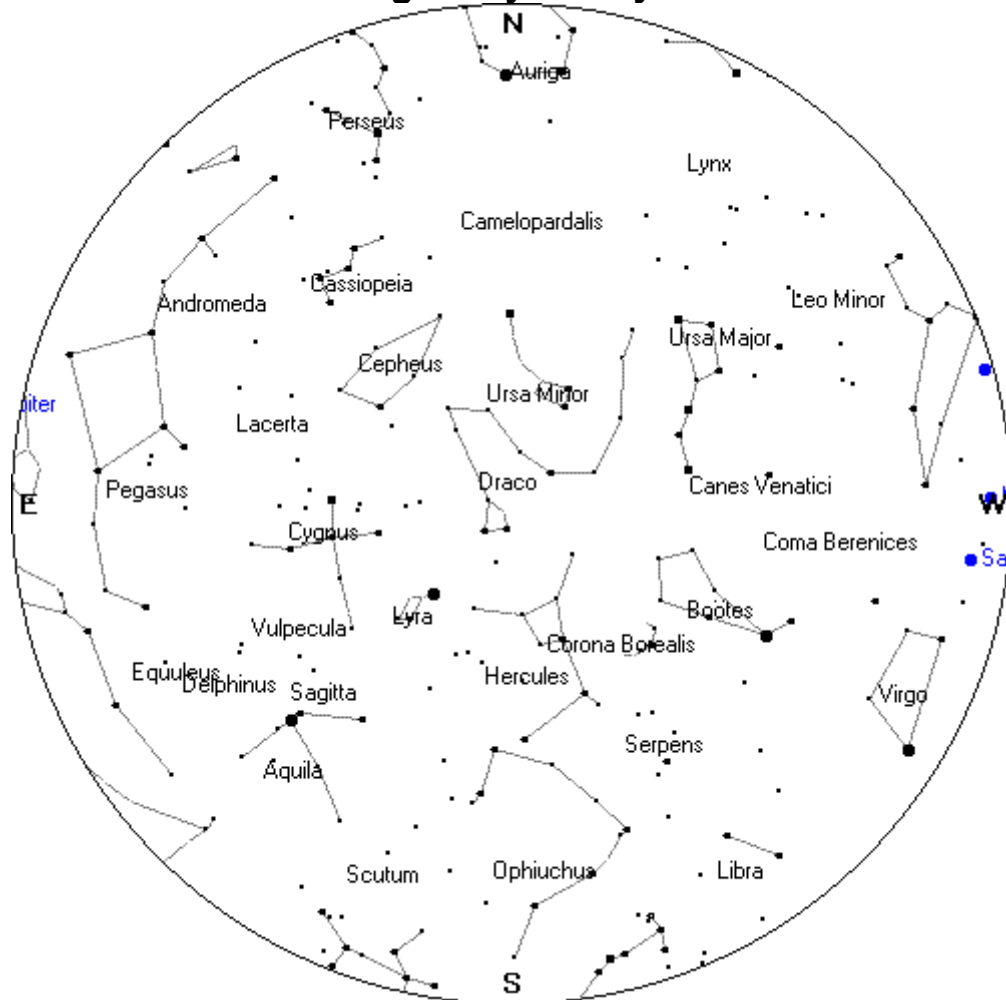


Dundee Astronomical Society The Night Sky in July 2010



The Sky at 10pm on 15th July 2010

[chart courtesy of www.heavens-above.com]

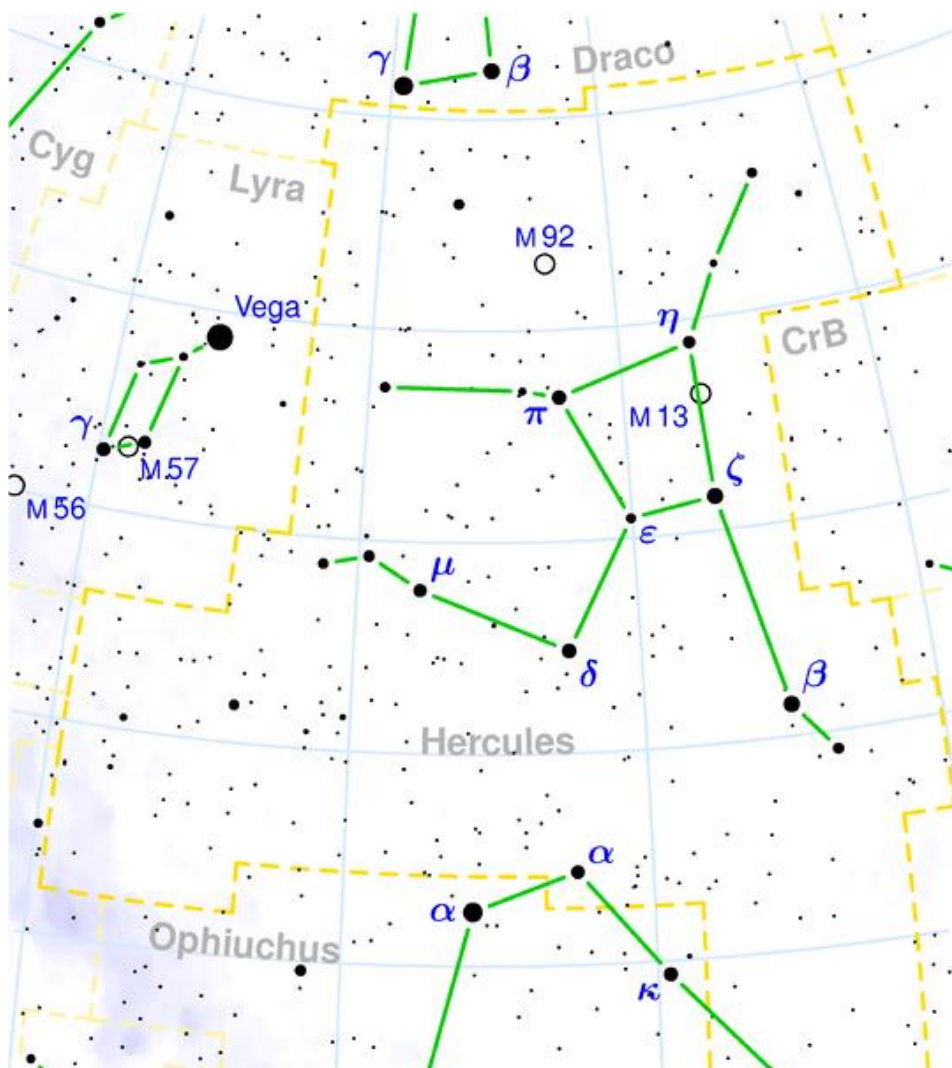
The night sky becomes a bit darker through the month of July and it will again be possible to make out some of the constellations. Hercules, the Roman name for the Greek demigod, Heracles, is high in the southern sky by late evening. Although not a particularly bright constellation, it represents one of the greatest heroes of mythology, the son of Zeus and Alcmene. As is often the case in mythology, his story is complex and convoluted and probably best known for the twelve seemingly impossible tasks set for him.

Eleven of the stars of Hercules are known to have orbiting planets, the latest being discovered this year. One of the more spectacular objects in Hercules is the globular star cluster called M13. This is the brightest globular cluster in the northern hemisphere and contains about 300,000 stars. It was discovered by Edmond Halley in 1714 and is now known to be at a distance of 25,100 light years from Earth.

Don't forget the second globular cluster of Hercules, M92. It is quite bright at mag.6.3 and is at a similar distance to the more spectacular M13.

Within Hercules but towards the bright star, Vega, is the point in space which the Sun is moving towards in its 225 million year orbit of the Milky Way galaxy.

Just east of Hercules, Vega, in the constellation Lyra is the second brightest star in the northern hemisphere. It is bright because it is 37 times more luminous than our Sun but also is only 25 light years away. Vega is only about one tenth the age of the Sun and is expected to shine for a mere billion years! Have a look at this bright star very high in the sky and consider that, about 12,000 years ago, it was the Earth's north pole star. It will again be the pole star when it is closest to the celestial pole in the year 13,727. While you are in the area, turn your telescope on M57 – how often have you seen this favourite? It's always worth having another look at this really satisfying planetary nebula. At 2,300 light years it seems surprisingly bright although it is only mag.8.8.



There are several rather poor meteor showers in July. The Delta Aquarids reach a maximum on 28th July with a max ZHR of perhaps 15 - but the Moon will be full on the 26th! The Alpha Capricornids have a maximum of about 5 on the 30th July the Perseids officially start on the 23rd July – but don't expect much activity until August.

Mercury is not well placed for observation in the northern hemisphere this month.

Venus remains bright but very low in the west after sunset and may be seen during the first half of July.

Mars is also low in the west in early July but will be very difficult to see in the summer twilight.

Jupiter rises at about 10pm by late month but can be seen throughout the month during the early hours. It will be better placed for observation after September.

Saturn follows Mars very low in the west after sunset and will also be a difficult object to locate and observe during July.

Uranus can be seen in Pisces in the early morning sky about 3 degrees from Jupiter.

Neptune is in Aquarius with a declination of -12 degrees. It will rise at about 10.30pm mid month and will reach opposition in August.

The Moon is at last quarter on the 4th, new on the 11th, at first quarter on the 18th and full on the 26th.

Ken Kennedy
Director of Observations