



STARRY TRAILS

OCTOBER 2015

Let's take advantage of our later sunrises at this time of year to head out in the predawn hours (one hour before sunrise) and check out several days full of sights of striking beauty! Not only will we see brilliant Venus and Jupiter and red Mars, but we will have appearances by Mercury and the Crescent Moon!! Of course our magnificent Orion, the Hunter and Sirius the Dog Star will join the show! See our highlight section for all the important viewing dates.

For our evening hike, step and take a deep breath. Do you smell the scent of autumn in the air? The nights are getting chillier and the sun sets much earlier. But on the warmer fall evenings, we may still hear the last of the crickets! It's time to head out and explore the autumn constellations. Grab your Starry Trail map, jacket, binoculars and for those cold nights, your gloves.

Our hike begins around 7:45. Let's face west or the beautiful colors of the sunset. Scan slightly to the left, or southwest. Do you see the bright red-orange star, Antares, which is the heart of the constellation Scorpius. Beautiful Saturn is to the right of Antares and will exit our skies towards month's end.

Now venture slightly towards the right to the familiar keystone shape of Hercules, which will be sinking lower in the west each night. (Illustration 1). Journey overhead to a bright blue-white star, which is Vega. Trek up just a bit more to another bright star, Deneb. Head to the left and down slightly to the next bright star, Altair. When you connect these three stars you have made the Summer Triangle. Great! Running through the Summer Triangle is the Milky Way, our Galaxy! Take your binoculars and scan through that part of the sky. Look at 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 right and up of Altair. Do you see the group of stars that resembles a coat hanger? Cool!

Hike back to Deneb. Imagine this to be the tail of Cygnus, the Swan. To the left will be three stars in a line. Those make up the 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 to the left of Vega. This star is Albireo, which is a beautiful double star through the telescope. Just above the Summer Triangle you will see a group of stars that look like a kite. This is the constellation, Delphinus, the Dolphin (Illustration 2)

Turn to the right or direction north. The Big Dipper is very low on the horizon. Take the two stars at the end of the cup of the Big Dipper and draw an imaginary line to the next bright star. You have reached the North Star! The North Star is at the end of the handle of the Little Dipper. Venture to the right and upward. Do you see the W shape in the stars? You have found Cassiopeia (Illustration 3). Grab your binoculars again. 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, a bit, and down slightly. You will come upon the Double Cluster in Perseus. If you continue to hike down to the horizon, you will see a bright red-orange star, Capella.

Turn once more to the right. You will now be facing east. Look straight ahead and up. You will see four stars that form a large square. This is the Great Square of Pegasus (Illustration 4). As we head further into October, you will begin to see a small cluster of stars, the Pleiades, or the Seven Sisters. This has to be one of my favorite clusters of stars to view through my binoculars. Give it a try. Wow!

Our final listen to the crickets, until next summer..... Next month, late autumn constellations and the Leonid Meteor Shower!

Predawn Highlights – Facing East

October 8 – The Crescent Moon is to the right of Venus.

October 9 – The Crescent Moon is to the right of Mars and in the middle of Venus & Jupiter.

October 10 – The Crescent Moon is below the lineup of Venus, Mars & Jupiter.

October 17 – Mars & Jupiter at their closest!

October 22-29 – Venus, Jupiter & Mars fit in a 5 degree binocular field!!

October 25 & 26 – Venus & Jupiter form their second closet pairing in 2015! They will fit in a low power telescope field of view!

From the second week of October until early November, Mercury is well to the lower left of the Venus, Jupiter & Mars show.

Night Sky Highlights

October 4 – Last Quarter Moon

October 12 – New Moon.

October 15 – First Quarter Moon

October 15-17 – Crescent Moon close by Saturn & Antares.

October 21 – Peak of the Orionid Meteor Shower

October 27 – Full Moon. According to folklore it is the Full Hunter's Moon

November 1 – Daylight Savings Time ends. We will need to adjust our hike start time to 7pm.

Brightest Stars – Overhead: Vega, Deneb, Altair. **West** – Arcturus. **North East** – Capella. **South** – Fomalhaut.

Binocular Highlights The Moon, Hercules Globular Star Cluster M13, Milky Way from southwest to northeast starting at Sagittarius, the Pleiades, Double Cluster (NGC 869 & 884), and Andromeda Galaxy M31.

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

[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!

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