WINTER SKIES OVER THE MIDDLE FORK 2023-2024

Winter is a great time to bundle up and do a little stargazing and the clear, crisp skies above the Middle Fork River Forest Preserve provide the perfect setting. The low horizons yield a wonderful view of the winter sky.

This winter we are treated to a number of bright planets in the sky. If you look early in the season, Saturn will be in the southwest. You'll find it doesn't take a very large telescope to see the system of rings around the planet. Don't confuse Saturn for the star Fomalhaut that sits below and left of the planet. By the end of 2023, Saturn sets at 9pm. By early February of 2024, it'll be setting in the evening twilight and be difficult to see. Jupiter is another story, however. Jupiter will be high in the southeast as the brightest star-like object in our sky as winter begins. As we approach spring, it will be situation high in the southwest. Even with binoculars, you can spy the four moons that Galileo saw back in the early 1600's. You just have to prop your elbows on something solid to keep your cold hands from shaking! This planet will be a prime target for Earth-bound telescopes this season!

Mercury and Venus are both in the morning sky this winter with Mercury putting on one of its best morning performances right after New Years. If you're up early, look for it in the southeast around 6:30am to the lower left of Venus. Venus will brighten our morning sky all season though its rise time approaches sunrise as we get closer to spring. The best time is to catch it in December and January as a brilliant star-like object in the southeast. On New Year's Day it rises at 5am. It will appear just to the left of the red star Antares on January 11th.

Winter boasts the greatest number of bright stars in our sky, more than spring, summer or autumn. The sky is anchored by our mighty warrior, Orion. Orion's shoulders and knees are marked by four stars that make a large, vertical rectangle. In the middle of the rectangle are the three belt stars in a line. This line can help you find other things. Follow the line to the upper right to a V-shaped group for stars, marked by a brighter reddish star. This is the face of Taurus, the Bull. The red star is Aldebaran, which means "the follower." Aldebaren follows the Pleiades or "Seven Sisters" star cluster across the sky. Look for the Pleiades near the V, especially if you bring binoculars with you. Note how blue the stars appear. The dipper-shaped group consists of very young and very hot stars. Binoculars will show over two dozen stars.

To the lower left of Orion's belt is Sirius, the brightest nighttime star in our sky. Sirius is also called the "Dog Star." It, and a trio of stars below it, mark Canis Major, the large hunting dog. If you have binoculars, look just below Sirius for a star cluster called M41. Note how a line drawn from Sirius to the upper right to Orion's shoulder (the reddish giant star, Betelgeuse) and then back to the left brings you to Procyon, the brightest in Canis Minor, the small dog. Don't look for a dog as the constellation is really two stars! These three stars form our winter triangle.

Above the dogs are two equally bright stars marking the heads of the Gemini twins. They are called Pollux and Castor. High above Orion is a bright yellowish star called Capella. Capella is part of Auriga, the chariot driver, though the entire constellation looks more like a pentagon.

To the northeast on winter evenings, you'll find the familiar Big Dipper. Follow the two stars at the end of the dipper's bowl northward to discover Polaris, our north star.

Lastly, if you brave the cold, a Dark Sky Park is a wonderful place to watch meteor showers. There aren't many active showers in the winter, but one is worthy of note. The Quandrantid shower peaks the evening of January 3rd and the morning of the 4th, though you may see a few "shooting stars" from the end of December to the second week of January. The peak of the Quandrantids, though, only lasts a few hours. The predicted maximum is about 3am on the morning of the 4th. No instrumentation is needed. Lay out a blanket, look straight up and be patient. You may see up to 25 meteors per hours, and some may be bright. There will be a last quarter Moon in the sky, rising near midnight, but it's still worth a look.

Of course we are all looking forward to the total solar eclipse on the afternoon of April 8th. In the meantime, look early in 2024 for Starwatch dates offered by the Champaign-Urbana Astronomical Society (www.cuas.org). The group loves to share the sky with others and provide views of the nebulae, galaxies and, of course, the planets. And it's free to participate!