MIDDLE FORK RIVER
FOREST PRESERVE

INTERNATIONAL DARK SKY PARK
AND CAMPGROUND

WINTER SKIES OVER THE MIDDLE FORK

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. Soon after sunset, all season, look for the brilliant Venus in the southwest. Venus begins the season to the upper left of Saturn, but Saturn is quickly lost in the evening twilight. As we progress into the new year, Venus gets higher in the sky until, in March, it is setting about three hours after the Sun. The Moon near Venus is always a beautiful sight and you can experience that on December 28, January 28, February 27, and March 28. At the end of January and beginning of February, Venus is joined by Mercury, far to the lower right of Venus.

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 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.

Though the campground doesn't open until April 1, if you happen to at the preserve early in the morning, look to the southeast before sunrise for the planet Mars. You can tell it is Mars due to its reddish color, but be careful, as, in the last half of January, Mars slides by the bright star Antares, which is also red. In fact, "Antares," in some translations, means "the rival of Mars." At the end of January, Mars is joined by Jupiter, far to the lower left of Mars. Saturn makes it a trio at the end of February. Mars will pass very close to Jupiter on the morning of March 20. A few days before this date, a crescent Moon will make for a wonderful view.

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. 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. The Moon will be out of the sky by just after 11pm.

Speaking of the Moon, we'll have "supermoons" on February 9 and March 9, though you won't notice much of a difference. Yes, the full Moon appears a bit larger, but the effect is so small the eye doesn't notice the difference. There's a penumbral lunar eclipse on January 10, but it's only visible from the eastern hemisphere.

The Champaign-Urbana Astronomical Society will hold its first Middle Fork Starwatch of the year on April 18. Join us!