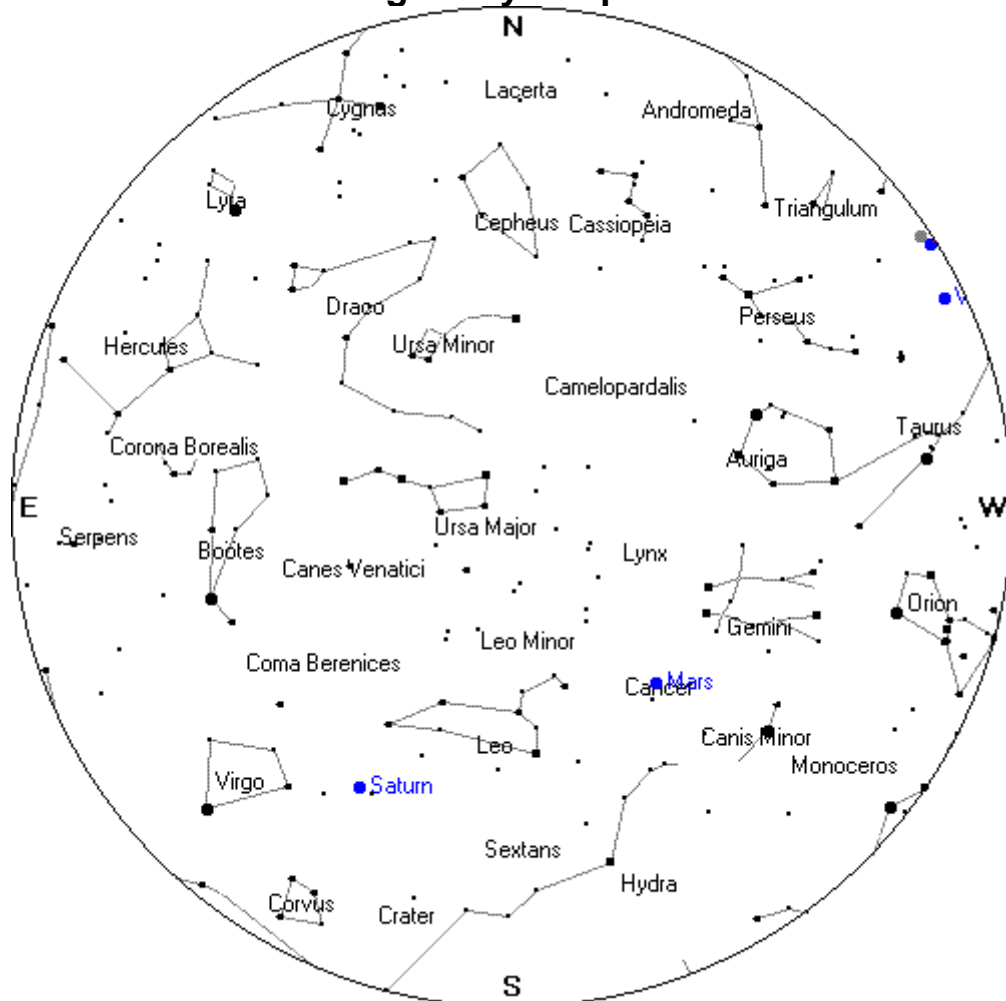


Dundee Astronomical Society The Night Sky in April 2010



The Sky at 9pm on 15th April 2010

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

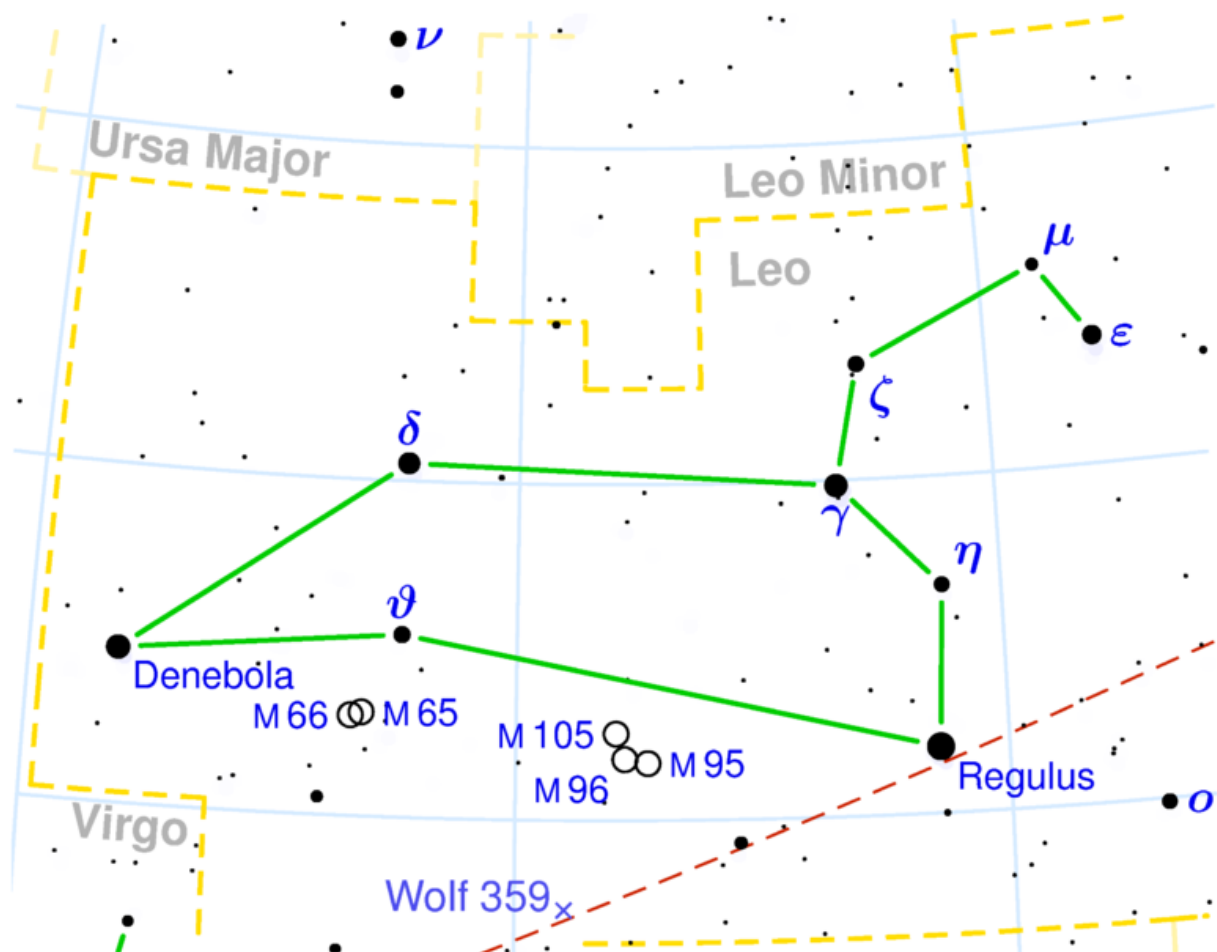
It's not the spring lamb but the spring Lion which chases the constellations of winter away into the west. Leo is the fifth of the 12 constellations of the zodiac and is easily recognisable quite high in the south during April. In Mythology, destroying the Nemean lion was the first of the labours of Hercules. The sickle shape which forms Leo's head leads downwards to the brightest star, Regulus, often referred to as the heart of Leo. This star is a group of four in two pairs, the brightest of which is a blue white star. Regulus is at a distance of 77 light years and the main star of the four is quite young at a few hundred million years and rotates in the remarkably rapid time of 15.9 hours.

For those with dark skies and a good telescope, Leo is one of the best constellations in which to see a fine selection of galaxies. Moving east of Regulus there is a triplet of galaxies at a distance of between 31 and 38 million light years. The French comet hunter, Charles Messier found many fuzzy objects in Leo and these were recorded in the final version of his catalogue in 1781. The three in the first triplet of galaxies are M95, M96 and M105. M95 and 96 are spiral galaxies, rather like our own Milky Way

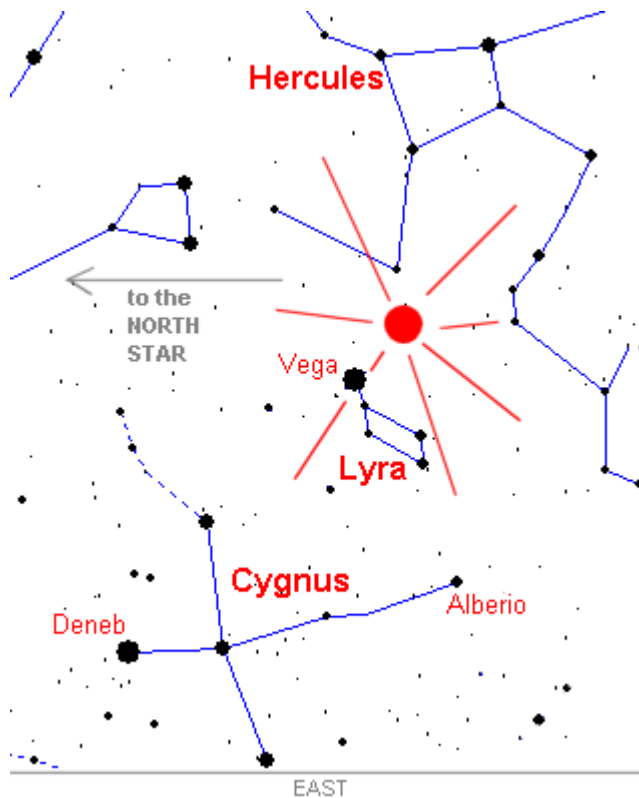
but M105 is an elliptical galaxy with a massive black hole at its centre. This black hole is believed to be 50 million times the mass of the Sun!

Just a bit further east is another triplet of galaxies, M65, M66 and NGC 3628. All of these are spiral galaxies but NGC 3628 is seen edge on. They, too, are at a distance of about 35 million light years.

Leo is the constellation from which the famous Leonid meteor shower radiates in November. This shower has peaks at 33 year intervals when, for a brief time, there may be thousands of meteors seen within 15 minutes. The next peak, however, will be about the year 2032.



Talking of meteors, the April Lyrids may be worth looking out for between the 19th and 25th April. The time of maximum is the 22^d 16^h when there may be a ZHR of 10 – 15 meteors. Rarely, there has been an outburst and in 1982, a maximum of 90 per hour was recorded and in 1803, 700 per hour. But don't expect great things! The radiant, between Lyra and Hercules, will be quite high in the south east by midnight on the 22nd. The moon is 8 days old and will be lower in the sky later in the night. The shower is associated with comet C/1861 G1 Thatcher and, surprisingly, has been recorded for about 2,600 years.



Mercury will be seen during the first two weeks of April low in the west shortly after sunset. This will be the best time in 2010 to see Mercury in the evening.

Venus will be nearby Mercury throughout early April but will remain in the western sky as Mercury slips towards the horizon later in the month.

Mars remains quite high in the south mid month and sets at about 3am. It continues to become less bright as Earth leaves it behind after being close in late January.

Jupiter rises at about 5am, just before sunrise, and will cross the sky during daylight hours.

Saturn can be seen in Virgo from sunset until it sets at about 5am. The tilt of Saturn's rings is reduced in April to about 2° before increasing again later in the year.

The Moon is at last quarter on the 6th, new on the 14th and at first quarter on the 21st and full on the 28th.

Mills Observatory is open from 11am to 5pm, Tuesday to Friday, closed on Monday and between 12.30pm and 4pm on Saturday and Sunday. Admission is free.

There will be a talk about the April sky and planetarium show on Wednesday 14th April at 2pm. Admission is £1 for adults and 50p for children. Please phone 01382 435967 to book as places for each show are limited.

Visitors arriving by car should use the Glamis Road entrance to Balgay Park.

The Mills website can be located at www.dundee.gov.uk/mills