

Dancing with the Moonlit Night

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As a landscape photographer who has lived in Orkney for over twenty years, I have come to enjoy the challenge of capturing unique images that stand out from the multitude of shots that currently drown social media and the internet. In the past I tended to photograph Orkney's landscapes, seascapes, and historic sites in sunny, blue-sky conditions, but in recent years I have been patiently creating a portfolio of images taken in poor light, in bad weather, and at night.

Orkney's wealth of historic sites, some dating back to 3500 BC, are an ideal subject to capture at night, as it is possible to accentuate the essence of mystery and intrigue that these sites ooze. There are no better examples than the Ring of Brodgar (below) and the Standing Stones of Stenness, two of the keystones of the UNESCO Heart of Neolithic Orkney World Heritage Site, since both monuments offer countless interpretations that can be played upon by clever use of lighting (natural or artificial), thereby enhancing the feeling of mystery and intrigue. Numerous other historic locations, such as the Iron-Age Broch of Gurness and Orphir's Norse St Nicholas Round Kirk, invite experimentation with night-time photography, a genre to which Orkney particularly lends itself, owing to its lack of light pollution and skyline obstructions, such as trees or buildings.

The Neolithic henge at Brodgar was built approximately 4500 years ago and originally comprised sixty megaliths, of

which only twenty-seven remain, some approaching five metres in height. A considerable rock-cut ditch up to three metres deep and seven metres wide was also constructed around the outside of the stone circle. The purpose of the circle and ditch remains a mystery, with theories ranging from use as an astronomical observatory to use as some kind of ceremonial monument.

The Brodgar stone circle sits on a narrow strip of land on Orkney's Mainland, between the Harray and Stenness lochs – an open setting providing uninhibited views in all directions and ample opportunities – and often ideal conditions, for the photographer to capture the stones in varied light and weather combinations. Living only thirteen kilometres away, I have availed of many such opportunities to experiment with star-trails, the Milky Way and the Aurora Borealis, and have built up quite a portfolio of shots of this location. Reviewing this recently, it dawned on me that the only light I had not played with was moonlight. Thus, my new project was hatched – to shoot the Brodgar stones with a setting full moon.

Studious pre-planning was required to get this shot right, so I consulted the Photographer's Ephemeris (www.photoephemeris.com) to find a day when a full moon would set around sunrise – I wanted some ambient daylight to balance the brightness of the moon. I also had to find a



pleasing composition of non-overlapping stones looking north-west towards the moon. Having visited the site many times, I had a fairly good idea where to go for this and knew that I would be able to fine-tune it on the night.

With the help of the Ephemeris, I earmarked a couple of potential days in February. Fortunately, the weather gods were kind to me, and on a clear morning before sunrise I cycled to the stones. With the moon due to set in the north-western sky shortly before sunrise, all things going well I would see it set behind the stones during pre-dawn. Having set up my heavy zoom lens on a tripod and found a suitable composition, I encountered my first obstacle – the ubiquitous Orkney wind. It was only a moderate breeze, but camera and lens were struggling to stay still on the tripod, and I knew that any movement would be exaggerated by the zoom. I just had to hope that I would get one stable shot.

The second challenge was trying to get both the stones and the moon in sharp focus. This was clearly not possible in one exposure, so I decided to take two consecutive shots – one focused on the moon, the other on the stones – and then later combine them in processing. As for exposure, I spot metered on the moon so that it would not appear washed out. Waiting until the moon had fallen just above the stones before pressing the shutter, I had a ten-minute window to take my exposures before the moon set on the horizon. Reviewing the resultant shots, I was

pleased to see that the twilight ambient daylight balanced the moonlight well – a mere fifteen-minute shift in the moonset time would have made balancing daylight and moonlight very difficult.

As the moon fell to the horizon and the sky lightened, I decided to call it a day, confident that I had captured some unique images of the fascinating but over-photographed stones. Pedalling home, I pondered whether any of those huge megaliths could possibly mark the spot on the horizon where the moon rises or sets at certain times of the year. Maybe, just maybe, the Ring of Brodgar was used as a lunar observatory by ancient humans. The truth is that, despite decades of study and theorising by experts, nobody knows.

A similar level of mystery and speculation shrouds the nearby Standing Stones of Stenness (below). These Neolithic stones date back to 3100 BC and currently consist of four monoliths (up to six metres high) and a large central slab structure. Originally there were twelve stones in a thirty-two by thirty metre elliptical orientation. The structure was surrounded by a six-metre-wide ditch, and bank with an eight-metre-wide entrance from the north. Like the Ring of Brodgar, it would have taken a monumental effort to construct. But why was it constructed? Was it some kind of temple or celestial observatory? Incidentally, some archaeologists believe that recent excavations at the Ness of Brodgar – another Neolithic site located between



the Stones of Stenness and the Ring of Brodgar – reveal a Neolithic temple dating back to 3000 BC. Time, and further excavations at the Ness of Brodgar, may shed more light on some or all of these sites, but the sheer size of the original stone circle structures tells us that they were of huge importance to the people of the time.

Photographically, the Stones of Stenness offer a bigger challenge than the Ring of Brodgar, because of the proximity of buildings and associated light pollution at night. For night shots I generally experiment with both artificial and natural light. One autumn night a few years ago I decided to illuminate the huge monoliths with my torch while the camera was taking a thirty-second-long exposure looking towards the north-western sky. I included both the setting moon and a faint Milky Way star band in the shot to show off Orkney's big sky. When I look at this shot, I wonder what Neolithic humans would have thought of these celestial lights and whether they played a significant role in their culture. Is it possible that the elliptical orientation of the henge facing north-west was a nod to a celestial event that acted as some kind of marker? A separate isolated standing stone located a short distance north of Stenness Stones and known as the Watchstone is a spot from which, at the winter solstice, the sun can be viewed setting in a prominent notch in the Hoy hills to the south-west. Could that have been the reason for the erection of the stone in that position? Again, nobody knows.

Aside from the archaeological treasures comprised in the UNESCO Heart of Neolithic Orkney World Heritage Site, there are numerous other historically significant relics in Orkney, some of which date back to the Bronze and Iron Ages, and some to the more recent Norse period. From the Iron-Age there is the Broch of Gurness (below) on the north-west coast of Orkney's Mainland, where I have recently been experimenting with night-time shots featuring auroral displays. The broch was built between 200 BC and 400 BC on the coast at Aikerness, overlooking Eynhallow Sound. It has a four metre base and once stood eight to thirteen metres high, in contrast to its current ruined height of three metres. Originally a fort and then an Iron-Age settlement of around 200–400 people, the site was regenerated by the Picts around AD 400, and remains of Viking burials have been found there relatively recently. Its northerly aspect makes it ideal for capturing the Aurora Borealis as they only appear in the northern sky – hence the expression Northern Lights. Of several attempts to capture the broch under an auroral display, most have ended in my capturing only star trails while waiting patiently for an Aurora to appear. However, on a night-trip in March 2020 my perseverance was rewarded. Lighting the broch with my torch while my tripod-mounted camera took a 20-second exposure, I managed to capture a faint but colourful display behind the broch, with the Milky Way also visible in the shot.



Again, when I take these shots, I often ask myself what Iron-Age humans would have thought about these displays. Were the lights believed to convey a message from some mythical god, for example? We do know that the Northern Lights feature prominently in Norse mythology.

The Norse era, from approximately AD 800 to 1400, was a significant period in Orkney's history. The twelfth-century St Magnus Cathedral in Kirkwall is Orkney's most magnificent landmark and is of international significance. The story of St Magnus is a fascinating one; and it was Magnus's cousin Earl Haakon who built St Nicholas Round Kirk in Orphir, on his return from a pilgrimage to the Holy Land to atone for the ordering of Magnus's death on Egilsay in 1116. The story goes that Earl Haakon built the twelfth-century church to the plan of the Church of the Holy Sepulchre in Jerusalem, which he visited on his pilgrimage. This historic round church is now Scotland's only surviving medieval circular church.

Photographically, Orphir Round Kirk and its associated graveyard (below) is another ideal site to shoot at night because of its freedom from artificial light pollution and nearby houses. Having managed to capture this church under star trails and with a full moon, my next challenge was to shoot the Milky Way above it, together with the

mystical gravestones. To capture the Milky Way, ideally a dark moonless sky and light winds are needed. Again, patience is the key, and eventually, one October night in 2019, a brief weather window allowed me the opportunity to capture my preconceived idea. With careful torchlit lighting of the gravestones and a clear night sky with the Milky Way, I managed to create an atmospheric image.

Orkney boasts many other historic sites which lend themselves to night-time photography projects – the St Magnus Cathedral with a full moon, the Ring of Brodgar under a big sky with star trails, and the Norse ruins on the Brough of Birsay under star-trails to name but a few. Fortunately, Orkney's freedom from light pollution and its ever-present big sky will offer me many future opportunities to expand my portfolio, while also experiencing the thrill of the unsolved mysteries of Orkney's ancient sites.

Mark Ferguson is an award-winning photographer based on Orkney. His extraordinary photographs in the present article are: Ring of Brodgar Moonset (page 9), Stones of Stenness Nightscape (10), Broch of Gurness with Aurora (11), Orphir Round Church Gravestones (12). For further information: www.markfergusonphotography.co.uk

