

The following text, on Dark Skies in the North Pennines, is a draft of an addition to the current 'What's Special about the North Pennines' publication, which sets out the special qualities of the North Pennines AONB and forms part of the AONB Management Plan.

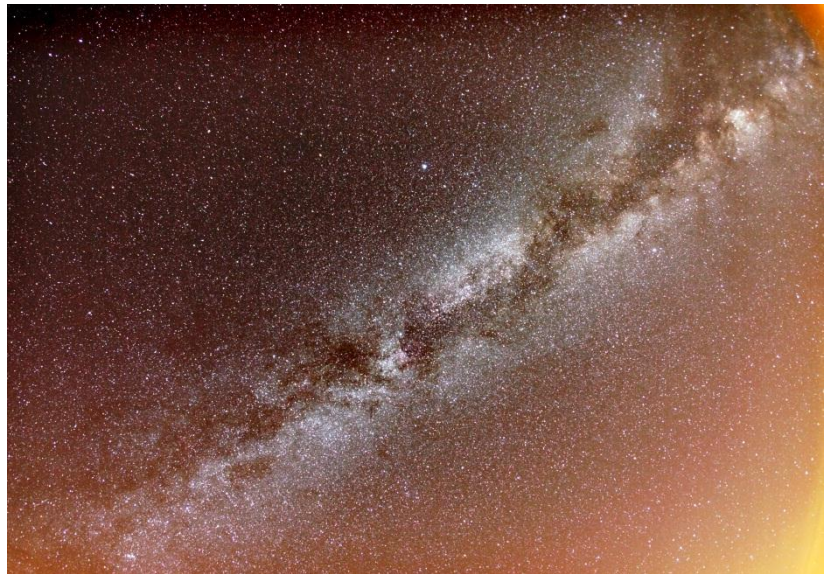
The main body of 'What's Special' will only have very minor changes and will then be incorporated into the new plan - it was fully consulted on when the last plan was being produced. The text is only intended as an introduction to the subject and to present some of the things required to keep this aspect of the area special.

Do you have any comments on this part of the What's Special document? Ideally it will not increase significantly in length.

Dark Night Skies

The North Pennines is rich in a quality which is being rapidly eroded from much of the rest of the country – truly dark night skies. To be in the heart of the moors on a clear night is to be surrounded by the dome of the most star-filled sky that can be found in England. The constellations and patterns of the stars we see in the sky today have remained the same as those seen by people throughout history; more than anything else we can see around us, the unchanging nature of the night sky, and our experience of it, is the aspect of nature that most links us to the first settlers in the North Pennines, and beyond to our most ancient ancestors.

In the darkest areas of the AONB the Milky Way can clearly be seen with the naked eye. This photograph, (*right*) taken above Rookhope by local astronomer Graham Relf, shows the Milky Way, with the band going from horizon to horizon.



The bright star in the photograph below is Zeta Orionis, the left-most of the three stars in Orion's belt. It is surrounded by various clouds of gas and dust, the most famous of which looks like a horse's head (the Horse Head Nebula).

The beauty to be seen in the sky above us offers many opportunities to discover more about



stars, planets and other wonders of the universe. Astronomy events held throughout the winter months have helped many people to appreciate their dark skies, whilst this also has the potential to attract visitors to the area outside the main tourism season.

c. Graham Relf, taken from Rookhope, Weardale

Brightening Skies

Over the last 20 years, the Campaign for the Protection Rural England has shown that the area of North East England with truly dark skies has decreased by 28%, making the AONB a particularly important dark sky space. The amount of 'sky glow' (the orange haze seen over urban areas) has increased by 1000% between 1993 and 2000. The high quality of the North Pennines' dark skies is continually threatened by artificial lights from development both within the AONB and beyond its boundaries. Views of the sky on the eastern edge of the AONB are limited by light pollution from the towns and cities of urban County Durham, Wearside and Tyneside.

Dark Skies Discovery Sites

In recognition of the spectacular night time display above the North Pennines, a number of 'Dark Sky Discovery Sites' (DSDS) have been designated. These exceptional places for stargazing were suggested for DSDS nomination by members of the public and local astronomers. Their spread across the AONB allows everyone to find somewhere to enjoy the night sky. Nearby Northumberland National Park has been designated one of the country's first Dark Skies Reserves; securing this status will be considered for the North Pennines, providing a higher level of both recognition and protection for this most remarkable of the AONB's special qualities.

Keeping our dark skies special and making the most of them means:

- Ensuring that Local Planning Authorities include in their Development Plans robust policies to protect dark night skies
- Installing lighting only where it is absolutely necessary for safety and security, and then making sure it is only focussed where needed – the North Pennines AONB Building Design Guide has useful information on lighting
- Helping people to increase their enjoyment, knowledge and understanding of the night sky and realising its potential for the visitor economy
- Supporting local astronomy groups and societies to engage with local communities
- Gathering evidence and support for the North Pennines to be designated as a Dark Skies Reserve.