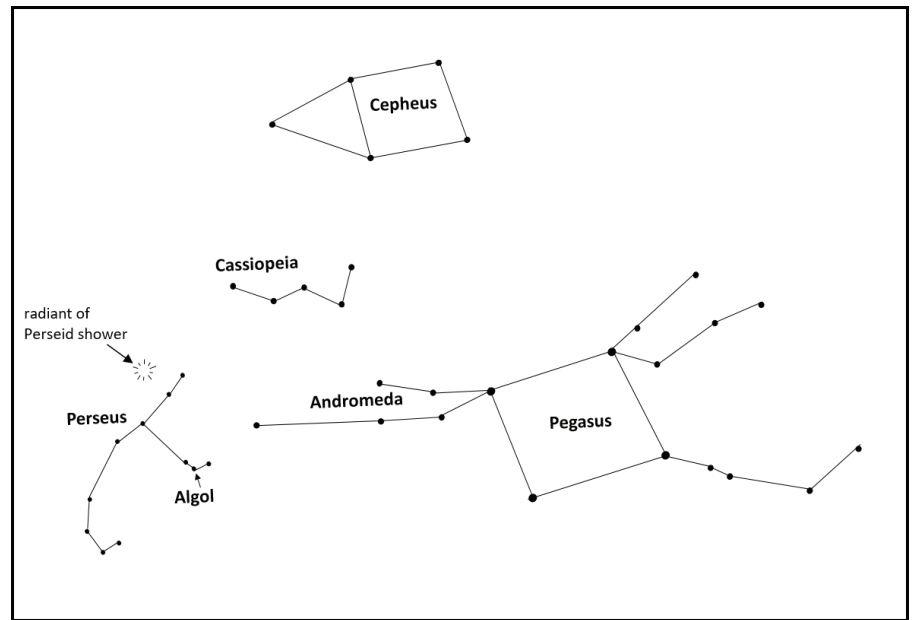


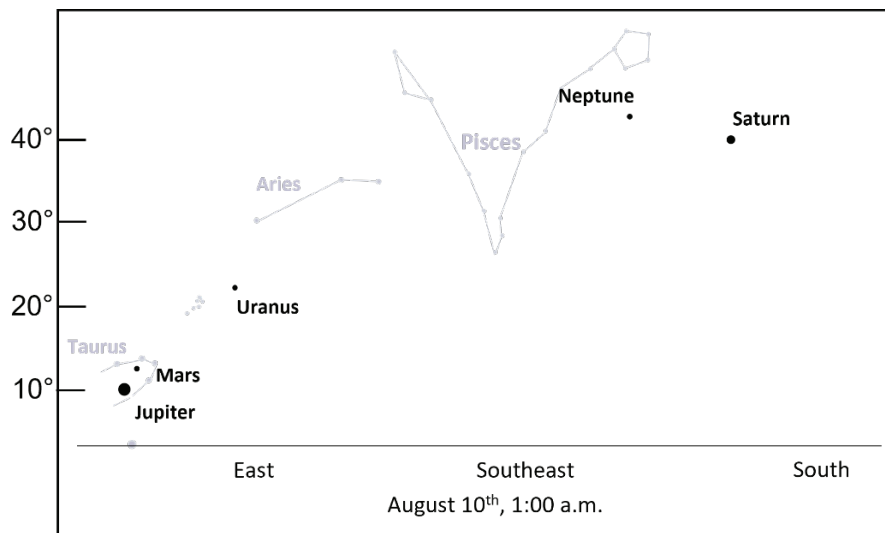
WHAT'S UP?

Hi, and I hope that all is well! It's August, and therefore time to get outside and watch the Perseid meteor shower. Weather-permitting, this year's shower should be a good for after-midnight viewing. The 1st Quarter Moon will be setting around then and won't be in our sky to interfere with the darkness. The nights of the 10th, 11th, and 12th (that is, the mornings of the 11th, 12th, and 13th) will be the best times to look. But, on any night now through the end of the month, you may see a Perseid or two. It's good that after-midnight is the best time this year anyway, because that's always the best time to see meteors. Why? Because then we'll be on the side of the Earth that is facing in the direction that the Earth orbits around the sun. The effect is

similar to driving in the rain and getting more raindrops on your windshield as compared to the rear window. Meteor showers are especially nice for all of us to view because you don't need any equipment to view a meteor shower. Set up a comfortable chair (one that reclines is best), sit outside in an open area, and look up. And even though it is summertime, you might also want to have a long-sleeve shirt and long pants handy in case it gets chilly and damp. Lastly – don't forget the bug spray! As to where to look, look generally from the northeastern horizon to straight up. Just slowly scan the sky. The point from which all of the Perseid meteors appear to start (the *radiant*) never sets for us at our latitude of 42° North and will be low in the Northeast as night falls and rises higher in the sky as the night progresses.



Sometimes we get to see a meteor that is extremely bright – like a bright as Venus! These are known as *fireballs*. They are very rare. Scientists at the American Meteor Society would like to know if you see one. If you do, you can report it to them on their website: https://fireball.amsmeteors.org/members/imo/report_intro/. The QR code at the end of this article will also bring you to their site.



Have you tried to see the Milky Way across our sky? If so, I'd love to hear about your impression of it! When you go out to view it, be sure to be away from any house or street lights and give your eyes a good 15-20 minutes to begin to noticeably adapt to the darkness, and a good couple of hours to fully adapt. In contrast to this, it takes only an instant of bright light to lose this *night vision*, so once you are outside, do all you can to protect your night vision. If you hear a car coming down the street, close your eyes until it passes. Don't use a white-light flashlight. Use only dim, red lights. Our dark-adapted eyes are less sensitive to red light.

Planet Roundup: Saturn now rises at a respectable time of 8:30 p.m. Give it some time to climb up above the haze on the horizon (and the lights of downtown Plymouth). By 10:00, it is 20 degrees above the horizon and a telescope will show its ever-thinning ring system. Next year, they will disappear from view as the Earth reaches the plane of Saturn's orbit around the Sun. They will then start to be more and more visible for the next decade or so. By 1:00 a.m., all of the planets further out from the Sun than we are, will be visible from the east to the south in our sky. For the time being, Mercury and Venus are too close to the Sun for us to view. The First Quarter Moon occurs on the 12th, the Full Moon is on the 19th, 3Q is on the 26th, and the next New Moon will be on September 2nd.



You can email me at astroblog@comcast.net with any questions and comments. This is *What's Up?* installment #88.

Barry