

The Night Sky in March

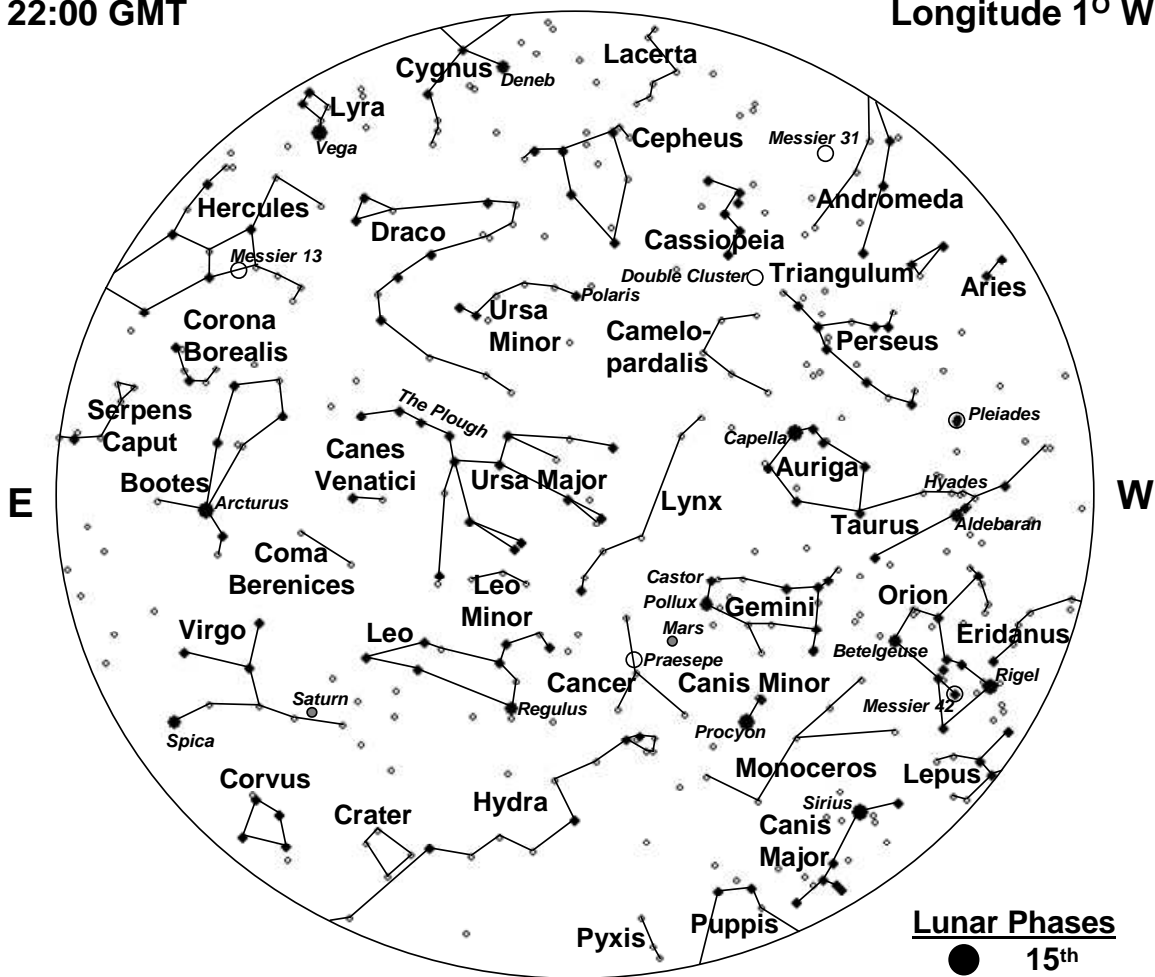
By 10pm on March evenings Orion and the other splendid constellations that have dominated the winter sky are all now fairly low in the West, whilst the stars of Spring, mostly less spectacular than the winter groups have taken over in the South. In the faint constellation of Cancer, between Leo and Gemini, look out for Praesepe (or the “Beehive”). This star cluster can just be discerned with the naked eye as a faint misty patch on dark, moonless nights. Binoculars will resolve the Beehive into several dozen stars. The seven stars of the Plough are now approaching the zenith and following the handle of the Plough down towards the eastern horizon, it should be possible to find orange Arcturus, the brightest star of the northern heavens. Opposite the Pole Star from the Plough, the famous “W” shape of Cassiopeia is now low in the North-West.

Three bright planets may be seen in the March evening sky. Saturn may be found in Virgo, below and to the left of Leo’s hind quarters. Orange-hued Mars is fairly close to the Beehive cluster. Venus is more brilliant than either of these two, but very low in the west after sunset.

Mar 15th 2010
22:00 GMT

N

Latitude 52° N
Longitude 1° W



Sunrise 6:19
Sunset 18:08

S

Lunar Phases
 ● 15th
 ☾ 23rd
 ○ 30th
 ☽ 7th

The Solar System in March

Mercury may be glimpsed very low down in the West in evening twilight during the last few days of the month, when it is at the start of its most favourable evening apparition of 2010. **Venus** which is slightly higher and much more brilliant may be used as a guide for finding the elusive innermost planet. The Moon is 4 degrees north of Venus on the 17th.

Mars is now past its best, decreasing in brightness from magnitude -0.6 to +0.2 during the month, whilst the angular size of its disc decreases from 12 to 9 arcseconds (compared with 14 at opposition). Surface detail should still be discernible, however. The Moon is 4 degrees south of Mars on the 25th.

Saturn is now likely to take over from Mars as the main focus of attention for planetary observers, since it reaches opposition in Virgo on March 22nd. It is less bright than at most oppositions since the famous ring system, although now widening currently only presents a 3 degree angle to us. The Moon is 7 degrees south of Saturn on the 3rd and again on the 29th.

Jupiter, Uranus and Neptune are all unfavourably placed for observation.

The **Moon** occults the magnitude 3.5 star Omicron Leonis on 27th March between 01:59 and 02:42 (UT). The disappearance, which takes place on the dark limb of the Moon will be easier to observe than the reappearance. Less favourable because of its very low altitude will be the occultation of magnitude 2.8 Lambda Sagittarii on March 9th between 05:04 and 06:18.

Asteroid 532, **Herculina**, is at opposition on March 13th at magnitude 8.8. It may be found in the constellation of Coma Berenices.

The Vernal Equinox occurs on March 20th and British Summer Time comes into force on March 28th at 1am – clocks go forward one hour.

Constellations of the Month: Ursa Minor and Camelopardalis

Ursa Minor was one of the original 48 constellations of Ptolemy's Almagest. It is however rather faint and possesses only one object of real note – its brightest star **Polaris**. Second magnitude Polaris is famous for being the star about which everything else in the sky appears to rotate. In fact it is pure coincidence that the Earth's axis is pointing towards a fairly bright star at this time. An effect called the "precession of the equinoxes" will gradually move the North Celestial Pole away from Polaris after its closest approach at the turn of the next century. Polaris is also an attractive double star, with a ninth magnitude companion 18 arcseconds distant. Furthermore, Polaris is a Cepheid variable, although the amplitude of its light variation is too small to be detected visually.

Even fainter and more obscure is the neighbouring constellation of **Camelopardalis**, a seventeenth century invention, possessing no star brighter than the fourth magnitude. It does however contain a few objects of note for deep-sky observers.

NGC 2403 is an eighth magnitude galaxy which should be discernible in good binoculars from dark skies. It lies at a distance of eight million light years from us and is an outlying member of the M81 group whose main members are in neighbouring Ursa Major.

IC 342 is a more difficult galaxy due to its low surface brightness. It is a spiral galaxy which we see "face on" from Earth. It was once thought to be an outlying member of our "Local Group" of galaxies, but is now known to be a member of the Maffei group, ten million light years distant.

NGC 1502 is a small compact cluster containing two easy double stars.

Camelopardalis also contains a number of interesting variables. **Z Camelopardalis** for example is a variable of the "eruptive" or dwarf-nova type. Outbursts take place at intervals of 2-3 weeks and the magnitude range is 10-14.