

January night sky



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Happy New Year! The stars are putting on a good show this month, and with long dark nights it's an excellent time to go out stargazing. It can be very cold though, so wrap up warm and take a hot drink if you plan on being out a while.

Constellation of the month: Canis Major

There are several stories surrounding Canis Major, with the most popular saying that the constellation represents Orion's hunting dog. The name is Latin for "greater dog" and it forms a pair with Canis Minor, a close-by constellation which is just above Monoceros the Unicorn. Canis Major is helping his master attack Taurus the Bull, but is also chasing Lepus the Hare across the sky, from east to west.

The well-known American poet Robert Frost once wrote this poem, inspired by Canis Major:

*The great Overdog, That heavenly beast, With a star in one eye, Gives a leap in the east.
He dances upright, All the way to the west, And never once drops, On his forefeet to rest.
I'm a poor underdog, But to-night I will bark, With the great Overdog, That romps through the dark.*



Finding Canis Major

The brightest star in this patch of sky is called Sirius, and it makes Canis Major quite easy to find. If you need a bit more help, look due south at around 11pm and so long as you have a clear horizon, you should have a good view of this dog in the sky. Another way to find Canis Major is to first track down Orion's Belt, then draw a line downwards from those three stars. They point straight to scorching Sirius.

Look out for...

The star Sirius is the most impressive object to see here. It is the brightest star in the night sky, and is only outshone by the Moon and planets such as Venus and Jupiter. Sirius is so bright that sometimes on blustery nights it twinkles a lot and is mistaken for a UFO! If you have binoculars or a small telescope you will be able to spot a cluster of stars below Sirius, called M41. In total it contains about 100 stars. Why not see how many you can count?

News flash: UK astronomers find the most distant galaxies seen

Teams of scientists from the Universities of Oxford and Edinburgh have used the newly refurbished Hubble Space Telescope to discover incredibly distant galaxies which had formed when the Universe was only 5 percent of its current age - within 1 billion years of the Big Bang. The galaxies were found after Hubble observed a patch of sky in the constellation of Fornax the Fox, which is just below Orion and Taurus. Plans are being put together to study them in detail by the James Webb Space Telescope, due to be launched in 2014.



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The planets in January

Mercury	is low in the south-east during the second half of January.
Venus	is close to the Sun as seen from Earth, so can't be seen this month.
Mars	is very bright near Leo, and is visible all night long.
Jupiter	shines strongly in the south-west but sets early, at around 7:30pm.
Saturn	rises in the south-east at around 10:30am, in the constellation Virgo.

Theme of the month: stargazing basics

Stuck for a New Year's Resolution? Why not get into amateur astronomy? Here are some tips to start you off.

There's no need to buy anything expensive

Luckily our eyes are excellent instruments for astronomy as we can see a huge amount of the sky and spot moving objects like shooting stars. If you do want to splash out, binoculars are easy to use and give excellent views of the night sky.

If you can, head for the countryside

The ideal location for stargazing is far away from town and city lights as this will give better views. The Mendips are ideal, and will also give you a clear horizon.

Learn the night sky

Tracking down star patterns will help you find your way around the sky quickly.

The more you look, the more you see

The secret of astronomy is persistence. Keep observing and build on your experiences. Jotting down the things you see in a journal will help you to learn.

Become a storyteller

The constellations come laden with myths that have been told for hundreds of years. Knowing these will help you become familiar with the sky, and make you a hit around the camp fire!

Enjoy it

Remember that stargazing is fun and simple. It's a rewarding hobby that is very enjoyable. Just go outside on a starry night and look up!

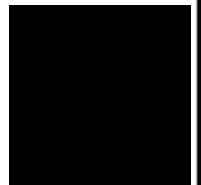


Moon Calendar

07 January
Last Quarter



15 January
New Moon



23 January
First Quarter



30 January
Full Moon



Would you like to know more?

Details of our planetarium shows and back issues of this handout can be found at:
<http://www.at-bristol.org.uk/theplanetarium>

Stellarium is a planetarium program for your computer, showing a realistic 3D sky just as you would see if looking with your eyes or a telescope. Best of all, it's completely free. Download it at www.stellarium.org

Heavens Above is a website that lets you create customised sky maps and see when satellites like the International Space Station will be visible. Head over to www.heavens-above.com and try it out.

Do you have an astronomy question for the At-Bristol planetarium team?

E-mail lee.pullen@at-bristol.org.uk and our keen astronomers will try to quench your thirst for knowledge!