

Tonight's Sky: 2016

August

Your guide to constellations, deep-sky objects, planets, and events. Tonight's Sky, highlights of the August Sky.

Evening Planets

Early in the month, Jupiter will hang low in the west right after sunset.

Catch it early, because the planet will be too low to spot after darkness falls.

In the southwestern sky, Saturn and Mars form a trio with the bright, reddish star Antares throughout the evening.

The three celestial objects will appear closest together near the end of the month.

Constellations and Deep-Sky Objects

Stargazing on a hot August night reveals a multitude of wonders.

Lyra, the Small Harp, lies high in the late evening sky. Its main star is the great Vega, one of the brightest in the sky.

Look for Lyra by locating Vega and then the parallelogram of stars nearby.

Epsilon Lyrae, the bright star near Vega, is actually a wonderful quadruple-star system, known as the Double-Double.

In the parallelogram of Lyra lies the dramatic Ring Nebula. It is an expanding shell of glowing gas expelled by the dying star at its center.

The great constellation Cygnus, the Swan, flies high through the August night.

Using bright Vega as your guide star, look for the cross just to the east. Cygnus is also known as the Northern Cross.

Albireo, at the head of the Swan, is a showpiece for small telescopes. This spectacular pair of stars features contrasting colors of sapphire and golden topaz.

Deneb, the Swan's tail, is a supergiant star. If Deneb replaced the Sun in the center of our solar system, it would engulf Mercury and Venus.

On a clear night, hazy patches of nebulae can be seen by casually panning across the Cygnus area with binoculars.

The most prominent is the North America Nebula, an area of gas and dust illuminated by the nearby, brilliant star Deneb.

Cygnus also hosts several clusters of stars. The easiest to find are M29 and M39.

M29 is found near the center of the Northern Cross. When viewed in a small telescope, it resembles a small square.

Best seen in binoculars, M39 is a loosely bound cluster of about 30 stars, just to the north of Deneb.

Just south of Cygnus lies the small constellation Vulpecula, the Little Fox, first charted by Polish astronomer Johannes Hevelius in the 17th century.

Vulpecula hosts the Dumbbell Nebula, which can be seen as a faint smudge in binoculars. A small telescope reveals its double-lobed shape.

Aquila, the Eagle, was known to the ancient Greeks as the great bird of Zeus.

Altair, the brightest star in Aquila, is only 16 light-years from Earth.

The bright stars of the summer night sky, Vega, Altair, and Deneb, make up the Summer Triangle.

Use binoculars to look for the Coathanger, located halfway between Altair and Albireo. This remarkable little group of stars forms a familiar pattern from our point of view.

Events

The Perseid meteor shower is an always-anticipated feature of the August night sky. Look for meteors during the early morning hours of August 12th and 13th.

These streaks of light are tiny bits of a comet burning up as they enter Earth's atmosphere. The cometary debris trail, which Earth passes through once a year, was left behind by Comet Swift-Tuttle during its many visits to the inner solar system.

Ending

The night sky is always a celestial showcase. Explore its wonders from your own backyard.