

Midday noon gazing

By Vernon Whetstone

Amateur Astronomer

Have you noticed that sunlight is creeping back into your south-facing windows?

Now that we have passed the summer solstice, the Sun is moving southward and more and more sunlight is spilling into your south-facing windows and onto the floor. It means you can move your sun-loving plants back there in preparation for winter.

Now, let's move on to this week's festivities. I have another letter from the inbox. "How is it possible that I am seeing the moon during daylight?"

Good question. The answer is basic orbital mechanics. In fact, we are able to see the moon more in daylight than we do at night.

On average—and if you know where to look—you could find the moon on 22 days of the month during daylight hours.

Right now, since we have just passed first quarter moon on July 15, we can find it in the southeast just after it rises at about 12:51 p.m. MDT, and then observe it until sunset. We can continue to observe it in the daylight until it is full on July 22, when it will rise at sunset and set at sunrise.

At that point, our daylight observing times will shift to the morning hours after sunrise and continue through the third quarter stage.

There is nothing as nice as seeing a just-past-full moon in the western sky just after sunrise. The sight of the white face of the moon against the blue of the sky giving the moon itself an almost bluish appearance is a sight to behold.

Slap a pair of binoculars on it and see for yourself.

To paraphrase Gloria Swanson from the movie *Sunset Boulevard*, "Alright Mr. DeMille, we are ready for our close-up," at least as close as we can get from a few billion miles away.

On Friday, July 19, between 3:27 and 3:42 p.m. MDT the Saturn-orbiting satellite, Cassini, will photograph Earth.

This is the second time the satellite has photographed Earth from its orbit around Saturn. The first was made famous when Carl Sagan called it "a pale, blue dot."

So, on that date, be outside dressed in your best, looking southeast, and smile.

SKY WATCH Full moon, Monday, July 22. Speaking of the moon, Thursday evening, July 18, the moon will be about seven degrees above the red heart of Scorpius, the Scorpion.

On Saturday, July 20, an almost-full moon will be just to the upper right of the distant planet Pluto. You won't be able to see it, but you will at least know where it is. In the west about a half-hour to an hour after local sunset the bright planet Venus will be visiting Regulus, the brightest star in Leo the Lion. The pair will be close beginning on Sunday, July 21 and stay close until Wednesday, July 24.

Back in the early morning sky, two planets will be doing a sort of fly-by of their own. Giant

Jupiter and much smaller Mars will be passing each other starting now and can be observed close to each other until the end of the month. Look east about a half-hour to 45-minutes before sunrise. Both planets are currently on the far side of the Sun from us.

Starting on Wednesday, July 24, through the end of the month you might be able to get a brief glimpse of tiny Mercury located just below the Jupiter/Mars pair in the early morning hours. If there are no clouds along the horizon, binoculars will be essential.

And finally, one of the most exciting astronomical events will be giving us a preview of things to come starting Tuesday, July 23. That is the date of the beginning of the Perseid meteor shower season. Starting then, and continuing through the peak viewing time on Aug. 11, we could start seeing the bright streaks of the Perseids in the early morning sky. The constellation, Perseus, will be above the horizon at about 1 a.m. MDT.

NEXT WEEK: More astronomical blathering.