

# THE SKY THIS MONTH

DECEMBER 2009

## A “BLUE MOON” THIS MONTH

You might have heard the phrase “once in a blue moon” when referring to an event that happens rarely. This month features such an event!

A “Blue Moon” occurs when two full moons are viewed in a single month. This month, the full moon will be visible on the night of the 1st and on the evening of the 31<sup>st</sup>.

Successive full moons occur every 29.5 days. If there is a full moon at the very beginning of a month with over 29 days, there will also be one at the very end of the same month, thus a Blue Moon. Sorry, February!

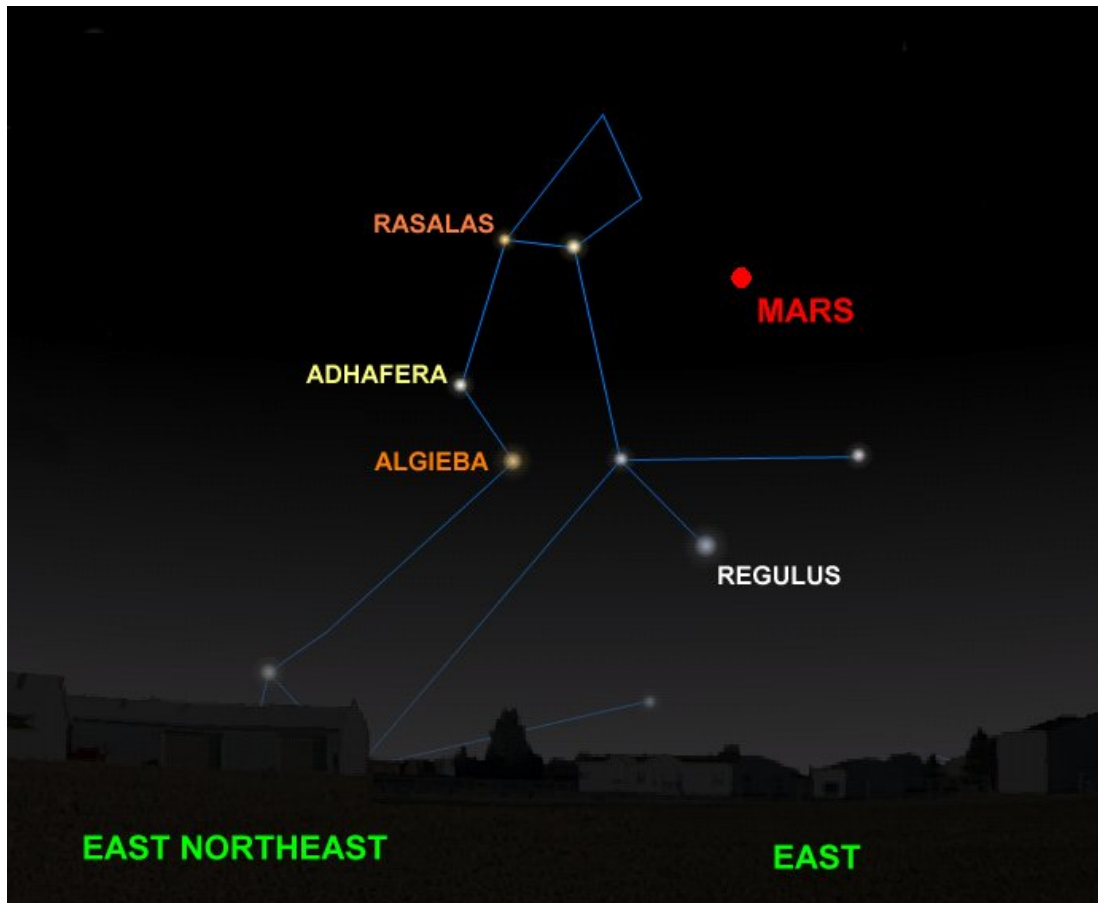
The first full moon of this month will actually occur at 2:30 a.m. EST on the 2<sup>nd</sup> and the second at 2:13 p.m. EST on the 31<sup>st</sup>. If you add up the amount of time between the two, you will get 29 days, 11 hours and 43 minutes; just 17 minutes shy of 29.5 days.

## MARS APPEARS IN OUR WINTER SKY

Although there have been numerous spacecraft orbiting and exploring its surface, Mars remains a planet of mystery and intrigue. From “War of the Worlds” to the “Face” to the present-day “Mars Hoax”, the planet has been a never-ending source of information and/or entertainment, depending on who you believe.

This month, you have a chance to actually see the planet that started it all! Mars will be rising in your east-northeastern sky every night this month. No, it will not appear as large as the full Moon (it never does when viewed from Earth), but will appear to be a bright red “star”.

Throughout the month, Mars rises with the constellation Leo (the Lion). On the 1<sup>st</sup>, it rises at 10 p.m. By the 31<sup>st</sup>, Mars will rise much earlier at 8 p.m.



**Figure 1:** Planet Mars in Leo as it will appear at 11 p.m. December 15, 2009. Image courtesy of The Sky 6 by Software Bisque.

## JUPITER HANGS ON FOR ANOTHER MONTH

The King of the Planets has been enjoying a long run of dominance over the evening skies since June, but will be facing its swansong over this month and January. By the end of January, Jupiter will set quickly after the Sun does. As if by instinct, Venus will take its place as the new wonder of the evening sky in March 2010.

This month, Jupiter can be spotted easily in your southern sky shortly after sunset. It will be a bright white “star” about 30 degrees above your southern horizon.

## **2010: A NIGHT SKY CONSERVATION ODYSSEY**

The Night Sky Conservation Program (NSC) has been enjoying its first successful year during the International Year of Astronomy, gaining more attendees during its star parties and more students during its astronomy courses. Many heart-felt thanks to everyone who attended NSC events throughout the IYA.

Today, the NSC is seeking grant opportunities in order to keep such a promising program running in 2010 and beyond.

The best method of gaining funds for the 2010 NSC year is to attract more students for the Spring and Autumn Astronomy Courses. The ideal scenario would be to have at least 100 students per course to raise 100% of the money required to cover all the expenses for 2010. However, we cannot solely rely on such a scenario. This is why we require grants and/or donations from those who wish to see this program continuing into 2010.

From my experience as coordinator of the NSC, we would ideally have a total of 25 students per course in 2010. At \$75 per student per course, this would generate \$3,750 towards the 2010 year. The NSC requires a minimum total of \$15,000 to continue in 2010. Assuming that the courses do generate the aforementioned revenue, the NSC would still require a minimum of \$11,250 to continue.

Ideally, the NSC would require a total of \$25,000 for 2010 to cover any overhead, such as additional advertising and administration that will most likely be necessary to attract more star party attendees and astronomy course students.

If you are interested in assisting the NSC to carry on into 2010, or are interested in enrolling in the Spring 2010 Astronomy Course, please contact the NSC at the e-mail address below.

About Night Sky Conservation: **[www.castor2.ca/nsc](http://www.castor2.ca/nsc)**

Contact Night Sky Conservation: **[nsc@castor2.ca](mailto:nsc@castor2.ca)**