



STARRY TRAILS

OCTOBER 2016

As we enjoy another great planet watching month, don't forget to take in the wonderful smells of autumn and the sounds of crickets on those last warm evenings of the year! You will want to head out 30 minutes after sunset. Face west or the beautiful sunset colors. The dazzling object you will see is the planet Venus! Now turn to the left and bright, red, orange Mars will catch your eyes. Saturn is the golden colored object to the right of Mars. As we head thru October you will notice Saturn & Venus getting closer together. By the end of October, Venus and Saturn will be 3 degrees apart! (Illustrations 1 & 2).

Our hike begins around 7:45. Grab your Starry Trail map, jacket, binoculars and for those cold nights, your gloves. Let's continue to face south, where we have located Mars and Saturn. Just below Saturn is the bright red-orange star, Antares, which is the heart of the constellation Scorpius.

Now venture slightly towards the right to the familiar keystone shape of Hercules, which will be sinking lower in the west each night. (Illustration 3). 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 4).

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 5).

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 6). 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!

Night Sky Highlights

October 3 – The Crescent Moon passes north of Venus.

October 4 – The Crescent Moon will pass between Venus & Saturn & Antares.

October 6 – The Moon passes north of Saturn.

October 8 – The Moon passes north of Mars.

October 9 – First Quarter Moon.

October 16 – Full Moon. According to folklore it is the Full Hunter's Moon.

October 21 – Peak of the Orionid Meteor Shower.

October 22 – Last Quarter Moon

October 26 – Venus north of Antares.

October 23-31 – Venus & Saturn together in the southwest after sunset.

October 30 – Saturn & Venus only 3 degrees apart in the southwest after sunset.

October 30 – New Moon.

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, Saturn, Mars, 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!

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

Illustrations courtesy of www.CassandraDills.com

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