

# Thanet Astronomy Group

## Astronomy for Everyone in Plain English

**What to see Saturday 4<sup>th</sup> 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.

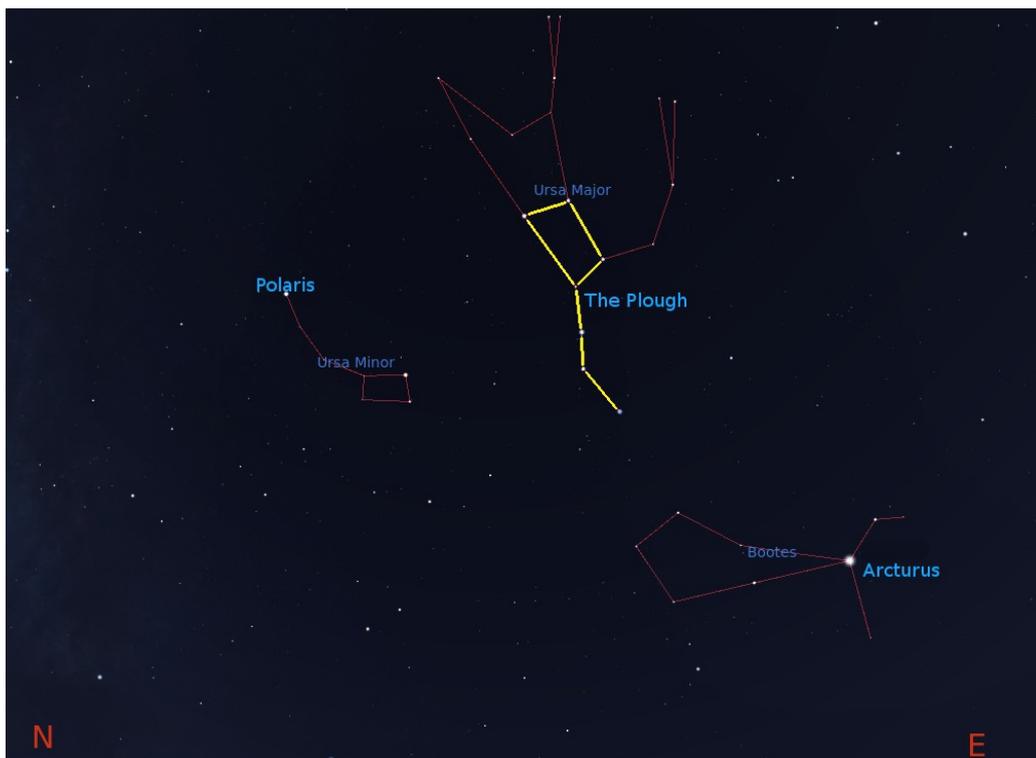
I'll start with **The Plough**, (*shown below in Yellow*) it is part of the constellation “**Ursa Major**”, also known as “The Great Bear”.

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 4<sup>th</sup> April it will be as shown in the picture below.

So at about 9pm on the 4<sup>th</sup> 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.**

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