

# IRELAND'S ANCIENT CELESTIAL SITES

BY ROSAMUND BURTON

THE MEGALITHIC MONUMENTS OF THE EMERALD ISLE REVEAL THE ANCIENTS' DEEP KNOWLEDGE OF THE MOVEMENTS OF THE HEAVENLY BODIES.

**The bus wends its way from Brú na Bóinne visitor centre along the narrow country lanes to Newgrange. This megalithic site on the bend of the River Boyne was built 5000 years ago. An hour's drive north of Dublin, it is one of Ireland's most popular tourist destinations.**

Since Newgrange was restored in the 1970s, the steady stream of visitors has grown and grown. It's a place about which I've heard and read so much and finally I'm here, looking at this large mound that's more than 76m in diameter, with its grassy knoll and white quartz and granite façade.

## NEWGRANGE

This ancient monument, older than Stonehenge and the Great Pyramids, got the name Newgrange when it was acquired by the Cistercian Abbey at nearby Mellifont in the 12th century. Before then, it was known as the Fairy Mound and there's certainly a sense of otherworldliness here.

In front is the famous entrance stone, decorated with its beautiful spiral designs. Behind this is the entrance to the "passage tomb". Single file, we follow our tour guide down the 19m narrow stone passage to a large chamber with three smaller chambers off it. It has a high vaulted stone roof, built of layers of rock and sealed with a capstone, which after 5000 years is still waterproof. On one stone is carved a triple spiral; on another a fern leaf. Elsewhere, zigzags and spirals adorn the ceiling.

In each of the three chambers is a basin stone, in which it was suggested that human bones were put. Cremated bones have also been found, which has led archaeologists to refer to Newgrange as a "passage tomb" and conclude it was constructed as a burial site.

But what fascinates the thousands of annual visitors, myself included, is the alignment of the passage and the roof box above it to the sunrise of the winter solstice on December 21. As the sun rises, the beam broadens and moves down the passage. On the shortest day of the year and for a number of days before and after, the sunlight enters the roof box, directly above the passage, and hits the edge of the basin stone at the back of the chamber. Astrological calculations have shown that at the time of construction the ray of dawning morning sunlight would have actually hit the back wall. Today the chamber is lit up for 17 minutes.

At the end of September every year there is a lottery and 50 names are drawn: 10 for each morning in December that the chamber is lit up. This experience is re-enacted for us now. For a moment, the chamber is plunged into darkness. As the group stands in silence in the heart of this ancient monument, I feel a deep sense of connection with the Earth. It's impossible to deny how sacred and special this place feels. Then, when the beam of light illuminates the chamber, I'm

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almost overwhelmed by emotion. It's a truly awesome experience.

Back outside, the guide draws our attention to the vertical line down the middle of the entrance stone. This line is believed to delineate the sun's position at the winter solstice. On the left-hand side are anti-clockwise spirals that form a triple spiral, thought to represent the shortening days before the solstice. On the right-hand side of the line, a clockwise spiral metamorphoses into quadrangles, believed to symbolise the lengthening days and triumph of light over darkness.

## KNOWTH

Newgrange is one of three ancient sites of Brú na Bóinne; the other two are Knowth and Dowth. Another short bus ride takes me from the visitor centre to Knowth and I arrive to find a cluster of small grass-covered mounds around the main one. Excavation of the site with its huge main mound and 16 satellite ones took place between 1962 and 2002; it's now considered one of the world's most outstanding prehistoric sites.

Knowth was built 500 years before Newgrange and has many layers of history. Not only was the top of the mound inhabited during the Iron Age, it was also an early Christian settlement and later the monks of Mellifont Abbey built an oratory on it. I walk up to the top of the mound and am astonished by the wide space and panoramic views in every direction.

As we walk round to the eastern side of the main mound, the guide points out its 127 kerbstones. Knowth is home to more than a quarter of all the known megalithic art in Europe and 90 of these large stones are decorated. The spiral is the most common motif, but there are also zigzags, wavy lines and concentric circles. On one stone is a sundial and beside it a large spiral. ➔

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Clockwise from far left: Newgrange; Back stone, Cairn T, Loughcrew; Sheep on Carnbane East, Loughcrew; Hawthorn, Hill of Tara; the Fairy Tree, Hill of Tara; a kerbstone, Knowth. Opening page: Newgrange.

In the early 1980s, Martin Brennan, the author of *The Stones of Time*, opened the world's eyes to the astrological significance of Ireland's megalithic mounds. Knowth has two long passages penetrating deep into the main mound, which sadly are not open to the public. Facing east and west, they both have large entrance stones with a vertical line down the middle of them. According to Martin Brennan, the shadow of the standing stone in front of the eastern entrance stone hits the vertical line at the equinox sunrise and the shadow of the standing stone in front of the western entrance stone hits the vertical line at sunset on the equinox.

Making solar observations in Ireland can be a tricky business due to the propensity for rain and clouds, but Martin Brennan and a couple of associates observed and photographed the sunset at Knowth six days before the autumn equinox and saw the beam of light penetrating the chamber at the end of the 34m-long western passage.

The eastern passage is 40m long. It is absolutely straight and the longest passage of this kind in the world. A huge concrete slab has been constructed at its entrance, however, so it's currently impossible to see the sunlight penetrate the chamber at the end.

Much of the archaeological thinking believes that both Newgrange and Knowth were passage tombs. However, there is convincing evidence that these mounds were used for astronomical observation. In his book, Martin Brennan gives a convincing interpretation of some of the symbols depicted on the kerbstones at Knowth. He believes the wavy lines and crescents are both representative of the moon, while the spiral depicts the sun. His theory is that these designs are, in fact, detailed recordings of the movement of the sun, moon and planets.

### DOWTH

Dowth is like the poor relation. No guided tours go here and no excavation or reconstruction has taken place here in recent times. However, in the 19th century, much of the top of the

mound was removed, resulting in the crater shape it bears today. The Irish for Dowth is *Dubad*, which means "darkness" or "place of darkness". I'm alone here and slowly walk around the forgotten and neglected mound. I peer through the bars of the iron gates in the low entrances of the two passages. Later, I learn that the short 3.3m south passage and chamber are aligned to the winter solstice sunset.

### THE HILL OF TARA

The following day, I visit the Hill of Tara. It's a warm, sunny Sunday in late spring and families, couples and groups of friends roam these 100 acres of open grassland with its banks of speedwells and buttercups, enjoying the sunshine.

Tara in Irish is *Temair*, which means "sanctuary" or "sacred space". With its 5000 years of history, this was a place of ceremony and worship as well as Ireland's seat of power, where the country's kings were inaugurated until the Middle Ages.

In front of the main mounds of Tara are two parallel banks of earth over 200m long, thought to be the site of a great banqueting hall. Many archaeologists also believe they were constructed to form a ceremonial approach up to the great hill.

The oldest mound on the hill is the Mound of the Hostages, built in 3000 BCE. Today, it's not possible to enter the passage of the mound because it's closed for renovation, but apparently this passage is aligned to the cross-quarter days, the ancient festivals of Imbolc and Samhain, in early February and November.

Instead, I walk up to Teach Cormaic and the Forrad, large mounds that were built later, both surrounded by ditches. On top of Forrad is the famous Lia Fáil, the Stone of Destiny. This sacred stone is said to have been brought to Tara by the Tuatha Dé Danaan, the gods who came to Ireland enshrouded in a magical mist before the arrival of the Milesians, from whom the Irish today are believed to be descended. When the mortals defeated the gods, they agreed they would inhabit the Earth's surface and the Tuatha Dé Danaan would

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live in the bowels of the Earth, the otherworld. And so they became known as the "little people", the fairies.

In ancient times, Tara was considered an entrance place to the otherworld and has always been associated with the festival of Samhain, which many of us know today as Halloween, when this world meets the otherworld.

The Stone of Destiny is said to roar when touched by the rightful king of Tara. As I approach the sacred stone, a group of girls, their long hair blowing in the breeze, rush up the hill and gather around it, each placing a hand on the stone.

Surrounding the three monuments is a bank and ditch called Rath na Rí, the Fort of the Kings. This bank encloses an area of 16 acres and, constructed 2000 years ago, is believed to be for spiritual protection of this sacred area rather than for defensive purposes. Hawthorn trees grow on the bank and one that stands alone is known as the fairy tree. Among its clusters of white flowers hang ribbons, rags, socks, handkerchiefs, shopping bags and babies' dummies, all tied to the tree for good luck — or in the hope that the fairies will heal an illness or disorder. Hawthorns are renowned as fairy trees and this one is a sure sign that the presence of the little people is still strong on the Hill of Tara.

### LOUGHCREW

My final destination is Loughcrew, a group of cairns that may be even older than the one of Brú na Bóinne. There are about 30 cairns on four different hills known as Sliabh na Caillí, the Hills of the Witch.

At the cafe in the gardens of Loughcrew House I pick up the entrance key to Cairn T and drive up the narrow road to Carnbane East, the highest of the hills. It's late afternoon and there are only one or two people around. The view stretches for miles in every direction; the only sound is the bleating of lambs in a field below. Up here, a couple of sheep climb in and out of the smaller stone-construction clusters around the main mound, known as Cairn T, nibbling at the long grass.

Cairn T is 35m in diameter and its entrance faces east. I unlock the padlock securing the gate to the 5m-long passage. On either side of the low, narrow passageway are huge decorated stones on which are lines, spirals and circles. Against the back wall of the chamber is the impressive symbol-covered back stone, against which an earlier visitor has placed a bunch of wildflowers.

It was here on March 17, 1980, that Martin Brennan witnessed the sun entering the chamber, highlighting the different symbols engraved on the stones. His realisation that this construction, built more than 5000 years ago, was a precise astronomical instrument with the ability to pinpoint the day of the equinox made the headlines of newspapers across the world.

Alone in the dim light, I am awestruck as I study the sun wheels and spirals on the huge stones. Not only did our predecessors have phenomenal powers of observation but it could also be that they were making detailed records of the movements of the sun, moon and planets in a way that we are only just starting to understand. ☺

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