outing of the second se

The night sky and its celestial spectacles have long captivated people across the world - and astrotourism, a once-unsung part of the tourism industry, is soaring to new heights as a stellar option for astronomy enthusiasts, environmentalists, and busy workers seeking to reconnect with nature

WORDS YI-HWA HANNA

or as long as humankind has existed, people have looked up to the stars for inspiration, guidance, and a sense of wonder. Throughout the ages, celestial bodies have been used for various forms of navigation. Ancient civilisations used them to travel across deserts and the sea, for timekeeping and marking changes in the season, and in the creation of mythology as well as the development of divine belief systems. They've inspired some of the greatest thinkers and explorers throughout history, with some of the earliest records of astronomical observations dating back to what is now known as the Middle East.

The first sky maps in history were

recorded by the Assyro-Babylonians of Mesopotamia, across presentday Iraq and Syria. Early Greek astronomers then studied the stars further. In one particularly notable advancement, a mathematician named Pythagoras realised through his observations that the morning and evening star were one and the same – the planet Venus. These evolving learnings then spread to Ancient Egypt and across the Islamic world; they were furthered as ancient civilisations such as the Mayans and the natives of North America came to observations and understandings of their own; and now, astronomy is a field studied across the world.

Some of the greatest discoveries of our universe (and our place in

it) have risen from astronomical findings, from dark energy and neutrinos to ripples in the fabric of spacetime, extraplanetary systems and solar systems beyond our own, interstellar visitors, the Higgs Boson - a subatomic particle that explained how things in the universe (from the stars and planets to people and other living things) beget mass - and so much more. Yet you don't have to be an astronomer or physicist to be fascinated by and appreciate these astral wonders. As city-dwellers across the world increasingly crave the sight of a sky full of stars - one that is free of the light pollution caused by expanding urbanisation - astrotourism is emerging as a curious new trend climbing to new, exciting heights.

Taking night sky "astrophotography from a smart phone is very possible with . certain low light, night mode, and exposureadjusted settings and techniques. Or to simply illuminate the pursuit of star-gazing, SkyView, Night Sky, and Star Walk are the most

well-loved

apps.

SHOOTING STARS

- LITERALLY!



So what exactly constitutes astrotourism? Essentially, the term encompasses any type of trip in which one might travel to enjoy a spot of stargazing, or indulge their appreciation of celestial wonder. The term "Dark Sky Tourism" is an offshoot of astrotourism, defining visitation to remote and unlit areas with the intent of observing celestial objects, from the moon to planets and more. It can involve heading to an observatory or grabbing a telescope, or simply sitting outdoors and looking up, perhaps in a large park or secluded resort where you can see the stars.

A report by Great American Eclipse predicted that between one to four million people within the United States alone would travel to view the total solar eclipse that took place in early April 2024. Meanwhile, surveys from the tourism board of Western Australia in 2021 found that more than 50 per cent of respondents were interested in Dark Sky Tourism, even if many weren't familiar with the term itself.

In the US, an association called DarkSky International has made it its mission to identify and conserve "Dark Sky Places" around the world, working with communities, municipalities, and the public alike to ensure such places can be certified and protected from the spread of urban light pollution. Flagstaff, Arizona, was named the first official Dark Sky City in 2001, and the association has now certified more than 200 Dark Sky Places in 22 countries on six continents, from



parks and reserves to sanctuaries, lodging, and even sites close to urban development. Outside of the US, these locations can be found in Spain, New Zealand, England, Japan, Australia, Wales, Greece, South Africa, France, Scotland, the Netherlands, Germany, Chile, Switzerland, Taiwan, Croatia, Mexico, Guatemala, Ireland, Denmark Namibia. Canada, Austria, and the island of Niue, to name some.

This year, Red Sea Global's The Red Sea, in Saudi Arabia, was designated the Dark Sky Reserve title, making it the first place to receive the official certification in the Middle East. Once complete, The Red Sea will be the world's largest Dark Sky Reserve. The first two luxury resorts to open at this destination, the Six Senses Southern Dunes and the St. Regis Red

TRAVEL TRENDS

TOP: A couple stargazing in the desert of AlUla, in Saudi ABOVE: Northern

Lights in Iceland

Sea Resort, have both implemented unique lighting strategies that will not only ensure that guests are able to see a uniquely star-lit sky each night, but will also help protect local wildlife. With the effects of intense light pollution able to alter essential reactions in nocturnal or light-sensitive animals, environments that blur the differentiation between day and night can wreak havoc on the natural ecosystems in these areas – and dark sky efforts can help to preserve them.

The latter could be another reason behind the rising interest in astrotourism. A growing interest in sustainability-supporting tourism, combined with a heightened desire for escapist travel and the discovery of lesser-known places, have also fed into the draw towards this otherwise niche market. Not only do these locations allow travellers to get away from their fast-paced modern life for a bit of peace and quiet away from the crowds, they also help people reconnect with nature. They enable visitors to reap the psychological, physical, and even emotional benefits that can be gleaned from this deeper connection to the great outdoors, and the widened perspective and wonder inspired by the cosmos. Indeed, astrotourism seems to be a perfect juncture between these adjacent growing trends: if ecotourism, escapism travel, and wellness tourism were to be placed on a Venn diagram, astrotourism would fit neatly into the overlap.

But it isn't only official Dark Sky certified locations that are taking advantage of the interest in astrotourism – and the idea has been budding for longer than many of us may think. The Office of Astronomy for Development, which has an observatory in Cape Town, had already launched a project titled "Development of Astro Tourism in South West Asia" back in 2016. It aimed to study and propose the development of astrotourism in the SWA region, as well as the Middle East and North Africa. Deep in the Karoo desert, in a small town called Carnarvon, the South African → Radio Astronomy Observatory

operates one of the world's largest radio telescopes, and has been offering astrotourism experiences since 2018. That same year, the Ladkh, Indiabased Global Himalayan Expedition partnered with the International Astronomical Union – Office of Astronomy for Development (which was founded in Belgium and is headquartered in France) to develop an astrotourism model highlighting sustainable travel to remote areas, that could help generate revenue for local communities with a low impact on the environment. Locals from up to 15 villages were trained in "astrostays".

BELOW:

Bioluminescent

Nova Maldives

plankton glowing

on the beaches at

Across Scandinavia and in Iceland, the chance to see another famous celestial phenomena – the Northern Lights – has long been a draw, while in Africa, Namibia's and Beyond Sossusvlei Desert Lodge – located in the NamibRand reserve - not only has in-house astronomers, but it also has its own observatory. Guests staying in the luxurious suites (which each come with a private plunge pool and fireplace) can also use the property's highly advanced telescope, or marvel at the cosmos from the retractable skylight above each bed. The UAE's Qasr Al Sarab Desert Resort by Anantara also offers guests access to a telescope, as well as guided night walks with their in-house astronomy expert and "Star Guru".

Meanwhile, in Hawaii, the Four Seasons Resort Maui at Wailea can take guests on an unforgettable journey aboard a private catamaran, wherein they can travel back in time as they experience how ancient Polynesian people would use the starry skies, oceanic movements, the wind, and other gifts of nature to navigate the seas. At another island across the world, another night-time pleasure awaits at Nova Maldives: the chance to witness the breathtaking sight of aquatic bioluminescence. Best viewed on a moonless night between June to November, the spectacle lights the shoreline with the mesmerising glow of bioluminescent plankton that not only drifts in its waters, but also often hitches a ride on the South Ari Atoll's stunning marine life. The result is the

In Saudi Arabia's AlUla – just a hop and a skip away from The Red Sea – the sparkling night sky is a key attraction. Visitors can be guided by local and international experts as they lie back and look at the stars from aweinspiring remote locations, such as the mystical rock formations at Gharameel. Although these ancient sites have stood as brilliant stargazing spots for centuries, the kingdom's foray into modern astrotourism has been fairly



Dark Sky tourism involves travel to unlit, remote areas to observe celestial objects

recent, with its first-ever official event on the subject having taken place in 2022. Held at Al-Tubayq, a natural reserve home to almost 750 types of flora and fauna, in partnership with the University of Tabuk and the King Salman bin Abdulaziz Royal Reserve Development Authority, visitors gathered to witness the convergence of Jupiter and the moon. In August 2024, The Royal Commission for AlUla also announced a collaboration with the SETI Institute - a nonprofit organisation dedicated to looking for intelligent life in other star systems (the acronym stands for "Search for

Extraterrestrial Intelligence"). A Laser SETI instrument has been installed at AlUla Manara Observatory to monitor the sky for laser flashes that could indicate the presence of extra-terrestrial technology. In the long run, it is also hoped that the station will become part of a broader network that scans the night sky of the entire northern hemisphere, transforming AlUla from a stellar tourism destination to one that is also a dynamic hub for the global exchange of science and knowledge.

Nearby, Qatar has also embraced the allure of celestial-themed travel: in 2022, the Qatar National Tourism Council partnered with Gulf Adventures to launch a series of astrotourism experiences in the Qatari desert, from desert camping under the stars to astronomer-guided night walks, or specially-timed excursions to see a rare and spectacular supermoon.

To history buffs, it should come as a delight that modern astrotourism is gaining a firm foothold in the Middle East. After all, it is arguably where humankind's study of astronomy first started. Long before the telescope was invented, the astrolabe was the go-to tool for marking star charts and heavenly bodies, and the many applications these could lead to. A mechanical device, the astrolabe was said to be a blend of the planisphere and dioptra. Although its origins are traced back to Hellenistic civilisations in the 6th century, it was refined in the Middle East, and was widely used across the Arab world during the Golden Age, or the medieval Islamic era. The astronomical tool had a multitude of purposes, being used as a calculator, navigation device, inclinometer, and clock. It could help determine prayer times, point to the direction of Mecca, or be used to find one's way home.

Thankfully, modern tourists don't need to use a complex albeit beautiful and intricate ancient instrument to be guided through an unforgettable journey under the stars. One of the many tourism bodies and exceptional resorts around the world that are embracing the joys of astrotourism can lead us there instead.