August Tonight’s Sky

Warm August nights offer fine opportunities for stargazing, as a flock of star-studded figures soars overhead.

In the southeast lies Vega, one of the brightest stars in the sky.

The Greeks made Vega the anchor of the small constellation Lyra, the lyre of Orpheus.

Lyra’s main pattern is a small parallelogram that marks the strings of the instrument.

Alongside Lyra sits Epsilon Lyrae, also known as the Double Double, a point of light consisting of two orbiting pairs of white stars.

Between the bottom two stars of the parallelogram is the Ring Nebula.

NASA's Hubble Space Telescope reveals stunning details of this planetary nebula, a glowing shell of gas expelled by a dying star.

The remnant core of the star—now a small, hot white dwarf—sits in the center of the shell, providing radiant energy that makes the gas glow.

Our own sun may end its life this way in about 6 billion years.

To the east of Lyra we find a second bright star: Deneb, a distant blue-white supergiant.

Deneb marks the tail of Cygnus the swan.

Marking the head of Cygnus is Albireo, a showpiece double star for small telescopes.

Just south of the head of Cygnus lies a small pattern called Vulpecula, the fox.

Vulpecula hosts the Dumbbell Nebula, another planetary nebula.

The Spitzer Space Telescope’s infrared view shows the expanding cloud of gas heated by the central remnant star—now a white dwarf.

Astronomers think that the dumbbell shape of this nebula could be caused by the presence of a second star at the center.

Eventually the expelled gas of the nebula will dissipate into surrounding space, leaving only the white dwarf and its possible companion behind.
To the south of Lyra and Cygnus lies another bright star of summer: Altair.

Altair marks the neck of Aquila the eagle.

Just off the end of Aquila’s outstretched tail lies an open star cluster.

Known as the Wild Duck Cluster, early observers thought it resembled a flock of ducks flying in a roughly V-shaped formation.

Taken together, the three bright summer stars Vega, Deneb, and Altair form the Summer Triangle.

Use the Summer Triangle as a guide to the stars and nebulas that glide through the late summer night.

Celestial wonders await you in tonight’s sky.