

# January 2012 Night Sky



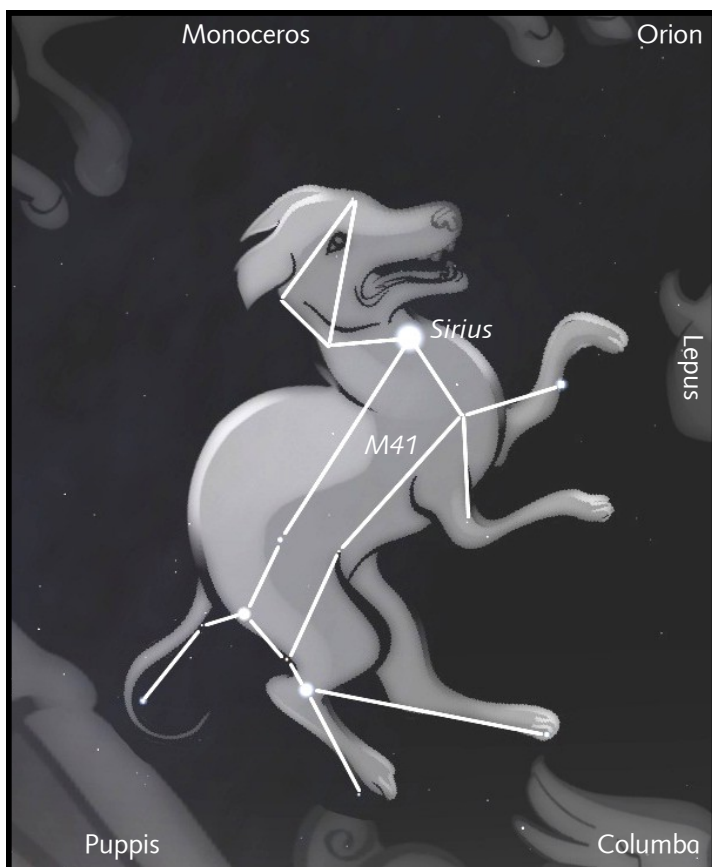
[www.at-bristol.org.uk](http://www.at-bristol.org.uk)

Happy New Year! The stars are putting on a good show, 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. The At-Bristol astronomers recommend warm cocoa in an insulating flask.

## 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 well-known American poet Robert Frost 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 most impressive part of Canis Major is the star Sirius, the brightest in the night sky. It makes Canis Major quite easy to find. Look due south at around 11pm and so long as you have a clear horizon you'll have a good view. 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.

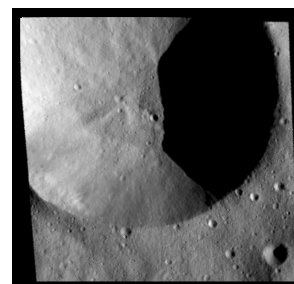
## Look out for...

Sirius is the unmissable object here. It's 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'll be able to spot a cluster of stars below Sirius, called M41. In total M41 contains about 100 stars. Why not see how many you can count?

## News flash: Asteroid seen up-close

NASA's *Dawn* space probe has started a low-altitude mapping mission of asteroid Vesta, and is now sending back incredible photos. Scientists hope that *Dawn* will keep taking pictures until March, helping us learn more about this strange world.

*This 18km by 18km photo shows a large crater. The dark patch at the right is a shadow cast by the crater's rim. Image credit: NASA/ JPL-Caltech/ UCLA/ MPS/ DLR/ IDA.*



## The planets in January

<b>Mercury</b>	can be spotted low in the south-east before sunrise.
<b>Venus</b>	is incredibly bright, low in the south-west after sunset.
<b>Mars</b>	rises at around 9pm in the east.
<b>Jupiter</b>	is in the south-west, brighter than any night-time stars.
<b>Saturn</b>	follows Mars late in the evening, rising after midnight.

## Theme of the month: Satellite spotting

Did you know that you've probably seen a satellite in the night sky, without even realising it? Although they are hundreds of kilometres above the surface of the Earth, some are so reflective that they can be surprisingly bright. Satellites are fun to track down and they do many useful jobs, from letting us talk with people on the other side of the world, to helping predict the weather.



*As this satellite was passing overhead it caught the Sun's light and suddenly became much brighter. Image credit: Mila Zinkova.*

In the night sky satellites usually look like faint stars that move from horizon to horizon over the course of a few minutes. Be careful not to mistake them for planes, which have flashing wing lights. If you watch from a dark site away from light pollution you'll be surprised at how many satellites you see. Have a go for yourself!

## Moon calendar

1 January  
First Quarter



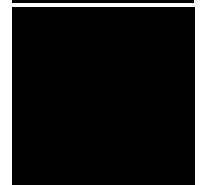
9 January  
Full Moon



16 January  
Last Quarter



23 January  
New Moon



## Would you like to know more?

**Zooniverse** is a collection of projects that lets you help professional astronomers and maybe make a real discovery. Visit [www.zooniverse.org](http://www.zooniverse.org) to get started.

**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](http://www.stellarium.org)

**Heavens Above** is a website for you to create customised sky maps and see when satellites like the International Space Station and Iridium flares will be visible. Try it at [www.heavens-above.com](http://www.heavens-above.com)

**Smartphone apps** for astronomy are excellent ways to help you navigate the night sky. *Google Sky Map* for Android and *Planets* for iPhones are free apps to start you off in the right direction.

**The Bristol Astronomical Society** is a group of local stargazers who are always keen to help beginners. Find out more via [www.bristolastro.org.uk](http://www.bristolastro.org.uk)

Do you have an astronomy question for the At-Bristol Planetarium team?  
E-mail [lee.pullen@at-bristol.org.uk](mailto:lee.pullen@at-bristol.org.uk) and our devoted astronomers will be happy to help!