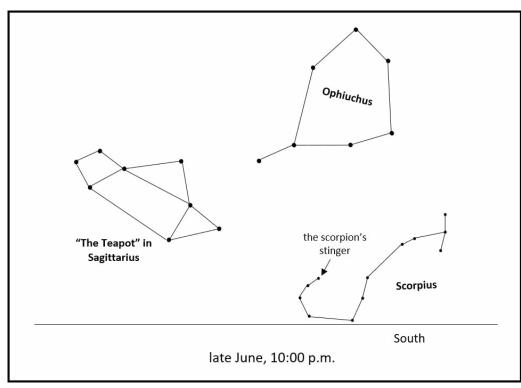


The Summer is officially upon us. This year the Summer Solstice occurred at 5:11 a.m. on June 21st. Not that the position of the Sun was noticeably different on the 21st than on the 20th or the 22nd, but we humans mark things and in doing so, we mark the moment that the Sun is above a spot on the Earth that's as far north of the equator as it gets. It's a momentary event. One instant the Sun is getting higher in our sky, then for one instant its northward motion stops (the solstice point), then the next instant it's moving southward and we're heading towards autumn and winter. In the southern hemisphere, it's still a solstice, but it's the Winter Solstice. There, it marks the first day of Winter. Here, the Sun is high in our daytime sky. There, it's low in the daytime sky. Wherever we live, the solstices are annual events that remind us where we are on our path around the Sun. Summer is tough for night sky lovers. In our towns, it doesn't get dark enough to admire and wonder over our view of the sky until at least 10 p.m. But when it is dark enough, the hazy path of our home galaxy, the Milky Way, stretches overhead from north to south. On June 4th, Carolyn and I had a particularly breathtaking view from our campsite at Burlingame State Park in southern Rhode Island. That weekend, we joined a couple of dozen other members from both our astronomy club – the South Shore Astronomical Society (SSAS) (ssastros.org) – and another local club, the Astronomical Society of Southern New England (ASSNE) (assne.org). We were hoping to stargaze from a spot just south of there that had a wideopen sky but by midnight, the clouds still hadn't completely dispersed and showed no signs of doing so. We all packed up our gear and return to the campground. And that small difference – about one mile further inland from the coast – made all the difference that night. The sky was velvety black and the stars and nebulae were bright and distinct. We kept our telescopes stashed though and just pulled our chairs into an open spot. We looked up, identified the constellations, pointed-out faint objects, and swapped stories. It was a wonderful night into the wee small hours of the morning. If my description of this interests you, I highly recommend setting aside some nights when the Moon will not be up to interfere and reserving a campsite for yourself. I'll be happy to help you with any details. Now THAT'S a way to spend a summer night!

As to constellations in sight these evenings, Scorpius the Scorpion is low in the South and the Teapot asterism in Sagittarius the Archer is just to its left about two fist-widths with your arm held out in front of you (20 degrees) above the horizon. That hazy Milky Way I mentioned passes through the Teapot. When we are looking at the Milky Way in Sagittarius, we are looking towards the very center of our galaxy. Just above these two constellations is the constellation Ophiuchus (OFF-ee-YOO-kus) the Serpentbearer. Ophiuchus is an interesting constellation. The constellation's boundaries straddle the ecliptic. Because of that, it is sometimes considered as the 13th constellation of the Zodiac. As the Sun, Moon, and planets travel along the Ecliptic the move through Ophiuchus after leaving Scorpius and before they enter Sagittarius. In fact, the Sun spends more time in Ophiuchus each year (about 18 days) than it does in Scorpius (about 7 days).



Pisces Jupiter Neptune Venus East Southeast late June, 4:00 a.m.

Planet Roundup:

Now, ALL of the planets in our Solar System are on display in the mornings. At 4 a.m. the smallest of them, Mercury, is just above the horizon. See it soon though. By July 3rd, it will be too close to the Sun to be seen. The rest, Venus, Uranus, Mars, Jupiter, Neptune, and Saturn can be found in a line rising from just north of east up and into the southeast. The eighth planet? Just look down. It's Earth! Saturn now rises around 11:30 p.m. so it's making its way into our evening skies. More on that as we get towards the Fall months.

As always, you can reach me at astroblog@comcast.net with any question and comments. This is What's Up? installment #60(!).

