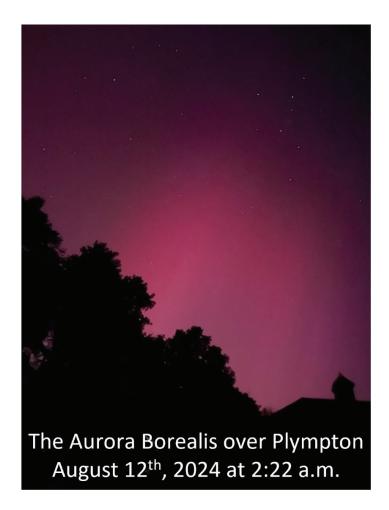
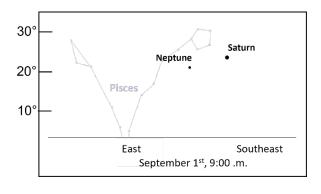


It's Labor Day weekend? Yikes! The good news is that it is getting dark earlier and earlier, enabling us to get outside and look at our night skies sooner. That said, for the past few weeks the transparency of the night sky has been diminished by high-altitude smoke from wildfires in Canada. The smoke particles have made for some beautiful Sun and Moon settings and risings though. And, if you're out at night, don't forget the bug spray! As of this writing, the nova in Corona Borealis has not yet occurred. Early on, the best prediction of the event was May 25th, +/- 110 days. It hasn't happened yet and the +110 days would bring us to September 12th, so keep watching. Of course, nature doesn't pay any attention to any of these predictions. The star will become a nova when the physical conditions on the white dwarf are right to drive the star's outer layers to explode.



How was your Perseid meteor shower watching? This year, we were treated to a fine display! The night of August 10th /11th provide just a few meteors for us to see as clouds constantly moved through our area from 10:30 until 1:00 (when I went inside again), but the next night...wow! On the morning of August 12th, I was out in my meteor-watching chair from 1:30 a.m. until around 3:30. During that period I counted 67 Perseid meteors and 3 strays. That's about one every other minute. "Strays" are meteors that are just part of the normal background number that we can see almost every night of the year as the Earth sweeps up small debris in its path. Of the 67, 44 were brighter than 2nd magnitude and the rest were fainter. Around 2:15, things got really wild. As I was watching the north and northeast sky for meteors, the pink glow of the Aurora Borealis steadily rose above the trees in the north. It was absolutely stunning. It shimmered for about 10 minutes, maybe less, and then sank back below the horizon. For a sound background to this amazing site, my meteor-watching playlist had randomly selected Shine On You Crazy Diamond (by Pink Floyd) and a pack of coyotes started howling out across Bonney Pond. Mind. Blown. As I went in an hour later, Saturn, Mars, and Jupiter shone brightly in the south and east. Their musical namesakes, by the composer Gustav Holst, also made their way from my playlist at different times during my viewing session. You, too, can see these planets using the diagram in the Planet Roundup.

Planet Roundup: With Saturn rising around 7:00 p.m., it is easily visible after the sky is dark. By 9:00, you can find it shining brightly at magnitude 0.6 about 25 degrees above the horizon in the southeast. By midnight, all of the planets



Neptune

Arles

Pleiades

Uranus

Taurus

Mars

East

Southeast

midnight, early September

further out from the Sun than we are, will be visible from the east to the south in our sky. If you are looking for Uranus with binoculars or a

telescope, a good way to find it is to look about 5 degrees below and to the right of the asterism called *the Pleiades*. The Pleiades is an open star cluster that looks a bit like a tiny, compact Big Dipper. When looking for it, scan that region of the sky and look for something that is more disk-like than point-like. You may also be able to pick up a bluish-green tinge to its disk. Happy hunting! I know that some regular readers of this column save the articles for later reference. If you do that, compare the positions of Mars and Jupiter shown in the diagram here with their positions shown in the last couple of installments. Mars, on its inside track, orbits the Sun more quickly than Jupiter does. It has now passed Jupiter in our sky and is found to the east of Jupiter instead of to the west of Jupiter. Watching the night sky regularly gives us a first-hand knowledge of the mechanics of the Solar System! Mercury rises around 4:30 a.m. in the dawn sky. Venus is too close to the Sun for us to view now. The New Moon occurs on September 2nd, the 1Q Moon is on the 11th, the Full Moon is on the 17th, and the 3Q Moon will be on the 24th.

You can email me at astroblog@comcast.net with any questions and comments. This is What's Up? installment #89.

