



STARRY TRAILS

July 2015

We start the month of July with the spectacular planet pairing and end with a Blue Moon! And in between we can enjoy the summer Milky Way which offers great views of many celestial delights! Venus and Jupiter continue to dazzle in the western sky after sunset for just a few more weeks. Brilliant Venus is now to the left of Jupiter and the pair will continue to spread apart and drop lower in the western sky each night. What a show it was!!

Once again our hike will begin around 10:00pm. We have so much to see tonight, are you ready?! Don't forget your Starry Trail Map, bug spray, binoculars, light jacket and lawn chair or blanket. We will begin our hike by facing west or the fading colors of the sunset. Right above Venus and Jupiter, you will see the bright star Regulus, part of the constellation Leo, the Lion, very low in the sky. Farewell to Leo until late winter. Now turn left or south, there is so much to see! The first object to catch your eye will be the bright red-orange star Antares, the heart of Scorpio. Above Antares and slightly right, you will see a golden colored object, which is the planet Saturn. Saturn is truly spectacular to view through a telescope! Now trek back to Antares and to the left 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!

Hike upwards and overhead to the brilliant yellow-orange star, Arcturus. To the left of 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! Just a little more to the left 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 2)

Turn to the opposite part of the sky 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, down and to the right of the Little Dipper is Queen Cassiopeia, the W-shaped constellation. (Illustration 3)

Trek to the right and you will be facing east. When looking up, 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. 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 a 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! (Illustration 4)

There was so much to see tonight! Maybe you were lucky enough to see a shooting star!

Speaking of shooting stars, next month, the Perseids!!

Starry Trails - July Highlights

July 1– Full Moon. According to folklore it is the Full Thunder Moon.

July 8 – Last Quarter Moon.

July 15 – New Moon.

July 18 – **Spectacular view of the Crescent Moon lower left of Crescent Venus!**

July 20 - Happy Moon Day! - 46 years ago, Apollo 11 Commander Neil Armstrong and Lunar Module Pilot Buzz Aldrin became the first humans to set foot on the Moon.

July 24 – First Quarter Moon.

July 26 – The Moon passes north of Saturn.

July 30 – Southern Delta Aquarid meteor shower peaks.

July 31 – The Blue Moon. When a second Full Moon occurs in a calendar month it is sometimes called a “Blue Moon.” The next Blue Moon is January 2018.

Brightest Stars:

West – Regulus. **Southwest** – Spica. **South** – Antares. **Overhead** – Arcturus. **East** – Vega, Deneb, Altair.

Binocular Highlights:

The Moon, Coat Hanger Asterism or Brocchi’s Cluster, Hercules Globular Star Cluster M13, Milky Way Deep Sky Objects to the left of Antares in Scorpio.

Telescope Highlights:

The Moon, Saturn, Jupiter, Venus, Albireo, M4, M5, M6, M7, M51, M39, M92 M44, M13, M57, M3, M81, M82, M10, M11, M12, M27, M16, M17, M20, M21, M22, M25 and M23.

Starry Trails is a fun & easy way to explore the night sky as it appears from your very own backyard!

Journey over to ***StarryTrails.com*** & get everything you need to navigate the night sky!

Starry Trails is a free publication & your able to make copies to pass along to your friends & family so they can learn and enjoy the night sky with you!

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