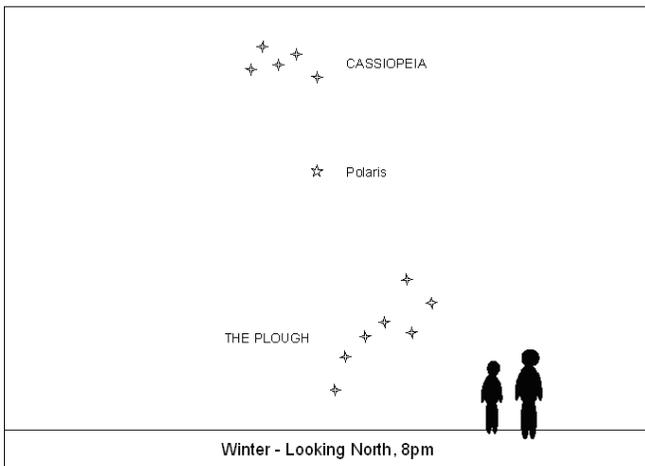


## Winter sky

### Facing North

The plough is perhaps the most easily recognised group of stars in the northern sky and it is a very useful marker. The plough is always above the horizon and allows us to find Polaris, or the Pole Star. If you imagine the plough as a saucepan, then you can follow the two stars furthest from the handle, up towards another not-particularly-bright star. This star is Polaris. If you are looking at this star, you are facing north.

On the other side of Polaris is a W of stars (or an M depending on which way up it happens to be; the stars appear to rotate anti-clockwise round Polaris once every 24 hours). This is the constellation of Cassiopeia. These stars in the northern sky are the same all year round, so you will always be able to find them on a clear night.



The constellations facing the North do not change over the course of a year instead they appear to rotate around the pole star. These constellations are called the circumpolar constellations and can be seen all year round. Ursa Major, Ursa Minor, Cassiopeia and Draco are amongst them. These are easily found and can act as a guide to finding other constellations. For more information visit the RCT DSDS website for regular updates.

## Dark Sky Discovery Site

### Where Are They?

Where is the best location to look at the stars? Well Dark Sky Discovery Sites (DSDS) are such places and they may not be as far away as you think. Located in towns and cities or mountains, lakes and historic places DSDS can be found all around the country. Here in Rhondda Cynon Taff we have several of our own, the Rhinos and Bwlch Mountains, Daerwynno Outdoor Centre, Barry Sidings and Dare Valley Parc. Each has its own unique viewpoint of the heavens and provide observers with fantastic views of the night sky.

### What are they?

DSDS are locations where members of the public can go to see the night sky which have better views of the stars than those found in heavily light polluted areas. They are easily accessible with many having disabled access.

## Garn Eiddel Car Park

Garn Eiddel Car Park is located on top of Maerdy mountain and provides an excellent panorama. The site is often frequented by astronomy groups from the neighbouring valleys who are happy for members of the public to participate in any of their observing sessions. The location has ample parking away from the main road but caution should be taken as the area can become extremely cold, so be prepared to wrap up warm as the skies will astound you.

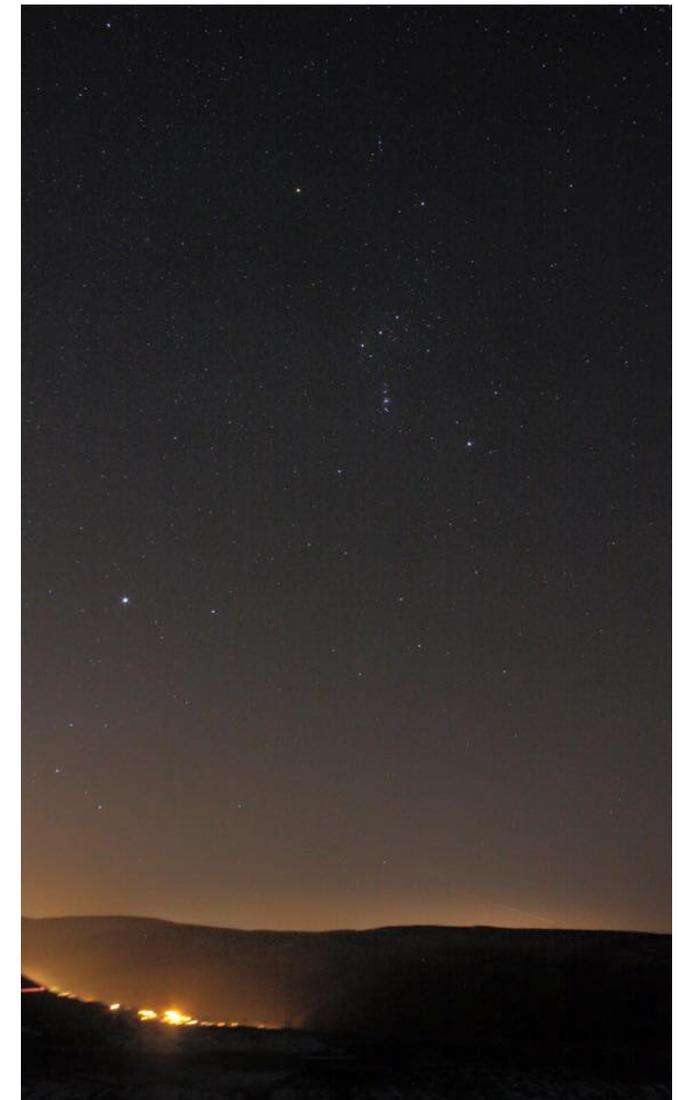
## What you can see

The night sky is constantly changing with seasonal constellations, planets, meteors and comets changing on a daily, monthly and seasonal basis. This guide will help you to discover the night sky for yourself and allow you to enjoy some Rhondda Cynon Taff's darkest areas.

# Dark Sky Discovery Site

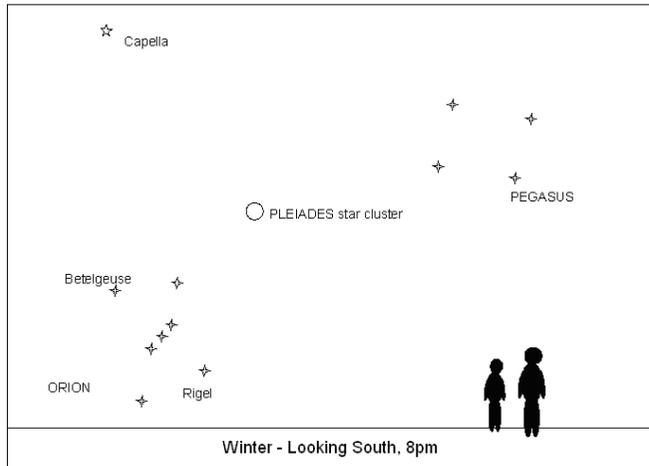
Garn Eiddel Car Park - Maerdy Mountain

Milky Way Class



## Facing South

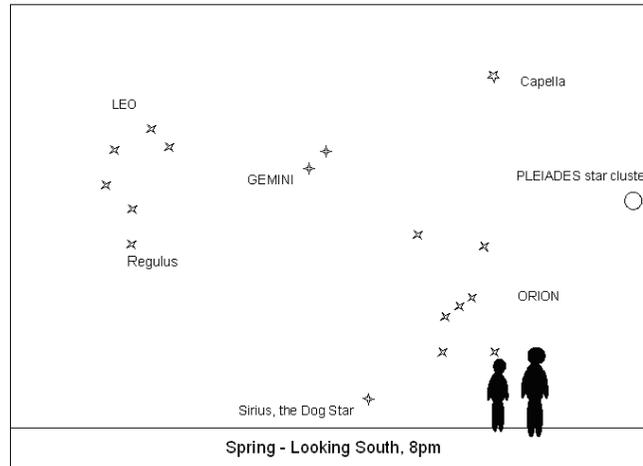
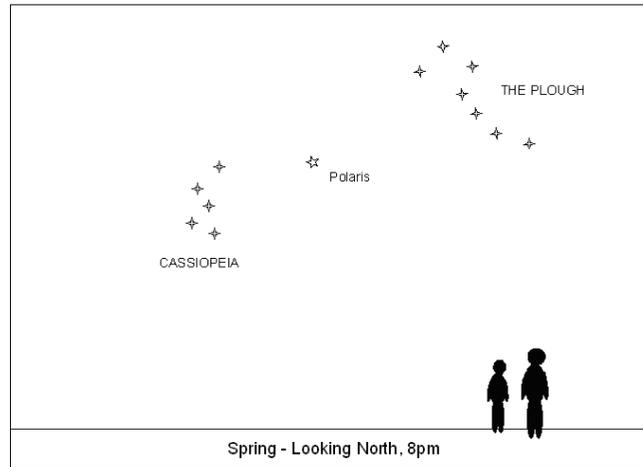
The stars in the southern sky change as the seasons change, the winter skies being perhaps the most exciting, and as it's nice and dark for longer, they're easier to see too! One of the best recognised constellations is in the sky, Orion the Hunter, with his Belt. Use the Belt to find other shapes by following the line of the belt right, till you come to a V-shape of stars – Taurus' head – and then a small group of faint stars – the Seven Sisters, or Pleiades cluster. If it's really dark and clear, look for Orion's nebula, a faint smudge on his sword, where new stars are being formed before your eyes! Follow the line of the belt left, and you come to Sirius,



## Spring Sky

### Facing South

The stars in the southern sky change as the seasons change. In spring, you can see Orion (who is visible all winter too), Gemini (the heads are marked, but you should be able to see the little stick-figures underneath on a clear night too. They lie towards Orion), Sirius and the Pleiades or Seven Sisters. To the left of Gemini, look for a backwards question mark, this is the head of Leo the Lion



## Summer Sky

### Facing South

The stars in the southern sky change as the seasons change. In summer, look out for the Summer Triangle, shown in the chart. It is made up of the stars Deneb, Vega and Altair. Deneb is the body of Cygnus, the swan, whose cross-shape is also shown. If you're very lucky, and get a very dark night, you might be able to see the Milky Way, our galaxy, down which Cygnus appears to fly.

## Autumn Sky

### Facing South

The stars in the southern sky change as the seasons change. As Summer moves into Autumn, look out for the Summer Triangle, shown in the chart. It is made up of the stars Deneb, Vega and Altair. Also up in the southern sky is the Great Square of Pegasus, which can help you find the Andromeda galaxy, above and to the left of the 'top left' star of the Square. If you are out later on, or into winter time, the cluster of the Seven Sisters becomes visible in the East, followed by the V shape of Taurus, then Orion the Hunter.

