

WHAT CAN I SEE?

From Gigha, you will be able to see as many as 2000 stars on a clear, moonless night, along with other wonders such as the Milky Way, planets, meteors and satellites! Almost anywhere on the island should be good enough for a dark skies experience. At certain times when conditions are just right you might be lucky enough to see the Northern Lights looking north from Gigha's Dark Sky Theatre. With binoculars or a telescope you can observe the night sky in much more detail.

WHAT ARE CONSTELLATIONS?

Constellations, like Orion (the hunter) and Cygnus (the swan), are groups of stars that appear to be distinctive or form patterns. They are useful in helping us find our way around the night sky. Many are associated with mythological figures as they have been recognised since ancient times. Some groups of stars such as The Plough are not constellations but are still recognised as a group known as asterisms.

WHY DOES THE NIGHT SKY CHANGE?

As the seasons change so does our view of the night sky and we see different constellations as the year passes. During the night, stars and planets also appear to move from east to west but it is actually the rotation of the Earth that causes this optical illusion. The best months to stargaze are from mid-August through to early-May as it never gets truly dark in mid-summer. If the Moon is shining bright you won't see so many stars.

CAN I SEE ANY PLANETS?

Although planets look like stars, their motions through our sky are much more complicated. On any given day, they rise and set like a star would, but like the sun and the moon, they gradually wander across our night sky and can be seen in the east, south and west. They are not visible all the time but you can usually recognise a planet because it doesn't twinkle like a star.

6 TOP TIPS FOR STARGAZING



Find a dark place such as Gigha's Dark Sky Theatre which is located at the end of the road heading north. Stargazing is best under the darkest night sky you can find.



Let your eyes adjust to the darkness for around 10 to 20 minutes. Once you have your night vision don't spoil it by looking at white light.



Turn out the lights. Use a torch with red light, rather than white. You can tape red cellophane to cover a torch light. Switch off car lights near stargazers.



Use binoculars to get a closer look. Binoculars with 10 x 50 magnification are best. You will be able to see galaxies, star clusters and colourful double stars.



Download a stargazing app for your mobile phone. This will help you find your way around the night sky, but make sure you use the night mode setting to protect your night vision.



Wrap up warm, bring a hot drink, and sit back and enjoy the show above.



DISCOVER GIGHA'S DARK SKIES



WHAT IS THE MOON'S CONNECTION WITH GIGHA?

High tides on Gigha are caused by the Moon's gravitational pull which causes Earth's water to bulge out on the side closest to and the side farthest from the Moon. The best time to observe the Moon is 'first quarter' when just half is lit by the Sun. We call it 'first quarter' because the Moon has travelled about a quarter of the way around the Earth since the new moon (when no part of the Moon is visible).

LIGHT POLLUTION

Gigha has very low levels of light pollution and this makes it a very special place to enjoy a really dark sky. However, all across our planet light pollution is increasing. The glow you often see spilling out into the night sky from cities and buildings makes it much harder to see the stars. This is due to too much light and poorly designed or poorly placed outdoor lighting. This is a waste of money and energy, and disturbs wildlife such as moths and birds, as well as causing health problems in humans. It is important that we protect our night sky for future generations.

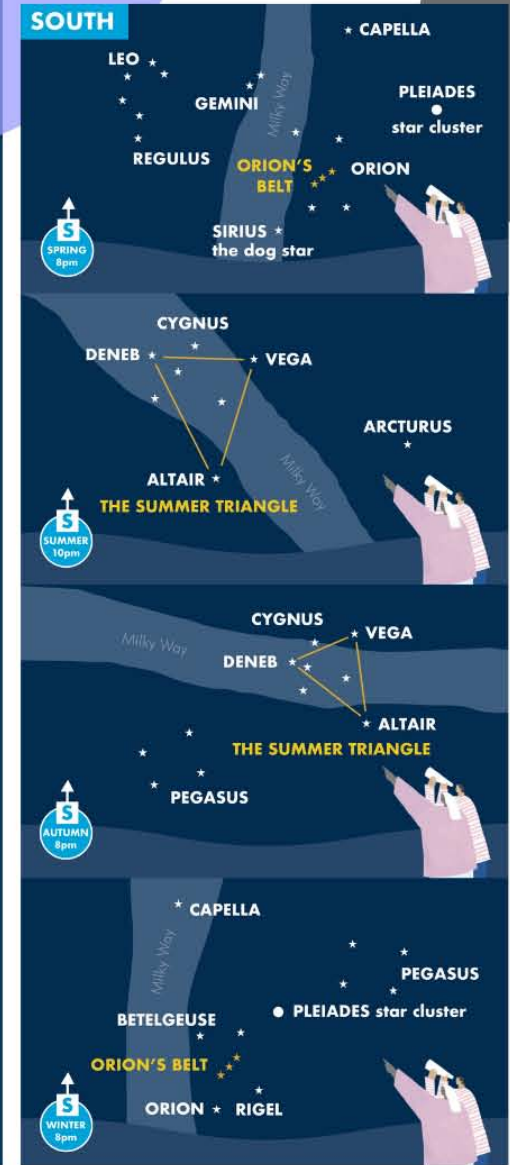
PROTECTING THE NIGHT SKY STARTS WITH YOU!

1. LIGHT ONLY WHAT & WHEN YOU NEED
2. SHIELD LIGHTS & POINT THEM DOWN
3. USE LOW-ENERGY EFFICIENT LIGHT BULBS WITH WARM LIGHT



STARGAZING ON GIGHA: NORTH VIEW

The Plough is an easily recognised group of stars. Looking like a little saucepan, it's always above the horizon. The two stars furthest from 'the handle' point towards the North Star (Polaris), so you can always find north. On the other side of Polaris is the w-shaped constellation of Cassiopeia.



STARGAZING ON GIGHA: SOUTH VIEW

These stars change throughout the year. Look for the distinctive constellations of Orion, Gemini, and the brightest star in the sky, Sirius. Try and spot the three stars that make up the Summer Triangle and if the sky is dark enough, when the Moon is absent, you should see the Milky Way.