



STARRY TRAILS

SEPTEMBER 2018

The reign of our dazzling planet, Venus, will come to an end by late September, when it will set 45 minutes after the Sun. Venus has been spectacular over the last few months! Also, this month, Jupiter will continue to get closer to Venus and the two planets will put on a great show with the Crescent Moon on September 13th (Illustration 1)! Venus & Jupiter will join Saturn & Mars, once again, for a phenomenal four planet extravaganza (Illustration 2)!!

It is great to head outside, this time of year and spend a few minutes enjoying the late summer sounds! We can still enjoy some warm nights, but autumn is just around the corner. Are you ready to enjoy our starry hike? Grab your Starry Trail map, bug spray, binoculars, jacket and chair or blanket.

Our hike begins around 8:45 pm. To start, we will face west or the spectacular colors of the sunset. Brilliant Venus & Jupiter will catch your eye!! Trek up and you will see a bright yellow, orange star, Arcturus. Arcturus has been with us since spring. Just above Arcturus, you will see a semi-circle of stars. It looks almost like a necklace, but actually it is the Northern Crown or Corona Borealis. I think it looks like a smiley face! Right overhead will be a keystone shape in the stars. This is the body of Hercules, the bravest and strongest hero! Binocular time! Take your binoculars and scan around the part of Hercules facing Corona. Do you see the fuzzy object? This is the finest Globular Star Cluster (M13) in the northern skies! (Illustration 3).

Turn to the left and head down slightly and you will notice the red, orange star Antares, the heart of Scorpio. Continue to head left of Antares to the constellation, Sagittarius, which looks more like a teapot. Between Scorpio and Sagittarius is the best part of the sky to scan with your binoculars and telescope! It is rich with deep sky wonders (Illustration 4)! Right above the lid of the teapot you will spy a golden colored object, Saturn. What a lovely sight in a telescope! Trek slightly left and brilliant Mars will catch your eye!

Turn right or north. The Big Dipper is beginning to swing down through the sky. Take the two stars at the end of the cup and draw an imaginary line to the next bright star. You have reached the North Star! The North Star, or Polaris, is at the end of the handle of the Little Dipper. Also, to the right of the Little Dipper is Queen Cassiopeia, the W-shaped constellation. Grab your binoculars. From the top point of the W shape, scan slowly to the right and up slightly. Do you see a fuzzy circular shape? That is the Andromeda Galaxy. It is 2.5 million light years away! Find the bottom point of the W. Scan once again to the right and down slightly. You will come upon the Double Cluster in Perseus (Illustration 5).

Hike again to the right and you will be facing east. When looking up overhead, you will see a very bright star, which is Vega. Journey down and to the left and you will come to Deneb. Now go right and you have reached Altair. When you connect these three bright stars you have made the Summer Triangle. Great job! Running through the Summer Triangle is the Milky Way, our galaxy! Pop open that lawn chair or lay out on your blanket. Take your binoculars and scan through that part of the sky from north to south. See all of those stars?! Even if you cannot view the Milky Way, due to light pollution, you can still see so many stars with your binoculars!

Here is a challenge: scan to the left and up of Altair.

Do you see the group of stars that resemble an upside-down coat hanger? Cool!

Head back to Deneb. Imagine this to be the tail of Cygnus, the Swan. To the right will be three stars in a line. These would be the outstretched wings. You should also be able to see the long neck and head of the swan extending from the wings. The head of the swan would be directly below Vega. This star is Albireo, which is a beautiful double star through a telescope! If you look just below the Summer Triangle, you will see a group of stars that look like a kite. This is the constellation, Delphinus, the Dolphin. Journey below Delphinus. Notice four stars that form a square. This is the Great Square of Pegasus, a sure sign of autumn (Illustration 6)!

Take a few minutes and listen. Farewell summer until next year!

Highlights

Sept 2 – Last Quarter Moon.

Sept 9 – New Moon.

Sept 12 – The Crescent Moon passes north of Venus.

Sept 13 – The Crescent Moon passes north of Jupiter.

Sept 16 – First Quarter Moon.

Sept 17 – The Moon passes north of Saturn.

Sept 20 – The Moon passes north of Mars.

Sept 21 – Venus will be at its brightest low in the west after sunset.

Sept 22 - Autumn begins in the Northern Hemisphere at 9:54 pm.

Sept 24 – Full Moon. According to folklore, it is the Harvest Moon.

Brightest Stars: West – Arcturus, Spica. **Overhead** – Vega, Deneb, Altair. **South** – Antares.

Binocular Highlights - The Moon, Jupiter Hercules Globular Star Cluster M13, Milky Way from south to north starting between Scorpio and Sagittarius, Double Cluster (NGC 869 & 884) and Andromeda Galaxy (M31).

Telescope Highlights - The Moon, Venus, Jupiter, Saturn, Uranus, Neptune, Albireo, M2, M3, M4, M6, M7, M8, M51, M13, M57, M81, M82, M10, M11, M12, M27, M15, M16, M17, M20, M21, M22, M23, M25, M31, M39, M92 and NGC 869&884.

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Night Sky Illustrations created by Suzie Dills using Starry Night Backyard & Stellarium.

Illustrations courtesy of Cassandra Dills

Written by Suzie Dills – Remember to download your Illustrations & Star Map!