## Stars over Sisters

By Cami Kornowski

Correspondent

Aquila the Eagle is one of nine constellations that represent various types of birds. However, only it, Corvus the Crow, and Cygnus the Swan can be seen from Central Oregon's latitude. The remaining six lie deep in the celestial southern hemisphere, well beyond our view.

Aquila is bisected by the celestial equator so that roughly half of it is in the northern hemisphere, half in the southern hemisphere. It is bordered by Sagitta to the north, Hercules, Ophiuchus, Serpens Cauda and Scutum to the west, Sagittarius and Capricornus to the south, and Aquarius and Delphinus to the east. The constellation is easy to find because a portion of the Milky Way runs through it.

According to Greek mythology, there was a battle between the Olympian gods and the Titans during which an eagle carried Zeus' thunderbolts. After the gods were victorious, Zeus kept the eagle by his side, represented by Aquila. In Hinduism, the constellation of Aquila is identified with the half-eagle half-human deity Garuda.

Aquila's most brilliant luminary is Altair, 12thbrightest star in the sky. An interesting property of this star is its rapid spin, making one rotation on its axis in just nine hours. By contrast, the equator of our sun takes a little more than 25 days to complete a single rotation. This rapid spin causes Altair to take on the shape

its equatorial diameter more than 20 percent greater than at the poles. Altair is one of closest bright stars to the earth, a mere 17 light-years

Long-time sci-fi fans may remember the 1956 movie "Forbidden Planet," a story set on the fictitious planet Altair IV, fourth planet out from Altair. Some regard it as one of the best science fiction movies of all-time.

Owing to its proximity to the Milky Way, there is no lack of deep-sky objects in Aquila. No fewer than 10 of these are planetary nebulae. These things have nothing to do with planets, but are instead shells of ionized gas cast off from mediumto-low-mass stars near the end of their lifespans. Astronomers believe that in another seven billion years or so our dying sun will produce a planetary nebula. NGC 6781 may be the most picturesque of the numerous gas shells in Aquila. It lies at a distance of about 2,600 light-years from the earth.

Though the annual Perseid meteor shower occurs from mid-July through mid-August, this year it is predicted to peak at about 1 a.m. PDT on August 13. The best time to view the meteors, therefore, will be the evening of August 12 and the morning of August 13. This should be a particularly good display because the moon is just one day from being new (dark). Approximately 100—120 meteors per hour are expected to streak across the sky during this time.

Meteor-stream modeler Jeremie Vaubaillon claims

very close to the debris trail that comet Swift-Tuttle shed in 1862. Because of this, there is a chance that the meteor count could be significantly higher for a few hours. If this event actually happens, observers in Asia have the best chance to witness the display.

Speedy Mercury joins Jupiter in the evening sky early in the month. On August 6 the two planets will be just 0.6 degrees apart low in the west, 45 minutes after sunset. The sun is slowly gaining on Jupiter, but because Venus is currently retrograding westward, it will leave the evening sky before Jupiter.

Saturn appears in the south-southwest as darkness falls. Because the planet is at eastern quadrature on August 21, the shadow of the globe on the rings is at its maximum extent this month. A telescope is necessary to view this phenomenon.



NGC 6781 is an attractive planetary nebula in the constellation of Aquila.

On August 20 and 21, Mars will arrive at the outskirts of the Beehive Cluster in Cancer. Use binoculars or a telescope to see the approach.

The month opens with a waning gibbous moon that fades to last quarter on August 6. Our only natural satellite is new on August 14 and first quarter on August 22. The full Sturgeon Moon appears on August 29.

To learn more about the night sky, all are invited to attend the Stars over Sisters Star Watch on Saturday August 15, at the Sisters Park & Recreation District building, beginning at 8:30 p.m. Following a brief presentation, visitors will have the opportunity to view celestial objects through telescopes provided by members of the Sisters Astronomy Club. The event is free.





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