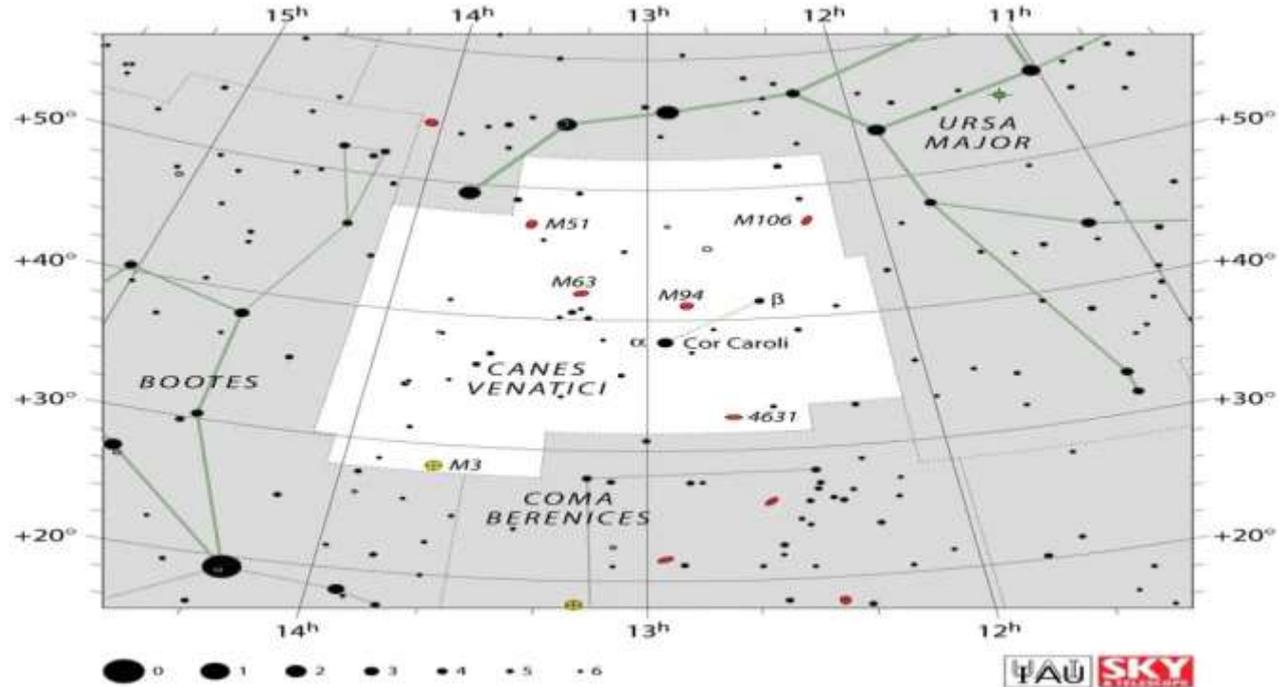


Binocular Observing April 2021 by Andrew Lohfink



The Night Sky
April 2021.

Canes Venatici Constellation.



Cor Caroli – A Double Star.

The brightest star in the constellation of Canes Venatici is Cor Caroli also known as Charles' Heart after King Charles I. It is a naked eye object but in mounted binoculars of x15 and above it can be seen to be a binary star. It lies about 110 light years distant and the pair is separated by 19 arcseconds. Try and tease out the colour difference.



Messier 94 – A Galaxy.

The constellation Canes Venatici looks unimpressive but it contains several interesting objects including several galaxies. M94 is a spiral galaxy about 16 million light years distant. It can be found by imagining a triangle with Alpha and Beta CVn and M94 forming the corners. At 10x50 M94 is a faint glow but at higher magnifications of x20 or x25 a central bright core can be seen.



Messier 63 – The Sunflower Galaxy.

Messier 63, also known as The Sunflower Galaxy can be found by imagining a larger right angled triangle with M63 and Alpha and Beta CVn forming the corners. It has an apparent magnitude of 9.3 and lies about 37 million light years away. Another spiral galaxy larger than the Sunflower Galaxy can be seen with binoculars of 20x80 and 25x100 will reveal subtle shading details. You are seeing an object whose photons have travelled for 37 million years with a pair of binoculars!



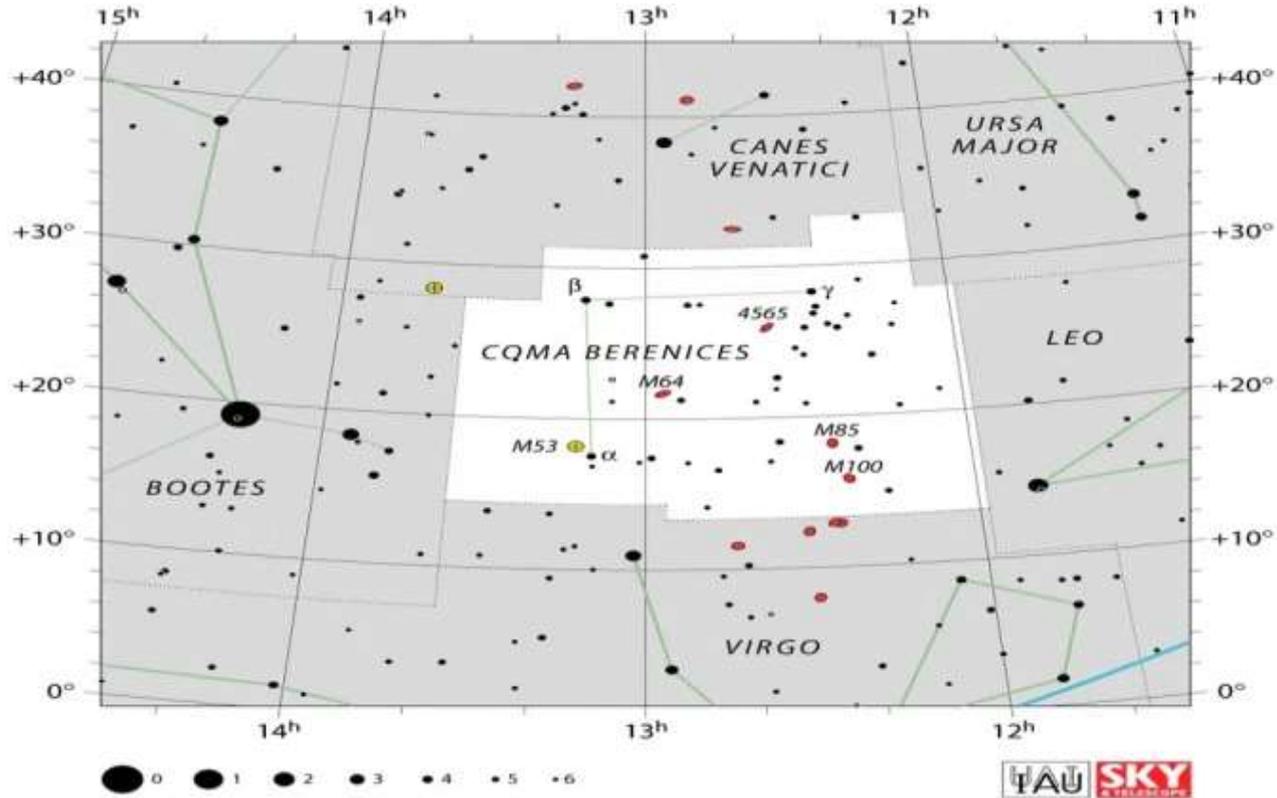
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Messier 106 – A Spiral Galaxy.

Our final galaxy is M106 and is found halfway along a line drawn from Beta CVn and Phecda which forms part of the bowl of The Big Dipper in Ursa Major.. It is about 22-25 million light years away and part of it may be falling into a supermassive black hole at its centre. It has a brighter core and an elongated shape.



Coma Berenices Constellation.



Messier 3 – A Globular Cluster.

M3 is one of the best globular clusters in the night sky. Although it lies in Canes Venatici it is easiest to find by navigating from Coma Berenices. Imagine a line extending from Gamma and Beta Comae Berenices and extend about a third further. M3 is 33,900 light years away and contains about 500,000 stars! It is around 8 billion years old. In 10x50 it appears as a small glow but at 20x80 you can see a mottled surface just hinting at resolving into individual stars.



Melotte 111 – An Open Cluster.

Melotte 111 is a lovely sight in low powered wide field binoculars – the bigger the field of view the better, especially in 8x40 or 6x30 binoculars. Easy to find, just point your binoculars at Gamma Coma Berenices and the cluster lies just below this star. There are a host of beautiful patterns – look out for the valley “V” and there are also some binocular doubles. The cluster spans over 7.5 degrees and is about 450 million years old being 280 light years away.

