

As the old saying states:

“The longest day has passed away, prepare for the longest night!”

The Sun

In the early hours of the June 21st the Sun stopped moving north and began its slow journey south towards the winter solstice on December 21st. As a result, our days will gradually shorten to give us longer nights, much to the delight of astronomy enthusiasts and the disappointment of sun lovers!

At the beginning of July, the Sun will rise around 4.40 BST and will set around 21.20 BST. At the end of the month, it will rise around 5.30 BST and will set around 21.00 BST.

The Moon

The Moon will be at last quarter on July 1st. It will be new on the 10th and will have reached first quarter on the 17th. It will be full on the 24th and will have reached last quarter, for the second time this month, on the 31st.

The Planets

Mercury will be difficult to spot this month. It is a morning object but will be hidden in the glow of the rising Sun.

Venus is an evening object but will be low in the west. It will require a clear unobscured horizon to spot.

Mars is soon to be lost in the evening sky glow. It will be close to Venus in mid-month.

Jupiter will have risen by midnight and will be a splendid sight in the early hours. It will reach opposition in August.

Saturn is about 20° ahead of Jupiter along the ecliptic. It too is moving towards opposition and will reach this on August 2nd.

Uranus is to be found among the stars of Aries. It is a morning object in the pre - dawn sky and is viewable through binoculars.

Neptune is visible just south of the circlet of stars which mark the western point of Pisces.

Constellations

We are now at that time of the year when the ecliptic is very low in the south. Zodiac constellations on this part of the ecliptic hug the southern horizon and one, Scorpius the scorpion, is only partly visible from our latitudes. The visible part, the scorpion's claw, is very distinctive and easily recognised. Spot the line of three stars in a curve and you will find the bright red giant star Antares to the left of, and equidistant from, the trio. Antares means the Rival of Mars and is so called because it resembles the Red Planet. Mars is never far from the ecliptic so, from time to time comes close to Antares so the two celestial bodies can be compared.

The claw can be seen on the southern horizon during July. If you are going south for a holiday at this time of the year, it is worth noting how much more of the constellation can be seen from your holiday destination. I was able to see more of the scorpion from Jersey than I can from Bury St Edmunds, so you do not have to go far to see a difference.

You can use the scorpion's claw as a guide to locate the constellation Ophiuchus. Follow the curve of the three claw stars upwards and you will come to a line of three stars with a fourth close to the third. The line forms the bottom of the bell shape which is Ophiuchus. The top of the bell is about 20° above the bottom line of stars. If you identify Ophiuchus, draw an imaginary line from the centre of the bottom of the bell to the top of the bell. Extend the line the same distance again and you will be in the vicinity of a large trio of stars known as the Summer Triangle.

The Summer Triangle, so named by Patrick Moore, is an asterism of three bright stars which ride high in the sky on summer nights.

The three stars are as follows: -

Altair is the southernmost star and is the brightest in the constellation Aquila the Eagle. Altair shines with a magnitude of +0.75.

Vega is the brightest star in the constellation Lyra the Lyre and is situated about 30° northwest of Altair. Vega shines with a magnitude of 0.0.

Deneb is the brightest star in the constellation of Cygnus the Swan and is situated about 30° northeast of Altair. Deneb shines with a magnitude of +1.25.

Considering the brightness of the three stars as seen from Earth, you could be forgiven for thinking that they are all roughly the same distance from us but that is not the case.

Altair is the closest to us at 16.7 light years. In effect we are looking back in time 16.7 years.

Vega is 25 light years from us, so we are looking back 25 years.

But Deneb, surprisingly, is around 1,400 light years from us. If you were able to look back at earth from Deneb, you would be viewing Britain around the time of the construction of the Sutton Ho ship burial. What a thought to conjure with!

That is all for now. More on the Summer Triangle next month.

