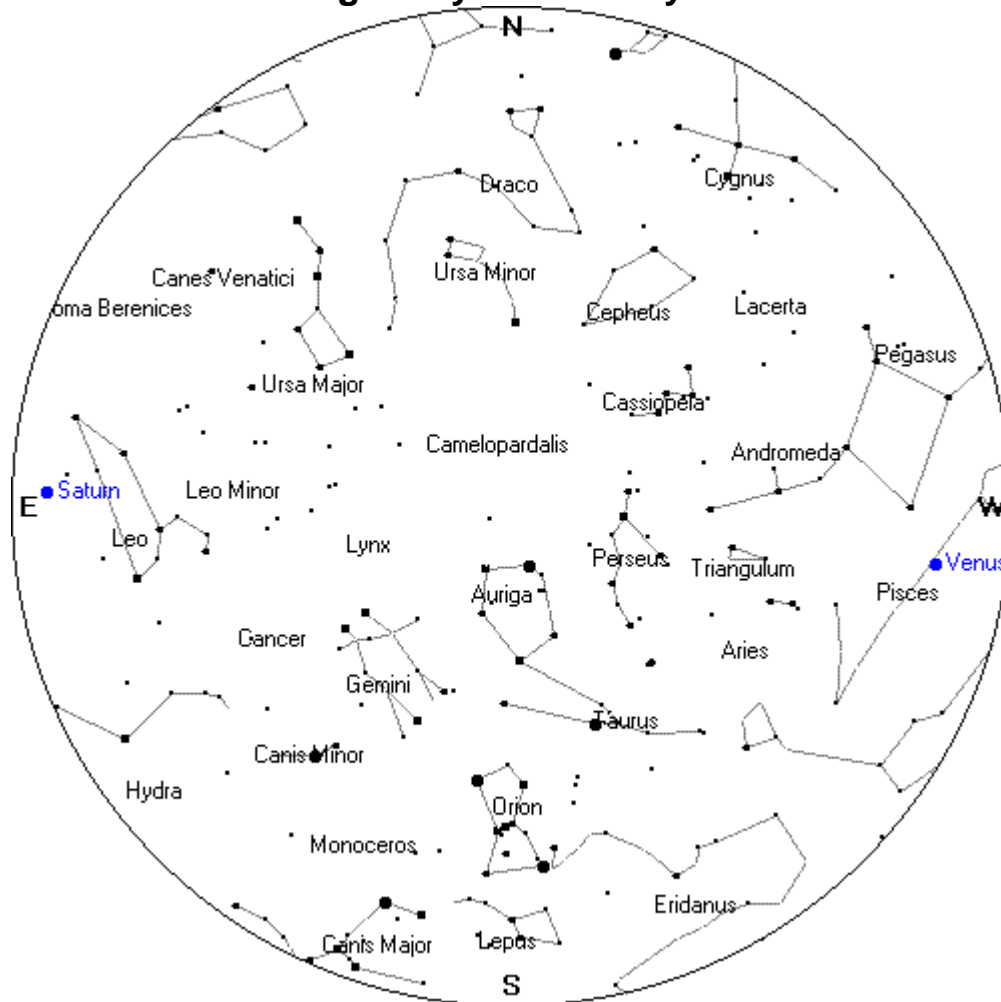


Dundee Astronomical Society The Night Sky in February 2009



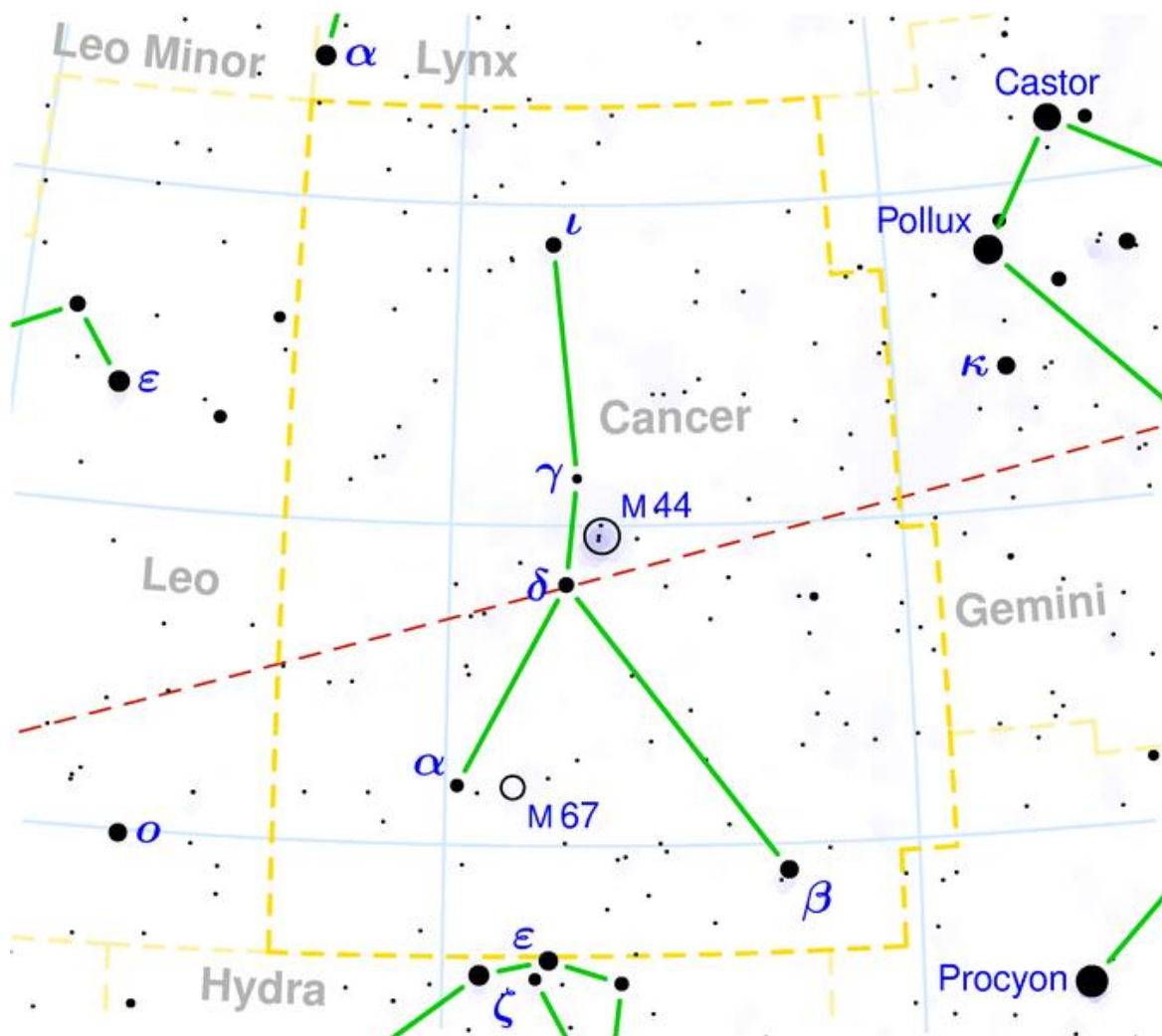
The Sky at 8pm on 15th February 2009

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

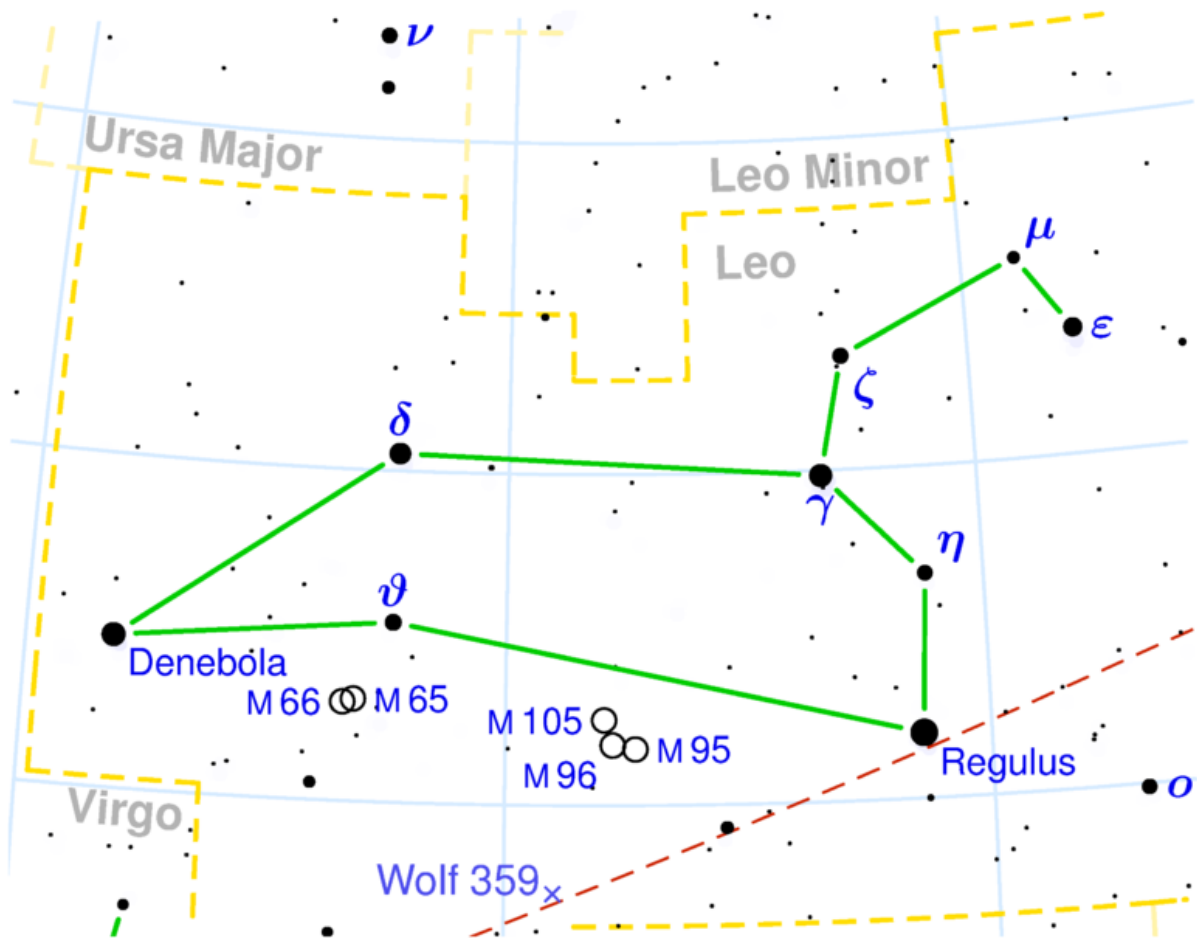
Cancer and Leo follow Gemini upwards in the sky in February and are well placed in the south by midnight. Cancer is quite an insignificant zodiacal constellation with stars of only 4th magnitude. I still enjoy the old mythological stories of the constellations and how Cancer the Crab was sent by Hera to nip the feet of Hercules in his battle with the Hydra. Hercules, not in the least put out, simply stamped on the creature so crushing it. Cancer was rewarded with a place in the sky for its efforts but only given faint stars for its lack of success in its mission.

Continuing with our run of open clusters, we have two easily located ones in Cancer, Messier 44 and Messier 67. Messier 44, Praesepe, or Beehive Cluster, has a magnitude of 3.7 and is well seen with binoculars. There are about 350 stars in the cluster which is 577 light years distant and 730 million years old. There is a suggestion that the Hyades cluster and M44 share a similar origin as their proper motions and age are similar.

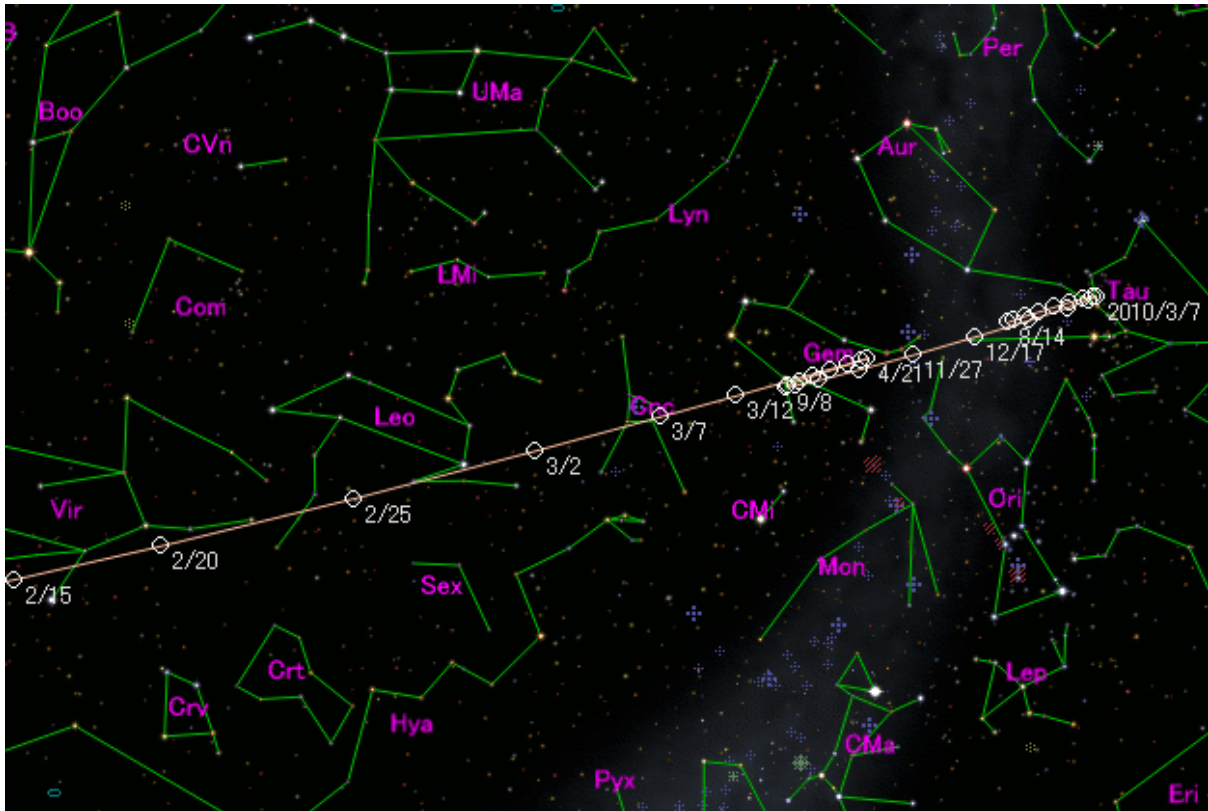
M 67, quite near to α Cancrri is a rather smaller looking cluster which appears more compact in binoculars. It consists of about 500 stars at a distance of 2,700 light years. It is one of the oldest open clusters known with an age of 3.2 billion years.



Following Cancer, Leo is a much better known constellation with brighter stars. Both The brightest stars of Leo, Regulus, magnitude 1.3 and Denebola, magnitude 2.1, are blue-white stars. The southern part of Leo contains many faint galaxies which are difficult with binoculars but, as you scan the area with a moderate sized telescope, will be revealed as faint patches often only glimpsed with averted vision. There are several brighter galaxies which can appear in the same telescopic field. The first of these is the triplet, M65, M66 and NGC 3628. On a dark moonless night these are quite easily seen and the general difference in shape is quite obvious. M65 and M66 are spiral with slightly different angles of presentation. NGC 3628 is an edge on spiral and appears as a faint thin line with a slight brightening towards the centre. All are at a distance of about 35 million light years. Scanning westwards just a bit you will come upon the triplet of M95, M96 and M105. M95 and M96 are spiral galaxies while M105 is an elliptical galaxy. Again, the difference in appearance is quite obvious with M95 being face on to the observer. These three galaxies are at a distance of about 32 million light years.



Look out for Comet Lulin which is closest to earth on February 24th with a distance of 0.4 AU. Comets are notoriously unpredictable but this one **MAY** reach a brightness of 5th – or even 4th magnitude. It will then be below and slightly east of Leo, not that far from Saturn, so use that as a guide.



Path of Comet Lulin

The Planets.

Mercury, in theory, will be low in the morning sky before sunrise for about the first 10 days or so of February but its declination is so low it is unlikely to be seen from our latitude.

Venus is a glorious object in the south-west for several hours after sunset. It will be 41% illuminated at the start of the month and 20% by the end and its diameter will have increased from 30 arc seconds to 45 arc seconds.

Mars and Jupiter are poorly placed throughout February.

Saturn may now be seen quite high in the south in late evening / early morning. Its magnitude is 0.6 and the rings are only slightly tilted at -2° (south).

Several events involving Saturn's satellites may be seen during February if a large enough telescope is available:

7th February, 0135 UT: Tethys shadow transit ending at 0431 UT.

10/11th February: Shadow transit of Tethys ends at 1108 UT (rises in transit).

Shadow transit of Dione ends at 0031 UT.

13/14th February, 1115 UT: Rhea shadow transit ending at 0246 UT.

24th February: Titan, Rhea, Dione, Tethys, Enceladus and Mimas are all grouped at western tip of Saturn's rings.

Uranus and Neptune are not well placed for observation.

The Moon.

The moon is at first quarter on the 2nd, Full on the 9th, last quarter on the 16th and new on the 25th.

Ken Kennedy
Director of Observations