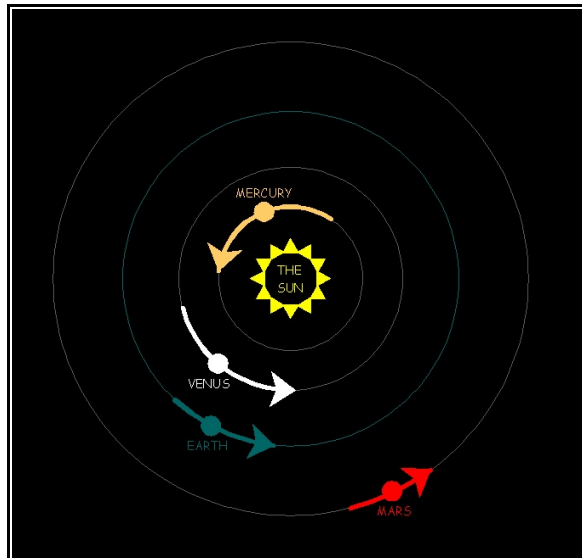


You couldn't have missed brilliant Venus in the western sky during the evenings in March and April. Some people would call it the “Western Star”. In June and July, early risers might catch Venus as the “Eastern Star” in the eastern sky before sunrise.

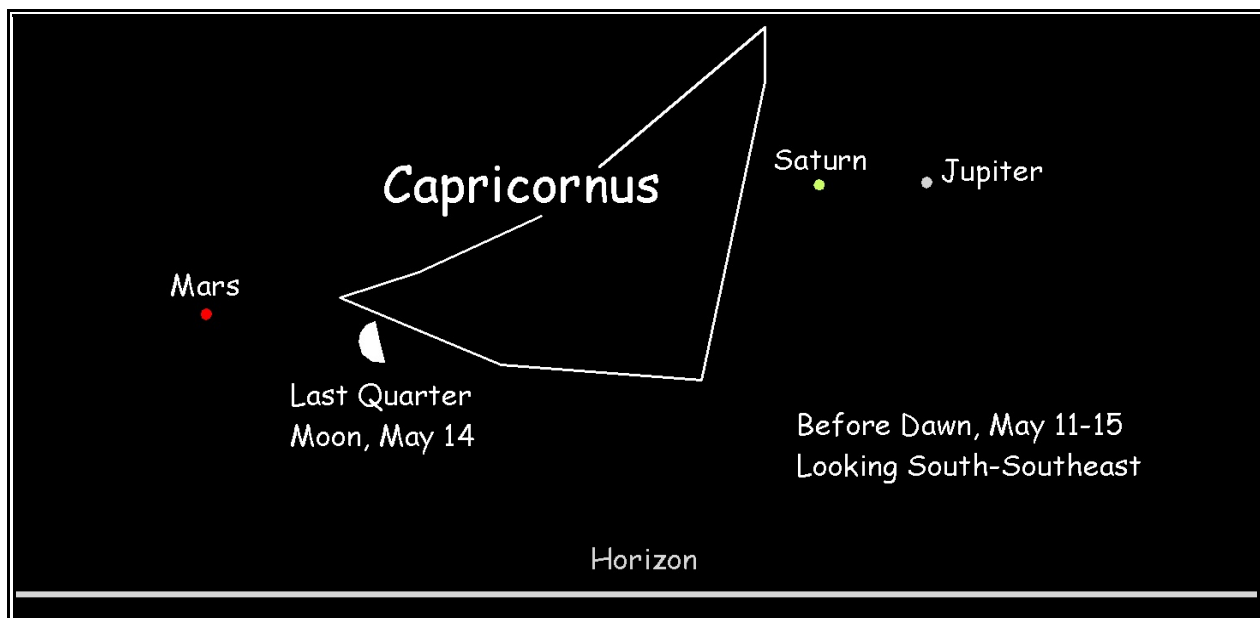
As Venus approaches us on its orbit it will appear larger and it will take on a more “crescent moon” appearance. If you have binoculars or a small telescope look at Venus, especially around May 15. You'll be treated to a beautiful view!

Around May 21, about a half-hour after sunset, you can see a planet you may have never seen before! On that evening, go out and find Venus, now low in the western sky. Hold out your hand level at arm's length, with two fingers together and place them just below Venus. That little 'star' just under your fingers and a little left...that's the planet Mercury! Again, grab those binoculars or telescope!

The ancient Greek name for "wanderer" is planet. If we have a string of clear evenings around May 21, you might want to check out how Venus and Mercury are moving against the sky and each other over a few days. The chart below shows the positions of Mercury, Venus, Earth and Mars on their orbits, from a viewpoint above the solar system.



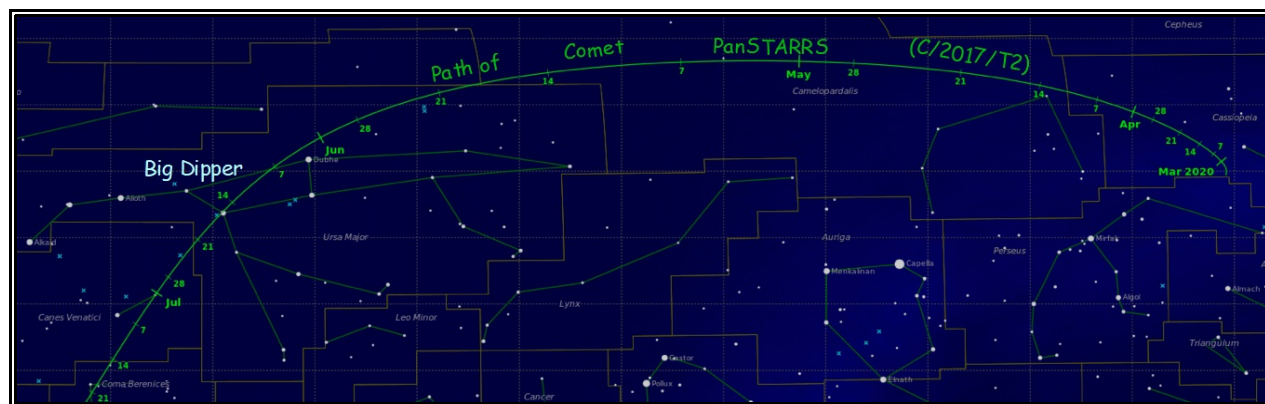
If you're an early riser, you can treat yourself to a fine view of Mars, Saturn and Jupiter near the constellation Capricornus in the wee hours around mid-May.



## Comet “Tales”

Maybe you are old enough to remember the most famous of all comets, Comet Halley. Halley last visited the inner solar system in 1986. Even if you remember the event, like me, you were, well, underwhelmed. That’s because Comet Halley didn’t get very close to the earth and stayed a dim smear low in the southern sky. In 1910, on it’s previous visit, Comet Halley’s enormous tail brushed over the Earth and that caused all kinds of needless worry for our great-grandparents. On the nights of May 4 and 5 you can see little pieces of Comet Halley during the Eta Aquariid Meteor Shower. This annual meteor shower occurs when the Earth sweeps through the dust trail left by Comet Halley. Check out my April 25 post for hints for observing meteor showers with your family. Look toward the constellation Aquarius low in the east at midnight, starting May 3. A group watching for meteors may see up to 30 “shooting stars” per hour.

While we’re discussing comets, here’s one for you intrepid astronomers.



Operation PanSTARRS, a program that uses telescopes around the world to identify and track objects that could threaten the Earth most often finds comets, which almost never pose any kind of a threat. But PanSTARRS provides a great way of alerting us sky-watchers to find “new” comets. Whenever a previously unknown comet is found, the person (or automated search-system) lends her, his, or the system’s name to the comet. On a clear night, follow the green line on the chart above, to tonight’s date. For instance, around June 16 Comet PanSTARRS will appear right next to one of the stars in the bowl of the Big Dipper. The best way to locate a comet from a chart like this is to identify the patch of sky around the comet’s predicted location and use your binoculars to sweep the area for anything ‘fuzzy’. Don’t look for a tail. The rule is: if you need binoculars to see a comet, the tail probably isn’t very bright. Sometimes, the fuzzy blob that is the comet looks a little green.

Most of the information found in this article is courtesy of the May issue of Sky & Telescope Magazine. For more detailed celestial information, check out [skyandtelescope.org](http://skyandtelescope.org).

-Jeff Hutton

Jeff is a long time amateur astronomer and telescope builder. He hopes to resume offering monthly presentations on astronomy and related topics at the FOC soon!