



STARRY TRAILS

FEBRUARY 2017

As the sun sets on a clear mid-winter evening, a dazzling gem will blaze in the southwestern sky, the planet Venus! Venus' greatest brilliancy will occur on February 17th! You will have plenty of time to see this gem because it does not set until 4 hours after sunset. Mars continues to pair with Venus, but you will find it to be much dimmer. The pair start the month close but continue to drift apart as the month wears on. (Illustrations 1 & 2). The Moon will join in the show at the start of February and at the end. And of course, Orion, the Hunter will be magnificent!

Now, let's grab our winter coats, hat, gloves, warm socks and boots and enjoy our hike. As we head out around 7:30, make sure to have on hand your Starry Trail Map and binoculars. Orion is only one of the phenomenal celestial treats that we will see on our hike. If you are having trouble finding Orion, start by facing west or where the sun set. Turn left, or south. You will see three stars in a row, which make up the belt of Orion. The bright red-orange star up and to the left of the belt is Betelgeuse. The bright blue-white star down and to the right of the belt is Rigel. Now with your binoculars scan just below the belt. You will notice a small fuzzy area. That is the Orion Nebula (M42). New stars are forming in that hydrogen gas cloud! We call this a stellar nursery! Now let's find Orion's best friend. Journey back to the belt of Orion. Draw a line down and to the left, to the brightest star in that part of the sky. You have reached Sirius, the Dog Star. Sirius is the number one brightest star in the night sky. Sirius always follows Orion through the night!

Head back to Orion's Belt. Hike up and to the right and you will see a bright red-orange star. This is Aldebaran, the eye of Taurus, the Bull. Continue to the right and you will notice a small cluster of stars. These stars are the Pleiades or the Seven Sisters (Illustration 3). The Pleiades has to be my favorite group of stars to gaze at through my binoculars. Take a look! What a treasure!! We are going to continue a counter clockwise loop while looking overhead. Next stop, up and to the left, is another bright star, Capella. Swing to the left to the two stars that look almost identical, Gemini, the Twins.

Hike to the opposite part of the sky, or north. You will notice the Big Dipper up on its handle. By the way, look at the second star in the handle, with binoculars. It is a double star! Head to the cup of the Big Dipper. 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.

Trek to the left and you will see a group of stars that are in the shape of a "W". This is the constellation Cassiopeia (Illustration 4). Grab your binoculars again. From the top point of the W shape, scan slowly up and to the left. You will come upon the Double Cluster in Perseus. Find the bottom point of the W. Scan once again to the left. Do you see a fuzzy circular shape? That is the Andromeda Galaxy (M31). It is 2.5 million light years away!

Finally, we will skip over to the cup of the Big Dipper. Locate the flat part of the cup. Look slowly to the right for the shape of a backwards question mark. This is the head of Leo, the Lion (Illustration 5), a sure sign of spring! How about a challenge? Take your binoculars and scan between Leo and Gemini. Do you see the beautiful Beehive Star Cluster (M44)?

Wow what a fabulous night of stargazing! So, remember... with a little practice, you can see so many awesome sights!! Head in to warm up and enjoy some hot chocolate!

Highlights

February 1-2 – The Crescent Moon, Venus & Mars put on a show in the west, southwest sky after sunset.

February 3 – First Quarter Moon.

February 10 – Full Moon. According to folklore it is the Full Snow Moon or Hunger Moon.

February 17 – **Venus reaches greatest brilliancy!**

February 18 – Last Quarter Moon.

February 26 – New Moon.

February 26 – Mars & Uranus have a close pairing after sunset in the west.

February 28 – The Crescent Moon & Venus put on a spectacular show after sunset.

Brightest Stars: South – Sirius, Betelgeuse, Rigel, Aldebaran, Procyon Overhead – Capella, Castor, Pollux East – Regulus.

Binocular Highlights The Moon, Andromeda Galaxy M31, Double Cluster near Perseus, Pleiades, Orion Nebula M42, Beehive Cluster M44, Deep sky objects around Capella (M36,37,38) thru the Milky Way to Cassiopeia.

Telescope Highlights The Moon, Venus, Mars, Uranus, M1, M31, M41, M42, M44, M51, M81, M82, M35,36,37,38 (near Capella), NGC869 & 864.

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

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