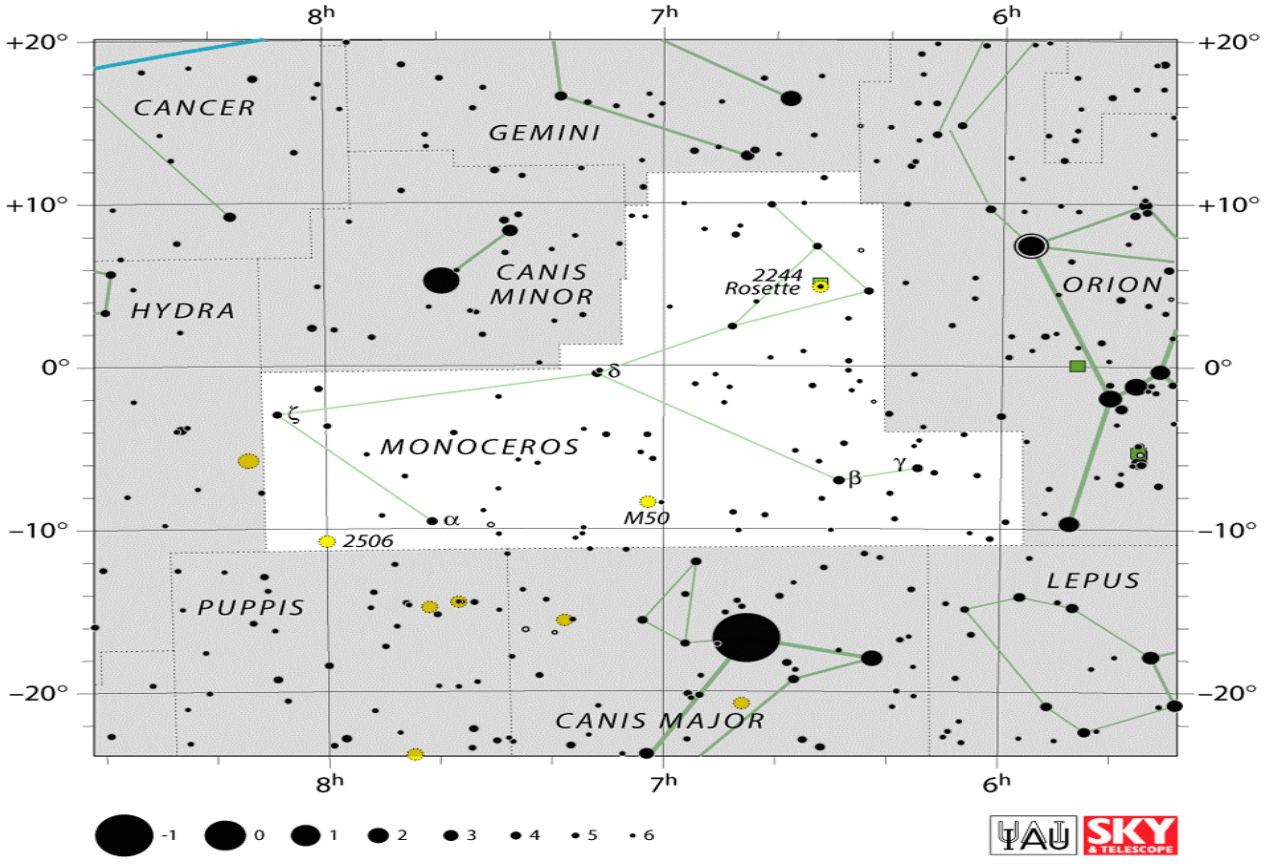
Binocular Observing February 2020 by Andrew Lohfink.

The Night Sky with Binoculars.

February 2020.

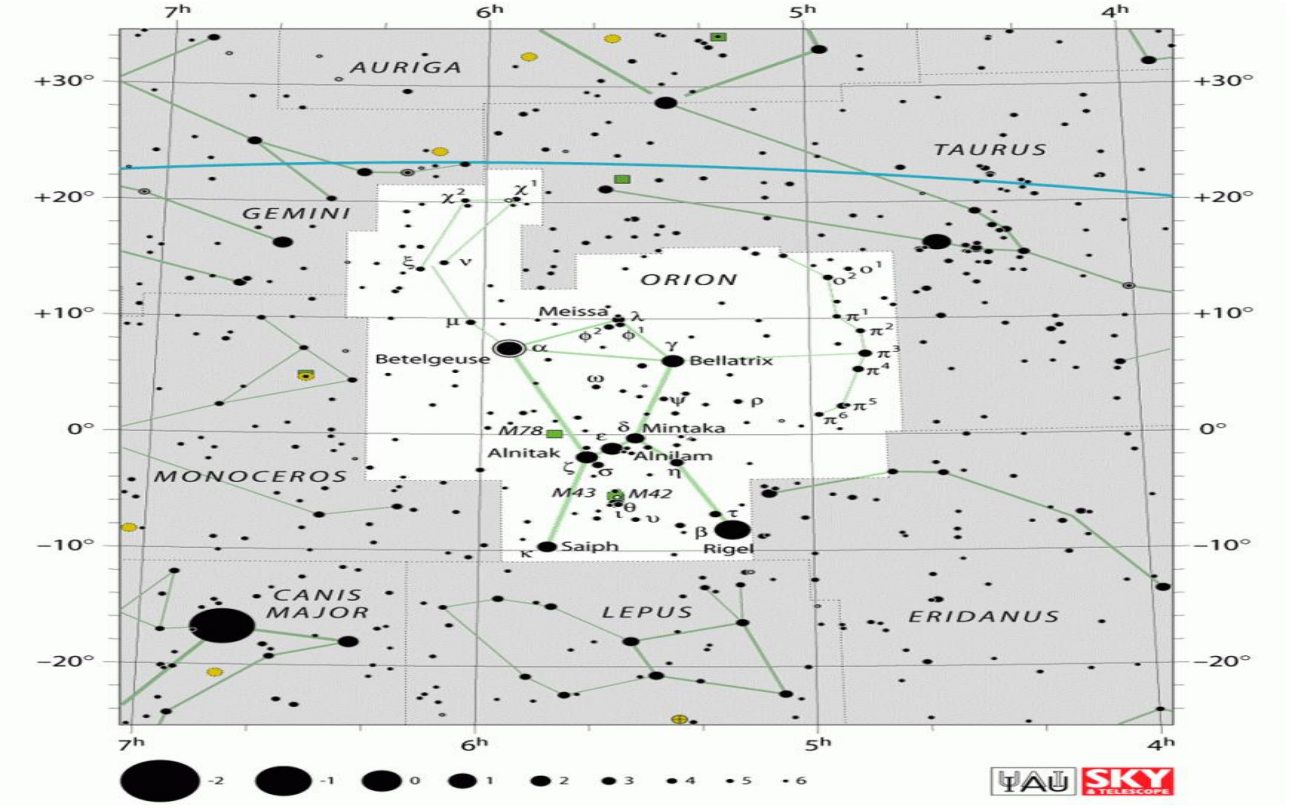
Monoceros Constellation.



Monoceros Constellation.

- Monoceros “The Unicorn” is an often forgotten constellation.
- It has no really bright stars and is vague and difficult to pick out of the night sky especially in light polluted areas.
- It lies between Orion, Gemini, Canis Major and Minor and these illustrious neighbours get all the glory.
- However it contains three star clusters NGC 2264, NGC 2244 and Messier 50 - which are excellent in binoculars and in many ways are better than the famous three Messier clusters – M36,37 and 38 - in Auriga.
- The Key to star hoping around The Unicorn is to use the stars of the neighbouring constellations as pointers, especially Orion.

Orion and The Western Portion of Monoceros.



Using Orion as a Pointer.

Using Orion as a Pointer for Monoceros.

- The three stars used in Orion as pointers are the head and shoulders – Betelgeuse and Bellatrix forming the shoulders and Meissa forming the head.

- To navigate to our first cluster NGC 2264 – The Christmas Tree Cluster – imagine a line between Bellatrix and Betelgeuse and extend out the same distance towards Monoceros and you will find The Christmas Tree.

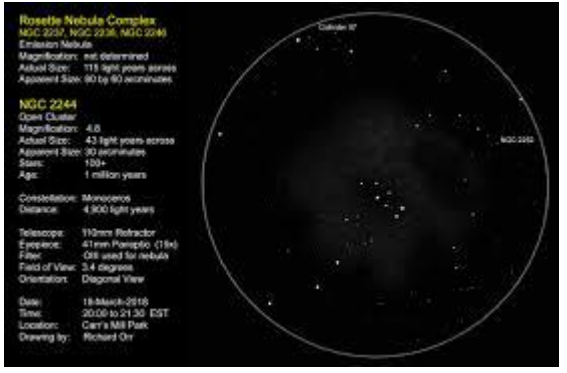
- To navigate to our second cluster NGC 2244 – The Rosette Cluster – imagine a line between Meissa and Betelgeuse and extend towards Monoceros approximately the same distance and you will find the Rosette a few degrees below the Christmas Tree.

NGC 2264 – The Christmas Tree Cluster.

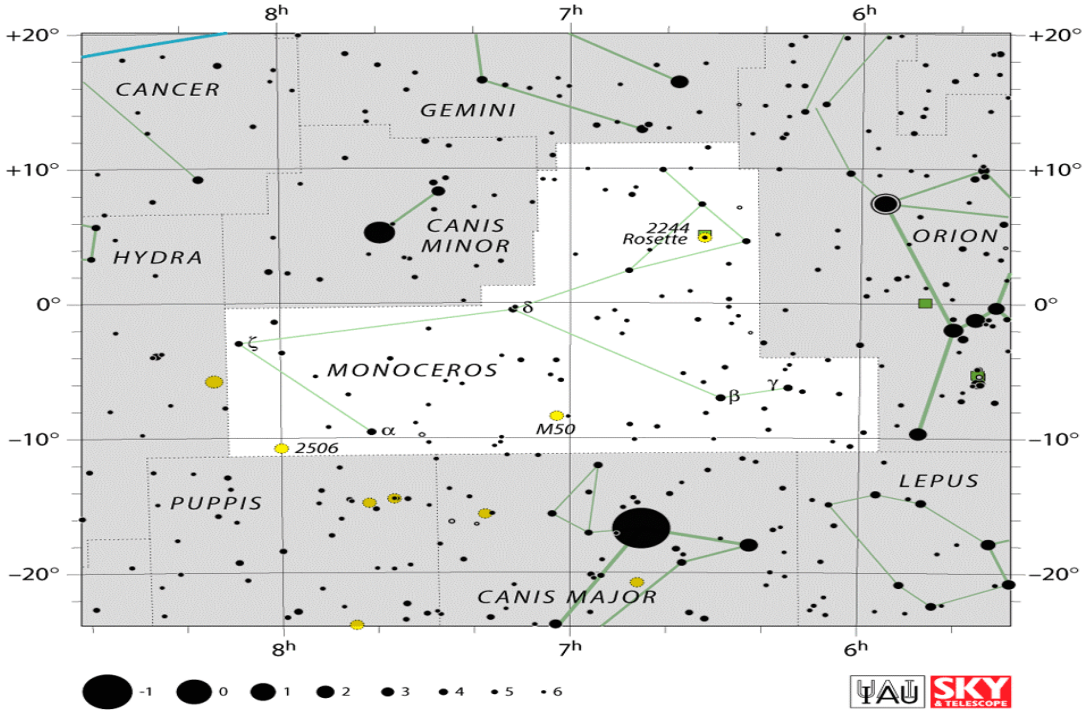
NGC 2264 is formed by a cluster of very young stars. As you can see in binoculars the tree looks upside down with the “trunk” formed by the bright star Monocerotis 15 lying at the top. This is because when looking through a telescope the image is inverted to form a conventional “tree” but in binoculars you see everything as it actually is – the right way up. The stars in the cluster have formed from the Cone Emission Nebula and in very dark skies a misty patch can be seen around the “top” (in binoculars the bottom) of the tree.

NGC 2244 – The Rosette Cluster / Nebula.

The Rosette Cluster contains very hot young stars under 5 million years old which formed from the Rosette Nebula. The region gets its name from the flower like appearance of the nebula. With binoculars you will see the cluster of bright stars, the higher your magnification the more stars you will see. In dark skies a misty patch of the nebula may also be seen.



The Winter Triangle and M50 – An Open Cluster.

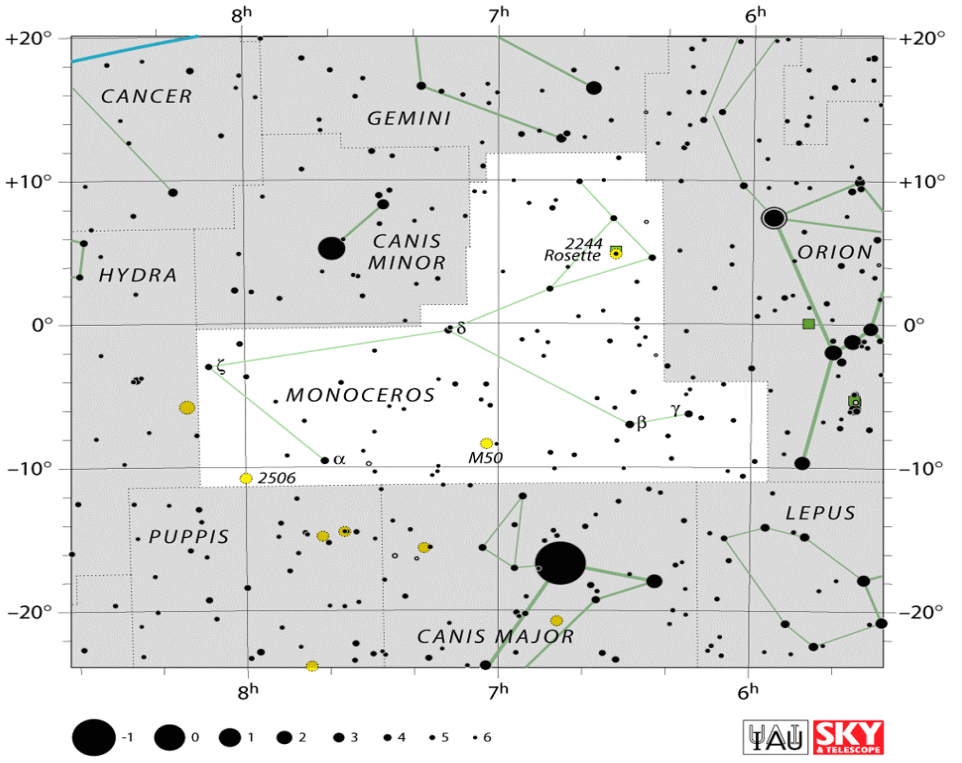


Messier 50 – An Open Cluster.

The key to finding M50 is to use The Winter Triangle asterism with Sirius, Procyon and Betelgeuse stars at the corner of the triangle. M50 lies about 40% along a line between Sirius and Procyon, being closer to Sirius. M50 lies 3,200 light years away and is known for its heart shaped figure. Binoculars of all sizes with resolve some stars but the higher magnifications will tease out the heart shape.

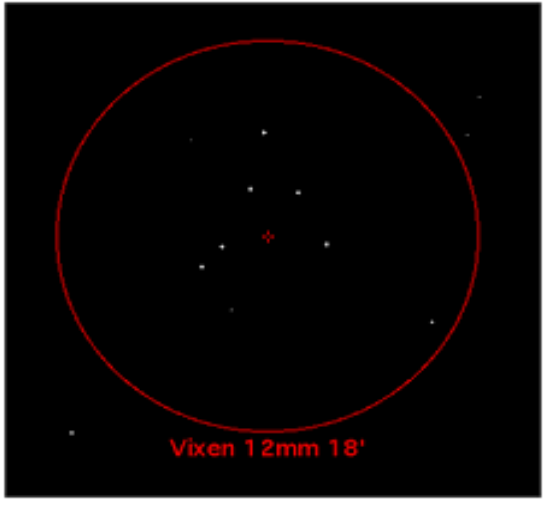
Binocular Asterisms In Monoceros.

There are two interesting binocular asterisms in Monoceros and the key to finding these is the star Beta Monocerotis which lies a third of the way along a line from Sirius to Betelgeuse being closer to Sirius.



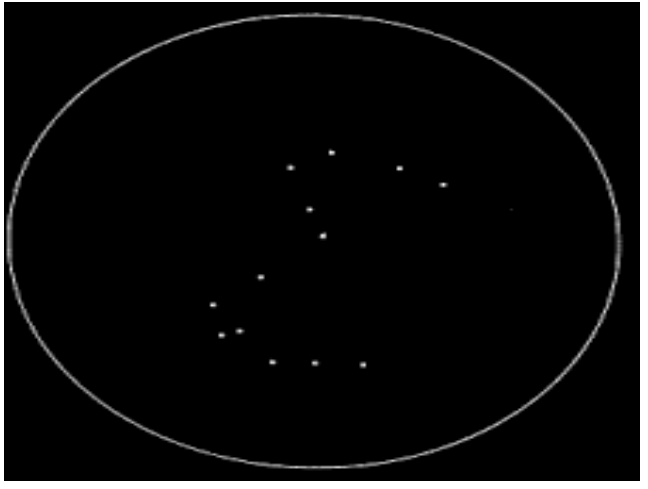
The Unicorn’s Horn Asterism.

From Beta Moncerotis go east-southest 3 degrees to find a find a V shaped asterism of 6 stars known as The Unicorn’s Horn. In binoculars the V will be the right way up.



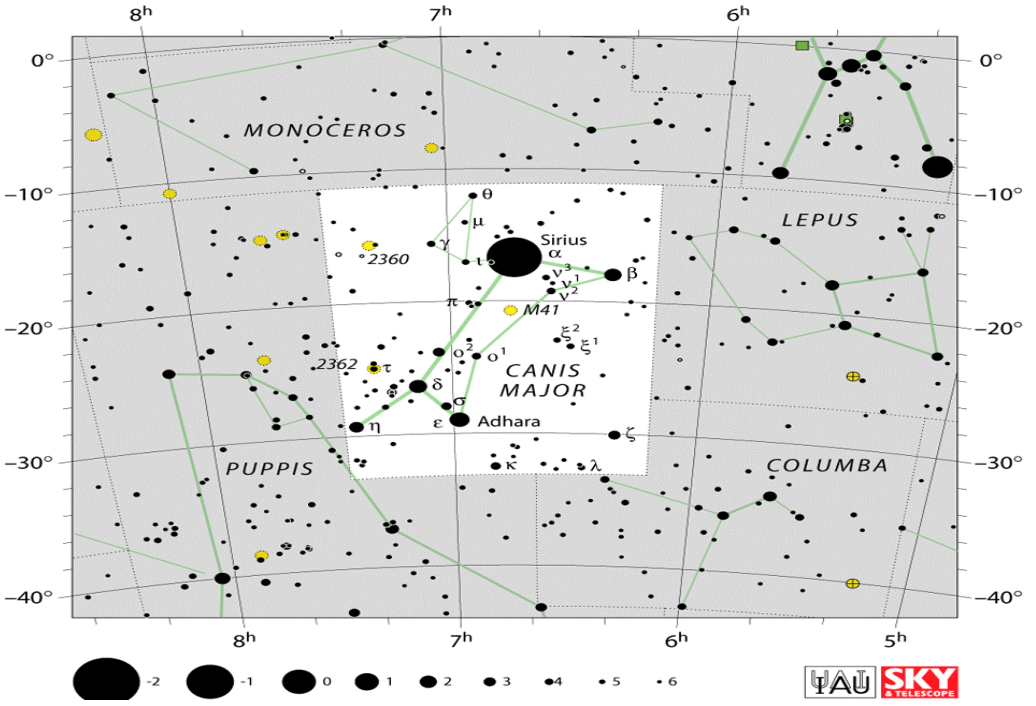
Pakan’s 3 Asterism.

This asterism has the shape of a 3 in binoculars (backward 3 in telescopes). It contains 15 to 20 stars and because of its size it is best observed in binoculars. To find this asterism move east – southeast about 3 degrees from The Unicorns Horn.



Canis Major Constellation.

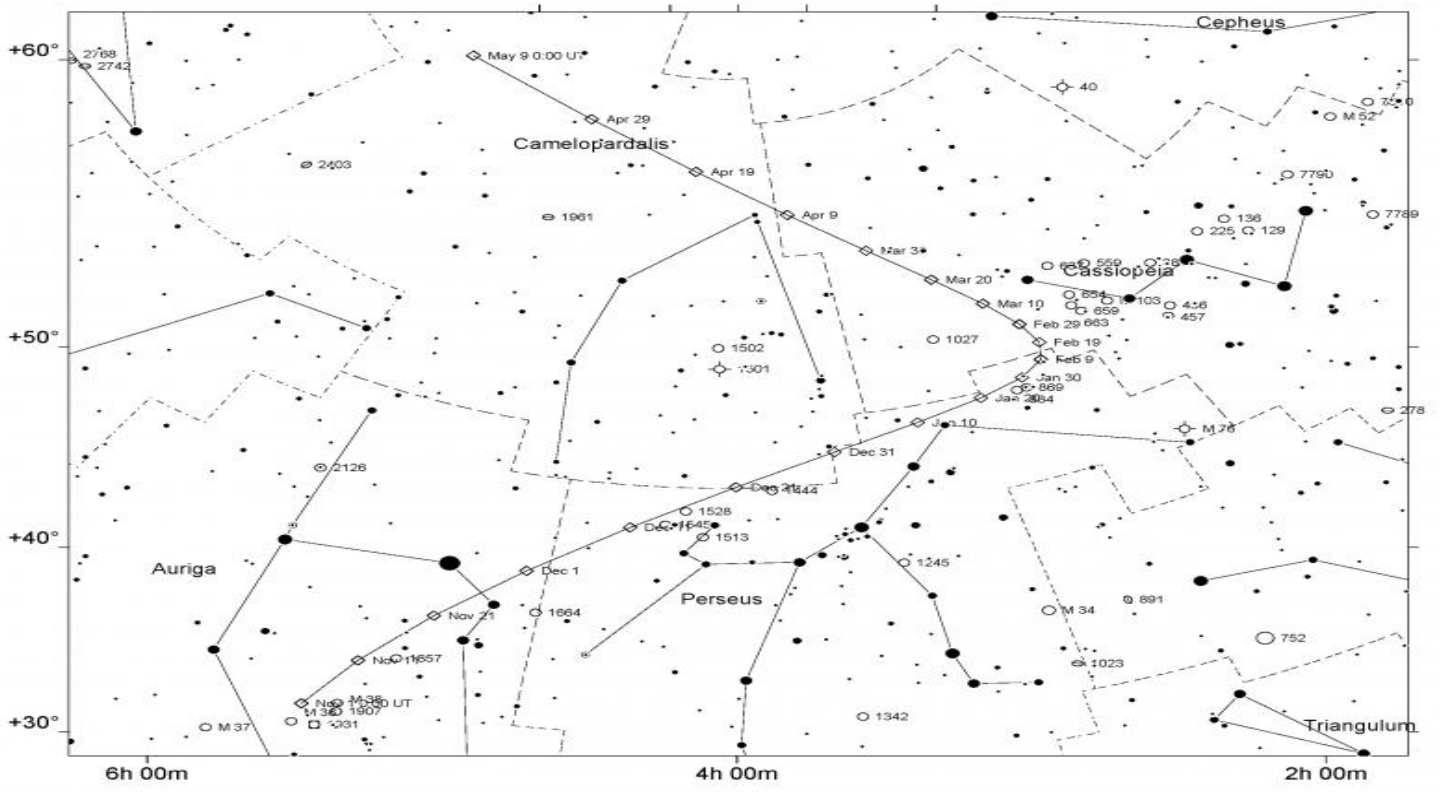
Canis Major is easily found as it contains Sirius the brightest star. Just extend a line south east from Orion's Belt. Just south of Sirius lies Messier 41 a open cluster.



Messier 41 – An Open Cluster.

The open cluster M41 lies about 2,300 light years distant and contains about 100 stars. The brightest star is a K3 type giant located at its centre and it also has several red giants. Seen in all sizes of binoculars, the higher the magnification and larger the aperture the more stars are resolved and the colours become more obvious.

Comet C/2017 T2 PanSTARRS.



Comet C/2017 T2 PanSTARRS.

- It can be rewarding looking at comets through binoculars and in some ways they give a better view than telescopes as you get a much wider field of view.
- Comet C/2017 T2 PanSTARRS will be passing close to The Double Cluster in Perseus In February and may be visible as a non stellar fuzzy object.
- It is uncertain how bright this comet will be so it may not be visible but will be fun to try. Try looking over a few nights to see if you can track any movements.
- If you can’t see it enjoy The Double Cluster and the red carbon star between the two clusters.