

April night sky

Welcome to Global Astronomy Month 2010! All around the world people are learning more about astronomy and the night sky, so why not get involved and join them? Spotting constellations is a good way to start stargazing, and this month Boötes is well positioned in the sky. Why not try to find him?

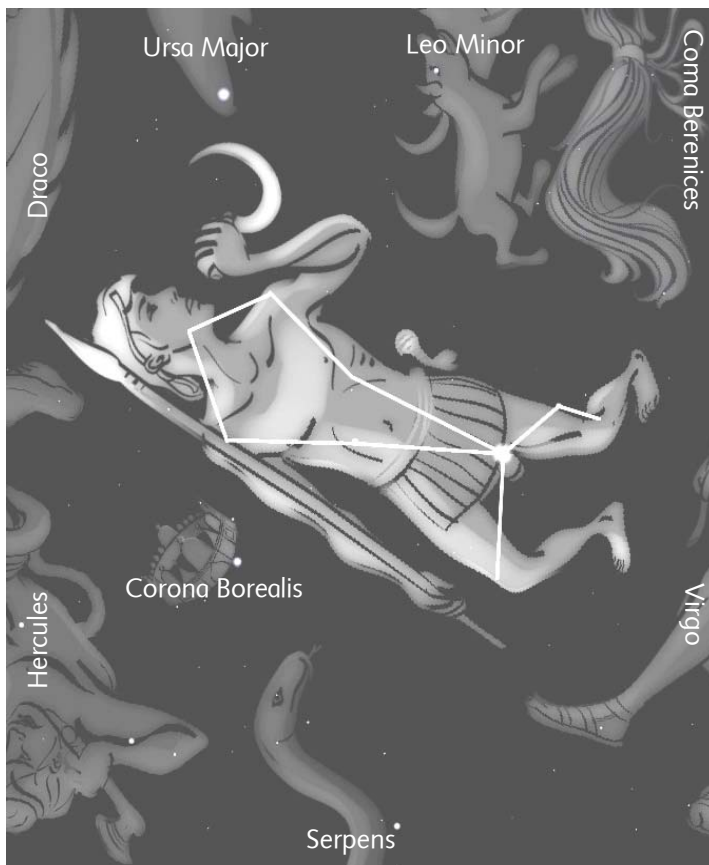
For more information about Global Astronomy Month 2010, and the many ways to be involved, please visit: <http://www.astronomerswithoutborders.org/index.php/projects/global-astronomy-month.html>



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Constellation of the month: Boötes

The Ancient Greeks loved to tell stories using the constellations. One such tale says that Boötes was a grape grower called Icarus, who one day invited the Roman god Bacchus, (also called Dionysus), to see his well-kept vineyards. Bacchus revealed the secret of wine making to Icarus, who was so impressed he immediately invited all his friends to sample this new drink. They consumed to excess and woke up the next morning with terrible headaches! As wine was a new invention this confused them, and they thought that Icarus had poisoned them. They formed a mob and killed him as revenge. Bacchus felt very bad about this, so placed Icarus in the sky to apologise.



Finding Boötes

This month the constellation is south-east in the sky. To find its bright star Arcturus, first trace out the famous pattern of the Plough. Then draw a line from the end two stars in the bent handle. They point to Arcturus. An easy way to remember this is to use the phrase "Arc to Arcturus". The other stars in Boötes are fainter, but from a dark site and using the picture on the left you will be able to see him. His body is almost shaped like a large kite, with Arcturus being a tail blazing brightly at the end.

Look out for...

Arcturus is the brightest star in Boötes, and is the third brightest in the night sky (after Sirius in Canis Major, and Canopus which is a Southern hemisphere star). Its name is from a Greek word meaning "Guardian of the Bear", which links with the legend of Boötes herding Ursa Major and Minor, the Great and Little bears, around the sky. Arcturus is bigger than our own Sun; you could fit around 30 suns across its surface.

News flash: UK Space Agency launched

April sees the formation of the UK Space Agency, a new organisation which represents Britain in space matters. The UK has a lot of expertise in space science. This industry supports 68,000 jobs, and helps raise £6 billion for the economy. It is hoped that the UK Space Agency will increase these figures significantly over the coming years. Unfortunately it doesn't mean any more British astronauts or flags on the Moon in the near future!



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The planets in April

Mercury	is putting on a good show, close to Venus.
Venus	is the brightest object in the evening sky, bar the Moon.
Mars	is getting dimmer, but is still quite easy to find in Cancer.
Jupiter	is lost in the Sun's glare, so is not visible this month.
Saturn	is in the constellation Virgo, and is fairly bright.

Theme of the month: Mars' moons

Our own planet Earth has a single moon, but Mars has two. Phobos is the larger of these, and also the closest to its planet. It is a strange world which could have reservoirs of ice beneath its surface and is covered in dusty material around 100 metres thick, making it darker than expected. Deimos is Mars' second moon. It is very small, only 15km at its widest. Like Phobos, it was probably once an asteroid which was captured by Mars' gravity. Another theory is that Mars once had lots of small moons, and all but the remaining two were smashed out of orbit by other objects, like a game of cosmic snooker.

In late 2011 or early 2012, the Russian Federal Space Agency will launch an ambitious mission called Phobos-Grunt. This is an unmanned lander which, if successful, will send back samples of soil from the moon Phobos.



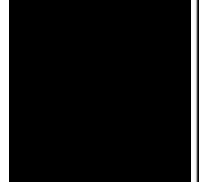
Photographs of Phobos and Deimos, taken by the Mars Reconnaissance Orbiter. Image credit: NASA.

Moon Calendar

06 April
Last Quarter



14 April
New Moon



21 April
First Quarter



28 April
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!