THE SKY THIS MONTH

JUNE 2009

VENUS AND JUPITER RULE THE MORNING SKIES

JUNE 6: THE FULL MOON'S CLOSE ENCOUNTER WITH A BRIGHT STAR

JUNE 19: VENUS, MARS AND A CRESCENT MOON GET CLOSE

JUNE 21: SUMMER SOLSTICE

For the past several months, Venus and Jupiter have been hogging the early morning skies. This June is no exception with Venus blazing in the low eastern sky and Jupiter blazing (not as brightly as Venus) in the southern sky.

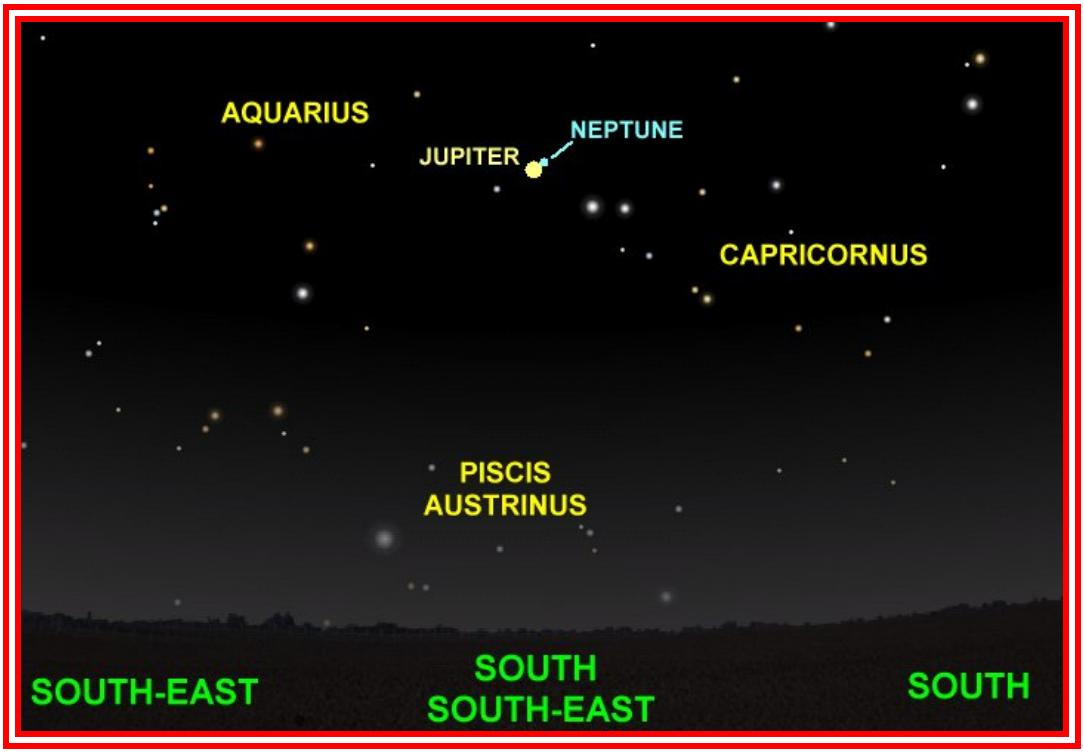

Figure 1: Jupiter dominates the early morning June skies. Neptune is much dimmer and can still be seen very close to Jupiter, but through binoculars only. This figure depicts Jupiter and Neptune at 4 a.m. June 18, 2009.

On June 6th, the full Moon will briefly replace Antares as the “Heart of the Scorpion. On this night, Antares, the brightest star in Scorpius, will have an apparent close encounter with the full Moon. From Almonte, the Moon and Antares will appear closest at 11:08 p.m. when the Moon’s northern limb will appear only 15 arc-seconds (1/240th of a degree) from Antares (see Figure 2).

Since the Moon will be nearly full (99.5%), you most likely will not be able to spot Antares with the naked eye at that time. Binoculars are recommended to see this spectacle.

If you were to travel further south, to New York State for example, you would be able to see the northern limb of the nearly full Moon occult (cover) Antares for about half an hour. Sadly, most of Canada is too far north to see an occulted Antares. However, it is easy to travel to the U.S. to see an occultation of one of the brightest stars in the sky!

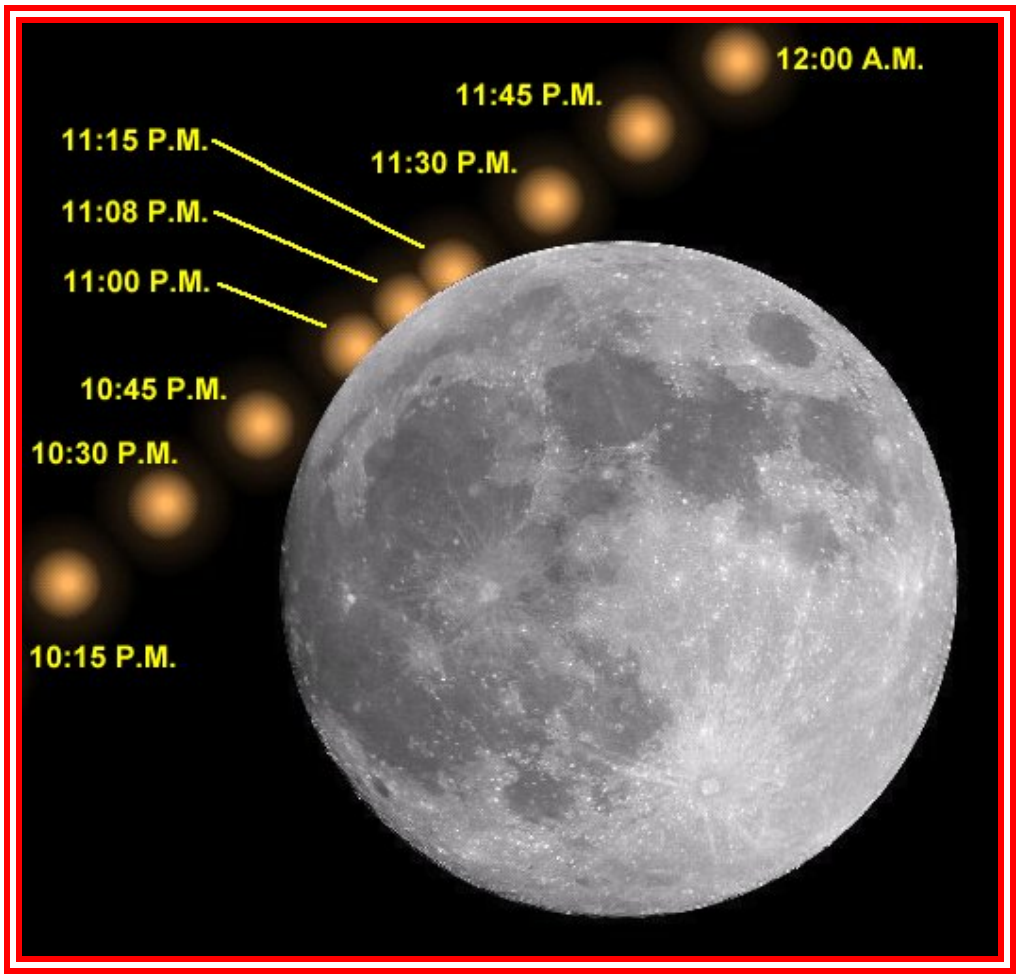

Figure 2: The nearly full Moon and Antares from 10:15 p.m. to 12:00 a.m. on June 6-7, 2009 as viewed from Almonte, Ontario.

Before dawn on June 19th, Venus and Mars will make an interesting pair when they will be only 2 degrees apart (see Figure 3). Venus will be easy to spot as a blazing bright object in the low eastern sky. Mars will look like an average "star" to the northeast of Venus. A 16% last crescent Moon joins in the fun 6½ degrees north of the pair making a lovely photographic opportunity.

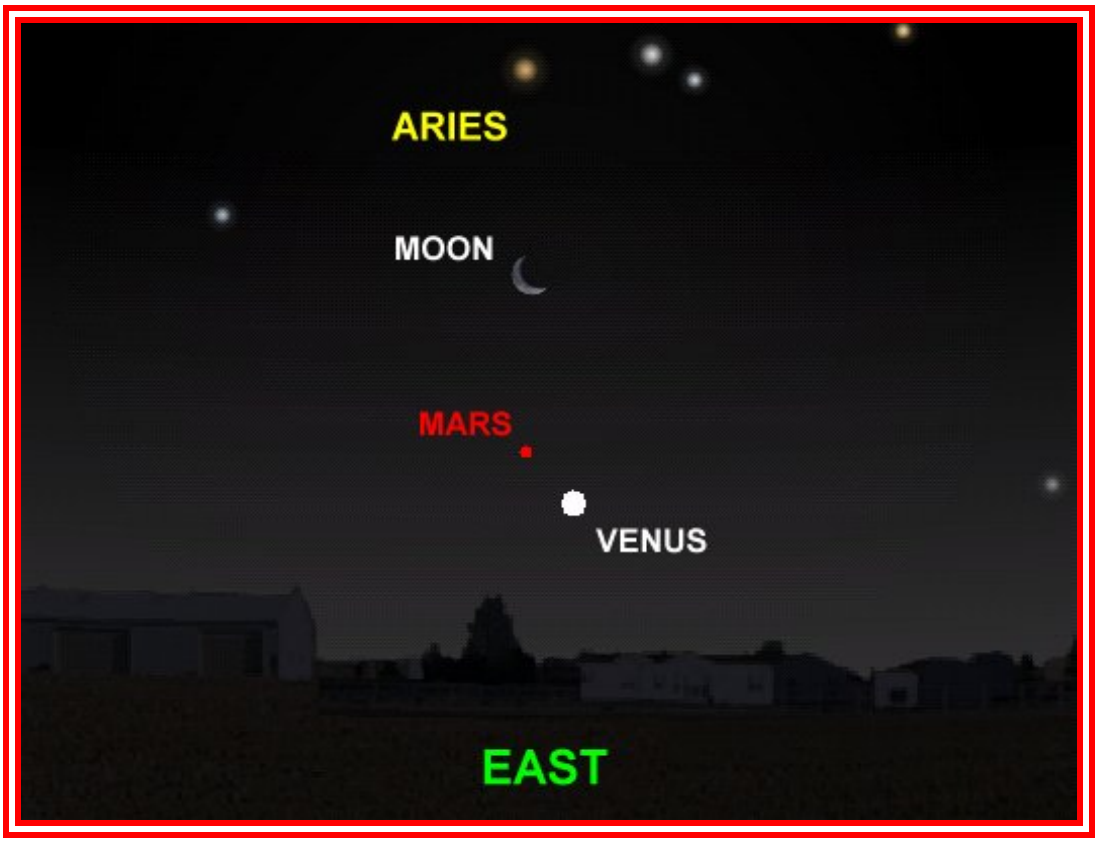

Figure 3: Venus, Mars and the last crescent Moon in the eastern sky at 4 a.m. June 19, 2009.

Our "First day of Summer" (Summer Solstice) occurs at 1:46 a.m. on June 21st. At 1:07 p.m. the next day, the Sun will reach its highest point in the sky for the entire year; 68.2 degrees above the southern horizon. Consequently, the amount of time to observe the night skies is the smallest during June. Contrast this with the Winter Solstice, which sees the Sun at only 21.3 degrees above the southern horizon at highest.

In order to see the Sun at local zenith on this date, you must be located on the latitude line called the "Tropic of Cancer" (about 23.5 degrees north). To see the Sun for 24 hours straight on this date, you must be located on or north of the latitude line called the "Arctic Circle" (about 66.5 degrees north).

Meanwhile, Saturn continues to be the brightest planet of the evening sky. It will be in the constellation Leo for the entire month (See Figure 4). However, Jupiter is quickly catching up and will replace Saturn as king of the evening skies by late summer.

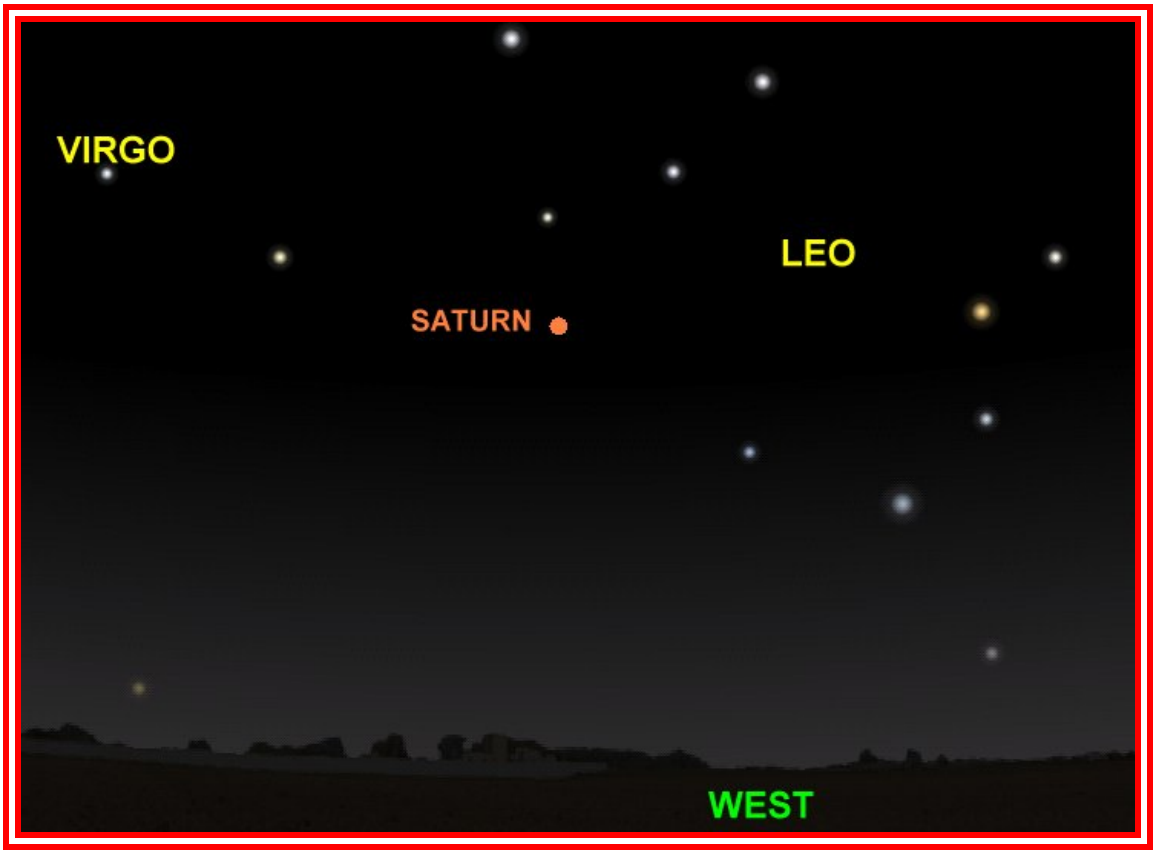

Figure 4: Saturn appears in the constellation Leo in the early evenings for the entire month of June.

SUMMER ASTRONOMY EVENTS AT THE MILL OF KINTAIL

The first Night Sky Conservation Sky Tour will begin at 8 p.m. Friday, August 21, 2009 (weather permitting) at the Mill of Kintail gatehouse. This event is free to the public and is open to all who are interested.

The second Night Sky Conservation Sky Tour will begin at 7 p.m. Friday, September 18, 2009 (weather permitting) at the Mill of Kintail gatehouse. This event is free to the public and is open to all who are interested.

For more information about the NSC Sky Tours, please visit www.castor2.ca/nsc/04_Tours.

THE SKY NEXT MONTH – JULY 2009

THE EARTH'S APHELION
THE MOON'S APOGEE
THE SMALLEST FULL MOON OF 2009

E-Mail: **skythismonth@castor2.ca**

Night Sky Conservation: **www.castor2.ca/nsc**