

# DARK SKY DISCOVERY PACK

A NIGHT-TIME ADVENTURE AWAITS YOUR FAMILY!



#### WELCOME STARGAZERS

We are Friends of the Lake District, an independent charity and the only membership organisation dedicated to protecting and enhancing Cumbria's landscapes, including our amazing dark skies!

We believe that the Lake District offers some of the most spectacular and precious skyscapes in England and we want you to join us on an interstellar adventure.



Grab the family - let's go and explore together!



#### 5 FACTS ABOUT DARK SKIES





It's estimated 85% (some say higher) of the UK population has never seen the Milky Way due to the rapid rise of light pollution over the last-50 years.



Globally, light pollution across the earth's surface has been rising at the worrying rate of 2% every year for the last 4 years.



Dark skies are really important for lots of animals that go out and about at night. Light pollution from unnecessarily bright lights blinds and confuses them so that they can't feed or find a mate.



Just using your own eyes, you will be amazed how far you can see. In the dark, the galaxy known as Andromeda appears like a hazy glow to the naked eye but through binoculars it reveals itself as a disc of light.



Friends of the Lake District is leading work to gain internationally recognised 'Dark Skies Reserve' status in Cumbria, to help protect nocturnal wildlife and our views of the stars.

#### HOW TO SEE THE STARS



Thinking about going to stargazing for the first time?

Don't worry, here's a starter guide from Friends of the Lake District...



#### WHAT SHOULD YOU TAKE WITH YOU?

Getting out and about to see the dark skies is easy. All you need is your eyes and a dark spot. Wrap up warm and head out with your family to see a wild night-time show – nature's most amazing spectacle.

We'd always recommend dressing appropriately (hats, gloves and a warm coat) and if you're keen to spot something even more special, why not bring a telescope or binoculars to see even more detail? A compass is helpful too, so you know which direction to look for certain patterns of stars called constellations.

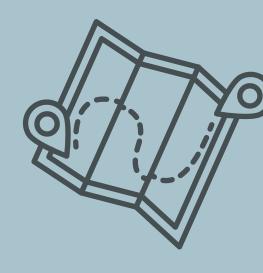
To help you get to the perfect stargazing spot, a red light torch is the best option as it won't affect your night vision – you can buy small red light torches, or you could even use a red rear bike light. Light pollution from non-red light torches, and outside lights such as streetlamps, has a huge impact on the sights you can see!

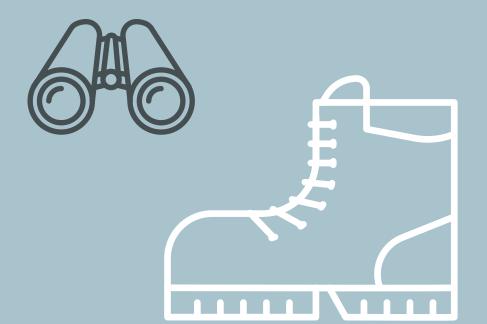
Don't forget, Cumbria has some amazing places to eat and drink, so if you're hungry there's lots of options before you head out!

#### WHERE CAN YOU GO?

Here in Cumbria there's some stunning places to see the stars. Why not visit the Dark Sky Discovery site of Low Gillerthwaite Field Centre at Ennerdale or the beautiful Wasdale Valley, both located in west Cumbria.

Asby Common in the Eden Valley is a brilliant, open space with minimal light pollution and Grizedale Forest has regular star gazing events for families – so with so many options, what are you waiting for? Go and explore the night sky in Cumbria.





#### HOW TO SEE THE STARS



#### WANT TO CAPTURE SOME MEMORIES?

If you're snap happy and you want to capture the sky coming to life, here's some tips to capture the best photo:

Use a good quality camera or highquality smartphone.

Make sure auto-focus is off – this can stop you catching the best image in the low light of night.

Increase the exposure of your shot to capture more light (your grown up can help with this) - aim for a minimum of 20 seconds and keep the camera steady!

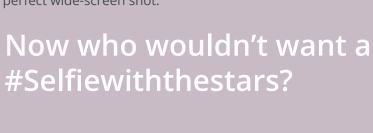
Don't be tempted to zoom into an individual star on the night, this can be done later when you've captured the perfect wide-screen shot.

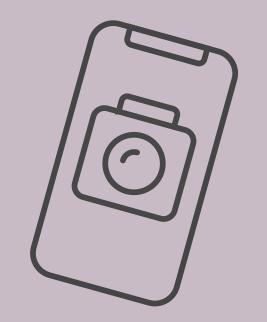
#### WHAT APPS CAN HELP YOU SPOT THE STARS?

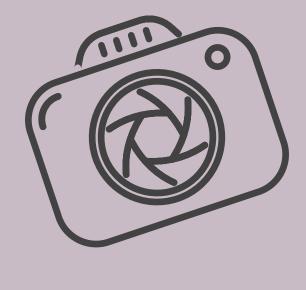
Enjoying astronomy? Did you know there are lots of free apps available for smartphones and tablets that use your device's inbuilt GPS to help you find your way around the stars? Some of our favourites include the NASA app, Star Chart, GoSkyWatch Planetarium and Star & Planet Finder.

Many of these use augmented reality so you can point your smartphone or tablet to the sky and see what's there!









## STAR MAPS - WHAT WILL YOU SEE?



To see the best sights, choose a clear night where the sky isn't clouded over.

Head out into a wide-open space and get looking.
Remember your eyes can take up to 20 minutes to fully adapt, and stay away from any light pollution.

As well as stars you can also spot planets, galaxies and even the International Space Station whizzing across the sky like a bright star!

Different constellations can be seen at different times of the year - here are some of the most recognisable that appear over the UK.









How many constellations can you see in the sky?



Don't forget, we're working hard to protect Cumbria's dark skies for the stars and for wildlife. To help, **visit Friends of the Lake District's website** and make a donation. Alternatively you can donate by text to **70085** for the cost of a standard rate message - just message **DARKSKIES** along with your chosen donation amount (eg DARKSKIES 3 to donate £3).

## ANIMAL MAGIC AT NIGHT



It's not just us humans that love Cumbria's dark skies. Lack of light pollution is a welcome sight for a range of animals, including some nocturnal creatures.

When you're out and about stargazing, you could very well spot deer, foxes, badgers, bats, owls and hedgehogs to name a few.



### DISCOVER MORE ABOUT DARK SKIES





To find out about stargazing locations and events near you, visit:

gostargazing.co.uk



A brilliant website for finding out what constellation will be visible from your specific location:

staratlas.com



Play 'Spot the International Space Station' with the help of NASAs website:

spotthestation.nasa.gov



To find out what to look out for in the night sky each month, see:

www.jb.man.ac.uk/astronomy/nightsky



The BBC's Sky at Night provides regular insights into the world of space and astronomy

www.bbc.co.uk/programmes/b006mk7h



For the world's most stunning photographs of the cosmos, explore:

www.rmg.co.uk/whats-on/astronomy-photographer-year/galleries/2019/overall-winners



For more updates and tips from Friends of the Lake District, sign up for our newsletter:

www.friendsofthelakedistrict.org.uk/newsletter-signup

