

Thanet Astronomy Group

Astronomy for Everyone in Plain English

What to see Saturday 4th April at 9pm

Asterism (The Plough)

Constellations (Ursa Major, Bootes, Ursa Minor)

Stars (Alkaid, Arcturus, Mizar, Alioth, Megrez, Phad, Polaris, Merak, Dubhe)

This month rather than bombarding you with yet more Solar Eclipse, I would like to do some star hopping, that means finding a recognisable pattern of stars and using it as a signpost in order to find other stars and constellations.

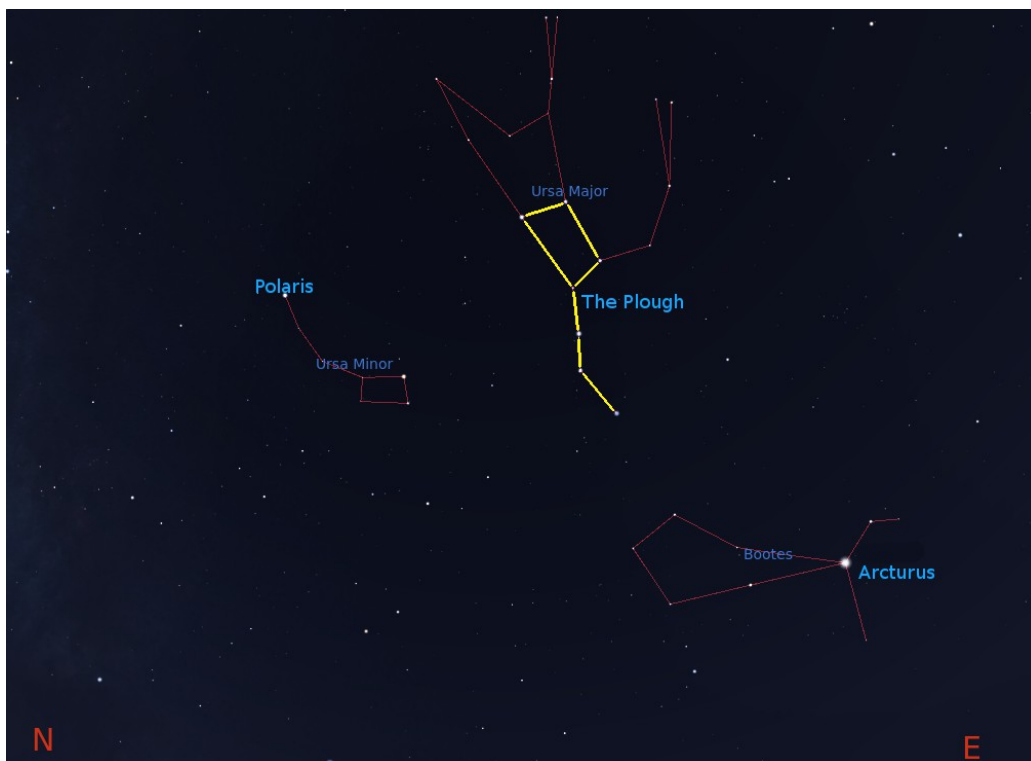
I'll start with **The Plough**, (*shown below in Yellow*) it is part of the constellation “**Ursa Major**”, also known as “The Great Bear”.

The plough is made up of the seven brightest stars of the constellation Ursa Major. The Plough is an **Asterism** (*a recognisable group of stars that is less than a constellation*). The plough looks a bit like a saucepan or frying pan.

The Plough will appear in the sky at any angle depending on the time you are looking at it, but at 9pm on Saturday 4th April it will be as shown in the picture below.

So at about 9pm on the 4th April

Look North East about 62° on your compass and up at an angle of about 45° above the horizon, you should see the star **Alkaid** at the end of the handle of the Saucepan and above it the rest of The Plough (*shown in Yellow*). If you look really carefully you may be able to pick out some of the other stars that make up the rest of the constellation Ursa Major (*shown in Red*).



The constellations shown in red and the Asterism The Plough shown in yellow

If you now follow the curve of the handle away from the pan for about twice the handles length, you will arrive at a bright orange star, it's name is **Arcturus**. You should now be looking due East at 85° on your compass and up at about 21° above the horizon. The star Arcturus is about 36 light years away from the Earth and is the “Alpha” or main star of the constellation of **Bootes**, The Herdsman (*shown in red*).

Now return to The Plough and work your way from the end of the handle, star 1 of 7 “Alkaid” along the handle past star 2 of 7 “Mizar” then star 3 of 7 “Alioth”. Now to the point where the handle joins the pan, star 4 of 7 “Megrez”, then to the bottom of the pan below the handle star 5 of 7 “Phad”.

Now comes the important bit the next two stars form the pointer we will use to locate **Polaris** some times called the North Star or Pole Star. Look at the next star 6 of 7 at the front bottom edge of the pan “Merak” and lastly star 7 of 7 “Dubhe” the star at the top front of the pan.

Draw a line from star 6 Merak through star 7 Dubhe and extend that line another 4 times its length, you will see a bright star near the end of the line. You have arrived at Polaris, and you should be looking at 358° on your compass and up at 51° above the horizon. The star Polaris marks the end of the tail of the constellation Ursa Minor.

This constellation looks just like a small version of the Plough with the end of the tail being the end of the pan handle.



The Constellations with their classical Art work

You have now identified one Asterism, nine Stars, and three Constellations all from just one set of 7 bright stars. There are many more stars, constellations and other objects that can be easily found using this star hopping method.



The stars of the Plough - (1)Alkaid, (2)Mizar, (3) Alioth, (4)Megrez, (5)Phad, (6)Merak, (7)Dubhe

Contact us if you need help or more information.

Website www.ThanetAstronomyGroup.com Email ThanetAstronomyGroup@gmail.com

See us at, West Bay Cafe, CT8 8QZ. Saturdays 1-4pm.