



STARRY TRAILS

JULY 2016

Whether you are viewing with your eyes, a pair of binoculars or a telescope, we are in for an out-of-this-world month of stargazing! Jupiter, Mars and Saturn continue to delight us in the evening sky and will be joined by Venus and Mercury towards the end of July! July 27th will be the night to check out all five visible planets!! (Illustrations 1 & 2) Also, with the opening of Milky Way season, this happens to be the best time of year to lay out on a warm summer night, with binoculars, and leisurely scan through the night sky! The summer Milky Way offers great views of many celestial delights! We have so much to see tonight, are you ready?! Once again our hike will begin around 10:00pm. Don't forget your Starry Trail Map, bug spray, light jacket and lawn chair or blanket.

We will begin our hike by facing west or the fading colors of the sunset. Once again, Jupiter will be the brilliant object that will catch your eye! The bright star, down and to the right of Jupiter is Regulus, part of the constellation Leo, the Lion. Farewell to Leo until late winter. Now turn left or south, there is so much to see! The bright red- orange object is the planet, Mars. To the left of Mars, you will see a golden colored object, which is the planet Saturn. Saturn is truly spectacular to view through a telescope. Journey down slightly and to the right to another bright red-orange star which is Antares, the heart of Scorpius (Illustration 3). To the left of Scorpius is the constellation, Sagittarius, which looks more like a teapot. Between Scorpius and Sagittarius is the best part of the sky to scan with your binoculars and telescope! It is rich with deep sky wonders!

Head back to Mars. 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 4)!

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 5).

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!

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 6)!

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!!

Highlights

July 4 – New Moon

July 8 & 9 – The Moon passes by Jupiter.

July 11 – First Quarter Moon.

July 14 – The Moon passes north of Mars.

July 15 – The Moon passes north of Saturn.

July 16 – Venus and Mercury, low in the west, northwest sky ½ degree apart!

July 19 - Full Moon. According to folklore it is the Full Thunder Moon or Hay Moon.

July 20 - Happy Moon Day. 47 years ago, Apollo 11 Commander Neil Armstrong and Lunar Module Pilot Buzz Aldrin became the first humans to set foot on the Moon.

July 26 – Last Quarter Moon.

July 29 – Southern Delta Aquarid meteor shower peaks.

July 29 – The Crescent Moon passes in front of the star Aldebaran in the early morning sky one hour before sunrise.

Brightest Stars: West – Regulus Southwest – Spica South – Antares **Overhead** – Arcturus **East** – Vega, Deneb, Altair

Binocular Highlights The Moon, Jupiter, Hercules Globular Star Cluster M13, Milky Way Deep Sky Objects to the left of Antares in Scorpio.

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

[Starry Trails](#) is a fun & easy way to explore the night sky as it appears from your 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!

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Written by Suzie Dills – Remember to [download your Illustrations & Star Map!](#)