Astronomy in the Two Dales

Welcome to what will be a monthly guide to some of the wonders of the night sky over Swaledale and Arkengarthdale. At the bottom of the page each month will be a table giving the times of sun and moonrise, but of course if you live in the lee of some of our hills, you may not see them quite as soon or for quite as long as the table suggests.

February

Just after sunset you may notice what appears to be a very bright star, radiating 5 points of light, in the south western sky. This is the planet Venus, also known as the Evening Star. Venus is the planet closest to Earth and is often referred to as Earth's twin. It is the brightest object in the night sky after the Moon. Viewed through a pair of binoculars, after the Sun has set, Venus is a dazzling sight with a faint blueish/green hue. Be quick, as it sets behind the western hills around 7pm in mid-month.

Just above Venus will be what appears to be a bright reddish star, this is our next nearest neighbour, Mars. It is not as bright as Venus but still worth getting the binoculars out before it sets at around 8pm. If you look to the west just after sunset on the 22nd you should see Venus and Mars just half a degree apart. That's about half the width of a finger at arm's length.

For those with a view of the eastern sky, you can also see the planet Jupiter rising, the largest planet in our solar system, almost 318 times the size of Earth and the next brightest object after Venus. If you get the chance to observe Jupiter through a pair of binoculars you may see several bright dots in a line on either side. These are Jupiter's four brightest moons; Io, Europa, Ganymede and Callisto. Their position and the number visible vary each day as they orbit the planet. The best day to see Jupiter is February 6th when it is at its closest to the Earth. If you are fortunate enough to have access to a telescope you may even be able to make out some of Jupiter's cloud bands.

February also has a long association with wolves, so keep an eye out for hairy neighbours at the full moon.

Sun	**1st**	**14th**	**28th**	**Moon**	**1st**	**14th**	**28th**
Twilight starts	7.18	6.54	6.24	Rises	14.47	03.38	12.42
Sunrise	7.57	7.32	7.00	Sets	05.59	12.14	03.57
Sunset	16.46	17.13	17.42	1ST Quarter	25th	Full	3rd
Twilight ends	17.26	17.51	18.18	3rd Quarter	12th	New	18th

Stay Safe: Never look directly at the sun, and never look in its direction before the sun has fully set when using binoculars or telescopes. If going out after dark, wrap up warm and make sure someone knows where you are.

Reeth Informal Astronomy Group. See our website at www.reethastro.org.uk