



# *STARRY TRAILS*

*AUGUST 2017*

**Are you ready for the grand event: The Solar Eclipse on August 21<sup>st</sup> from 1:00 pm – 4:00 pm!!** We are not in the path of totality, but we will experience about 85% shadowing of the Sun (occurs around 2:20 pm)! **THE TOP PRIORITY IS HAVING A PLAN FOR SAFELY VIEWING THE ECLIPSE. NEVER LOOK AT THE SUN WITH YOUR EYES, BINOCULARS OR A TELESCOPE (Unless you have proper filters)!!** If you are planning to view the eclipse from our area, visit <https://eclipse2017.nasa.gov/> for safe solar viewing techniques. Join me at Bleser Park in Avon Lake from 1-4PM!

August has always been my favorite stargazing month! This August will certainly be a blockbuster month for stargazing too! Here is what is in store for us: two fantastic planets after sunset, the Perseid Meteor Shower and the Summer Milky Way!! Not to mention the spectacular sounds of summer!! Take a minute to listen! About 30 minutes after sunset face west and turn slowly to the left. Brilliant Jupiter will catch your eye. Spica is the star to the left of Jupiter (Illustration 1). Trek a little more to the left to a red, orange star, Antares, and then up and to the left to the golden colored object, Saturn (Illustration 2).

Now, let's head out for our hike. Grab your Starry Trail map, bug spray, binoculars, light jacket and lawn chair or blanket. Our hike begins around 9:30pm in the southwest sky or slightly left of the beautiful sunset colors. Once again, Jupiter is the bright object joined by Spica to the left. Spica is a part of the constellation Virgo. A little further to the left, you will see golden colored Saturn. Saturn is an incredible sight through a telescope! Trek down and right from Saturn to a red-orange star, Antares, the heart of Scorpio. To the left of Antares is the constellation, Sagittarius, which looks more like a teapot (Illustration 3). 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! Grab your binoculars and take a look!

Head back to Antares. Continue to hike upwards, and slightly right, 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! Right overhead, or left of Corona, will be a keystone shape in the stars. This is the body of Hercules, the bravest and strongest hero (Illustration 4)! Binocular time! Take your binoculars and scan around the part of Hercules facing Corona. Do you see a small fuzzy object? This is the finest Globular Star Cluster (M13) in the northern skies!

Turn to the opposite part off 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 again 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. 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 (Illustration 6).

Now just relax and look up. August is the best month to see a shooting star. Anytime around the 12<sup>th</sup> you may be lucky enough to see a few shooting stars. The Perseid Meteor Shower will peak the night of August 12<sup>th</sup>. That is the best night to watch. The waning Gibbous Moon will rise around 11:00pm this year, so the moonlight that will fade away the fainter meteors! Give it a try and make a wish!

**Wow! What an unbelievable month of stargazing!! - Next month... signs of Autumn.**

### **Highlights:**

**Venus continues to blaze in the eastern sky before sunrise.**

**Aug 3** – The Moon passes north of Saturn.

**Aug 7** – Full Moon. According to folklore it is the Full Corn Moon or the Full Grain Moon.

**Aug 12** – **Peak of the Perseid Meteor Shower! There will be moonlight fading some shooting stars after 11:00pm.**

**Aug 14** – Last Quarter Moon.

**Aug 19** – The Crescent Moon and Venus in the eastern sky before sunrise.

**Aug 21** – New Moon.

**Aug 21** – **The Great American Eclipse from 1:06pm-3:51pm. Maximum shadowing at 2:31pm.**

**Aug 25** – The Moon passes north of Jupiter.

**Aug 29** – First Quarter Moon.

**Aug 30** – The Moon passes north of Saturn.

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

**Binocular Highlights:** The Moon, Hercules Globular Star Cluster M13, Milky Way Deep Sky Objects to the left of Antares in Scorpio thru the Summer Triangle, the Coat Hanger.

**Telescope Highlights:** The Moon, Jupiter, Saturn, Albireo, M3, M4, M5, M6, M7, M8, M51, M39, M92, M13, M57, M81, M82, M10, M11, M12, M27, M15, M16, M17, M20, M21, M22, M23 and M25.

**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! **You can Follow [Starry Trails on Facebook](#) for weekly discussions & special sky events!**

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

Illustrations courtesy of [www.CassandraDills.com](http://www.CassandraDills.com)

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