

Dundee Astronomical Society

Sky Notes for February 2018

Sky Map for 15th February 22:00

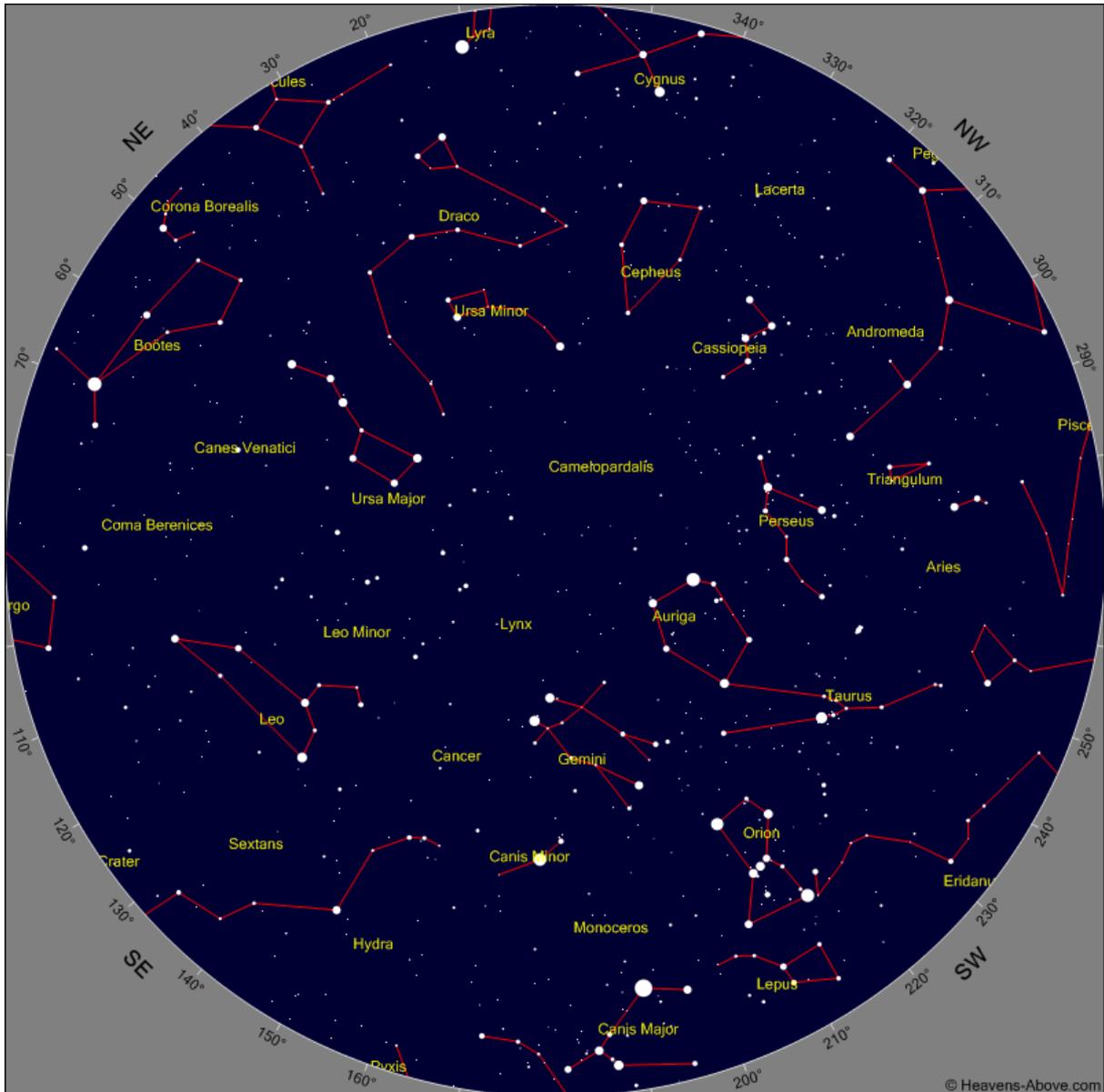


Illustration Courtesy of www.heavensabove.com

Here we are in February, doesn't time fly by when you are enjoying yourself? At this time of the year the nights are long but getting shorter, hopefully the skies where you live are clear, and you can get out and do some observing. Make the most of Orion as by the end of the month it will start to disappear over the horizon in the West. Gemini is in a favourable position this month for viewing, with Castor and Pollux being the heads of the twins, further to the west is the constellation Leo (the Lion) easily recognised by the backward question mark depicting the head of Leo. Look for the

bright star at the bottom of the sickle (Regulus) and draw an imaginary line west to the foot of the twins and in between is M44 an open cluster, more commonly known as the Beehive Cluster, and at a magnitude of +3.1 is best viewed using a pair of binoculars. Just below M44 is M67 another open cluster but at a magnitude of +6.9 is going to need a pair of binoculars or small telescope to view. Also, visible in Leo is the Triplets, M 65, 66 and NGC 3628.

At the members 'show and tell meeting' last Friday, (12th January), Pam Foster presented her project on charting Variable Stars, a most interesting talk with excellent examples. Pam also invited members of the Society to take part. All the variable stars that were discussed were either naked eye or telescope objects to make it easy to get started. All the documentation, including star charts, details of comparison stars, etc are available on the website or by contacting Pam via email. You can also pass comments onto myself or other members of the committee who will ensure Pam receives the information. If you are inclined to take part, please do so, as the more data Pam receives the more accurate will be the overall results. Good hunting.

The Planets

Mercury	Moving into the evening sky at the end of the month.
Venus	Best seen at the end of the month, low in the west after sunset.
Mars	Very small at present but mainly a morning/daytime object.
Jupiter	Reaching its highest altitude due south at the end of the month, rising at about midnight UT. Look for the shadow of Ganymede on the surface of the planet on the 17 th and 24 th of the month.
Saturn	Still a morning object at present.
Uranus	Reasonably well placed these nights, during darkness at the beginning of the month, but losing altitude as the month progresses
Neptune	Too close to the sun at present to view.

The Moon

Third Quarter	7 th February
New Moon	15 th February
First Quarter	23 rd February

Monthly Challenge

Given that we will start to lose Orion at the end of the month, I thought it would be appropriate to look at M42 in the belt of Orion. Of course, not a general view, but more precisely try to capture The Trapezium. It is most readily recognised by the four bright stars whose positioning gives the cluster its name.

The brightest of the four stars is C, or Theta Orionis C, with an apparent magnitude of 5.13. Both A and B have been identified as eclipsing binary's. The images below are in the "optical and Infrared".



Whilst looking around for another challenge for February, I came across this interesting asterism.

Resting in the constellation of Auriga, is the "Leaping Minnow" lying to the East of Hassaleh (Mag +2.7). Using a pair of pair of binoculars (10X50) the minnow with an average mag of +5, will be easily seen on a clear night and looking to the North East of the fish you should also make out the splash where the minnow enters the stream.

Have a go and see what you can find.

Jim's Focus of the Month

This month let's look at Cancer sitting between Leo in the East and Gemini to its West. Being rather smaller and dimmer than other constellations which adorn our night sky, and although containing only two Messier objects, M44 and M67, Cancer is still worth a look at.

M44 is an open star cluster with a magnitude of +3.1, so should be easily visible in binoculars, but for a better view use a medium telescope. Those with good eyesight and clear skies may be able to see it with the naked eye, although you may need to use averted vision to see it. M44 is also known more commonly as the beehive cluster or the Praesepe Cluster.



M67 is the other cluster in Cancer and with a magnitude of +6.9 is going to be more difficult to see without binoculars or a medium telescope.



Women of NASA

Whilst trawling the internet for interesting articles for this months Sky Notes I came across this article about the achievements of Women in NASA, that to my knowledge have not been publicised.



Let's look at Margaret Hamilton. Born in 1936 she was always interested in Mathematics. 1959 saw her at MIT developing software for weather prediction and air defence software. 1969 saw Margaret in NASA and as Apollo Lunar 11 approached the surface of the moon its onboard computer became overloaded, priority displays designed by Margaret warned the astronauts with 1201 and 1202 alarms. As we all know the mission was a success and her software was the first to support the first landing on the moon and the crew became the first humans to walk on its surface. She received Nasa's Exceptional Space Act Award in 2003 and the Presidential Medal of Freedom from President Obama in 2016.

Did You Know?

1st February 2003, Space Shuttle Columbia breaks up during re-entry into the Earth's atmosphere with a crew of seven Astronauts aboard.

7th February 1999 Stardust launched as the first US mission to bring a sample of a Comet back to Earth.

11th February 1970 Ohsumi, a Japanese test satellite was launched.

20th February 1962 John Glenn Jr becomes the first American to orbit Earth.

Jim Barber

Director of Observations

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