

### Notes on a Discovery by David Brandon

I thought I'd share with you a discovery I made tonight. Actually, my subconscious higher self has been trying to clue me into them the last several nights in my sleep and while awake as well. Several times I got this mental flash of the *Nebra Sky Disc* and a familiar pattern of round barrows shapes that seemed familiar to me in some area around the *Dorset Cursus*.



I couldn't quite place my finger on where I had seen this pattern of stars. But then it hit me. It was the round barrows at *Knowlton Henge*:

When I looked tonight, it was similar to the pattern of stars in the *Nebra Sky Disc* and hence the *Seven Sisters* or *Pleiades* in the constellation of *Taurus*.

Here is a photo of the *Nebra Sky Disc*, a bronze disc around 30 cm diameter with a blue-green patina and inlaid with gold symbols. These are interpreted generally as a sun or full moon, a lunar crescent, and stars (including a cluster interpreted as the *Pleiades*).

Two golden arcs along the sides, to mark the angle between the solstices, were added later. A final addition was another arc at the bottom surrounded with multiple strokes...variously interpreted as a solar barge with numerous oars, as the Milky Way or as a rainbow.

The disc is attributed to a site near Nebra, Saxony-Anhalt in Germany, and dated to around 1600 BC. It has been associated with the *Bronze Age Unetice Culture*. The disc is unlike any known artistic style from the period, and had initially been suspected of being a forgery, but is now widely accepted as authentic.

Initially the other barrows of the *Northern Barrow* cemetery at the *Knowlton Barrow Complex* did not seem right until I realized that the way the side stars of *Pleiades* slope outwards would mean that the plan is mirrored from the sky disc. So I overlaid the *Nebra Sky Disc* onto the archaeological plan of the *Knowlton Henge Complex*.<sup>1</sup>

I was amazed at how closely all the stars lined up in view of the enormous difference in scale between a barrow cemetery and a copper plate. On top of that, the stars being represented are far distant in the sky and they came from two different parts of Europe on the same latitude.

According to an initial analysis of trace elements by x-ray fluorescence by E. Pernicka at the *University of Freiberg, Saxony*,<sup>2</sup> the copper originated at Bischofshofen in Austria, while the gold was thought to be from the Carpathian Mountains. But a more recent analysis found that the gold comes from the River Carnon in Cornwall and that the tin content of the bronze is also from Cornwall.

Anyway the exciting thing for me about this discovery is that it provides new clues on tie-ins with *Osiris* and *Egyptian Mythology*, thereby further substantiating the hypothesis that these sites are all linked, focusing in on one part of the night sky, and showing a connection and a continuity between the *Neolithic Period* and the later *Bronze Age* that was the same in Britain and Germany.

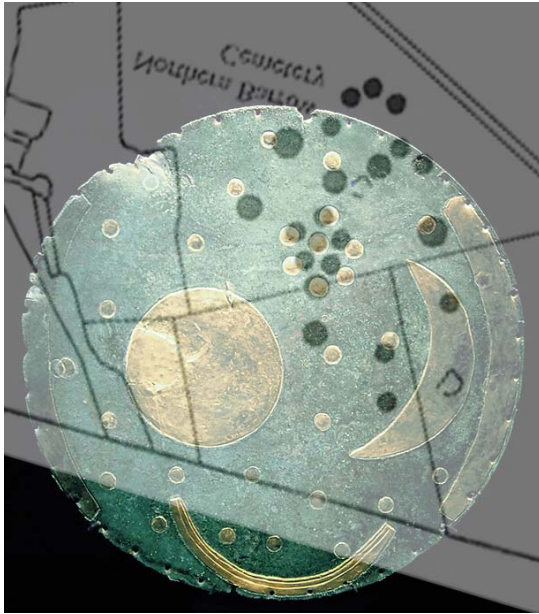
To follow are some early thoughts on the intriguing connections between the *Nebra Sky Disc*, the *Knowlton Henge Complex*, the *Dorset Cursus* & the *Seven Sisters of the Pleiades*.

<sup>1</sup> Acknowledgements to Steve Burrow of *Bournemouth University* for the archaeological plan for the *Knowlton Henge Complex*.

<sup>2</sup> E. Pernicka is associated with the *University of Freiberg* in Saxony, which is a metallurgy centre near where the *Nebra Sky Disc* was found, as well as with Freiberg in Germany and Freiburg in Switzerland.

### Early thoughts from David Brandon on the Nebra Disc, Knowlton Barrows, Pleiades and the Dorset Cursus<sup>3</sup>

1. Standing at the 'Old Churchyard Henge' at the Knowlton Henge complex, looking at an azimuth angle of 291.15 degrees on the 1st of August in 3300 BC sunset, which is known to the ancients as *Lughsanadh*, you would be



looking at the Southwest corner of the *Dorset Cursus* by *Thickthorn Downes Barrow*. This line seems to connect two opposing corners of a rectangular barrow that existed at *Old Church Henge* that can readily be seen on *Google Earth*.

2. If you look from this same location at an angle of 11.49 degrees to the Northeast, you will arrive at the opposite NE corner of *Dorset Cursus*. This angle is seemingly related to the other two opposing corners of this rectangular henge mentioned in the *Bournemouth University Archaeological Survey Site* on the web.

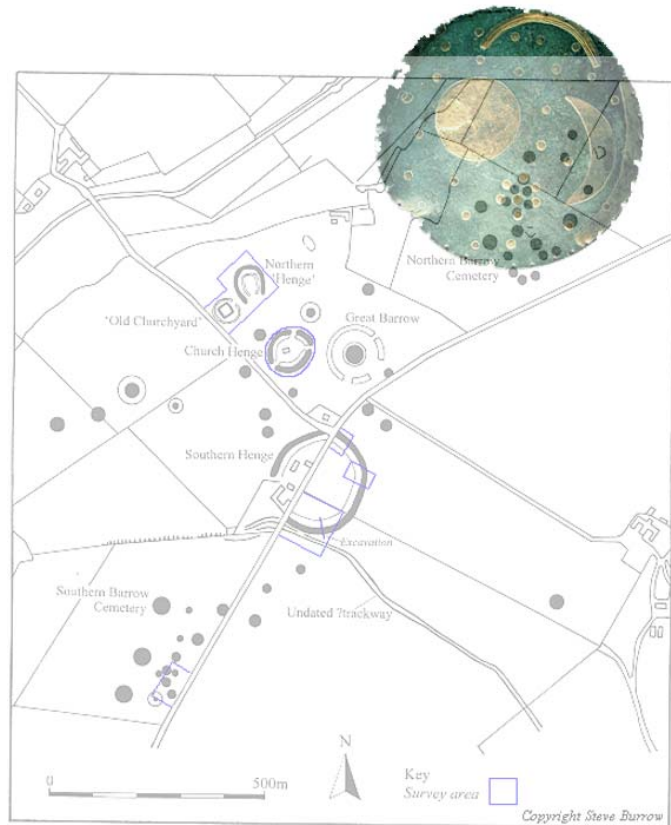
3. The angle between these two corners of the *Dorset Cursus* while standing at the *Old Churchyard Henge* is 80.39 degrees to 80.6 degrees. This correlates to the calculated difference in sunset angles of the winter and summer solstice from looking from *Knowlton Henge* as calculated in *Starry Night* software of 80.39 degrees with a year of 3300 BC. This angle also correlates to the two copper plates that were added to the *Nebra Sky Disc* on the sides to delineate the angle between the Solstices at a latitude of 51 degrees North.

least the *Bronze Age* and the *Nebra Sky Disc* from constellation *Taurus* which when the Sun is in this position relates to the period surrounding Beltane which is midway between the Beltane and the Spring Equinox. This area of the sky also marked the beginning of the Egyptian zodiac calendar year, and played a critical role in the iconography surrounding *Rock Gate* or *Coral Castle*.<sup>4</sup>

4. Both *Knowlton Henge North Cemetery Barrows* date to at

5. The Egyptian gods rode a sun boat, which can be likened to the instantaneous force of Newton's gravity on a speed boat with visible light as the waves created in the boat's wake arriving 8 minute later on earth after it has turned roughly 2 degrees on its axis. This sun boat is on the *Nebra Sky Disc*. There are also phallus shapes immediately adjacent to *Knowlton Henge* and other places around Cranborne Chase. The phallus is a symbol of the penis of *Osiris*, the constellation of *Orion* whose three stars are the belt of *Osiris* right above his phallus.

6. So the *Nebra Sky Disc* could be used by someone standing at the *Old Churchyard Henge* at Knowlton to lay out and predict the location of the winter and summer solstices, the equinoxes, and the cross-quarter days of the year because it is the same latitude it was found. To align the disc they would need to align the stars at the center of *Pleiades* barrows in the *North Barrow Cemetery* with the stars on the disc. Then they would simply wait for the Sun and Moon to arrive at the appropriate locations.



<sup>3</sup> More details on David Brandon's research at <http://cesc.net/adobeweb/scholars/lethbridge/brandon/lethbridgesymposium.pdf>

<sup>4</sup> Coral Castle was built by Edward Leedskalnin in 1923 and named *Rock Gate Park*, in Florida City, Florida.

### Notes on Tin Mining in the West of Britain by William Shepherd

Tin is one of the earliest metals to have been exploited in Britain. Mining in Cornwall has existed from the early Bronze Age around 2150 BC. By 500 BC Hecataeus knew of islands beyond Gaul where tin was obtained. The geographical identity of the *Cassiterides* (the 'tin islands') is debated but the west of Britain is a leading contender. Metal workers at the end of the *Chalcolithic* Age (3500 to 1700 BC) discovered that adding a small amount of tin (5-20%) to molten copper produced an alloy called bronze which was easier to work and harder than copper.

The oldest production of tin-bronze was in Turkey in about 3500 BC but exploitation of the tin resources in Britain is believed to have started before 2000 BC, with a thriving tin trade developing with the civilizations of the Mediterranean.<sup>5</sup> The strategic importance of tin in forging bronze weapons brought the southwest of Britain into the Mediterranean economy at an early date.



Later tin was also used in the production of pewter.

South-West Britain escaped glaciation and so tin ore was readily available on the surface. Originally alluvial deposits in the gravels of streams would have been exploited. Later underground workings and shallow cuttings would have been used to extract ore.

As demand for bronze grew in the Middle East the local supplies of tin ore (cassiterite) became used up and searches were made over the entire known world for new supplies, including Britain. Tin is said to have been behind the Romans invasion of Britain.

Production in Britain increased in the third century, for use in coinage, and there was extensive use of tin in pewter manufacture. West Devon and Cornwall are areas which are less Romanised than many other parts of England and it may be tin mining was in local hands with tin purchase by the imperial authority.

A possible official stamp has been identified on the Carnington tin ingot. A number of tin ingots have been found in Roman contexts. A site in the Erme valley, Devon, shows sediment aggregation in late Roman and Post-Roman times due to tin mining on Dartmoor. A shipwreck site with ingots of tin was found at the mouth of the River Erme, which may represent trade along this coast during the Bronze Age, although dating the site is very difficult. Strabo reported that British tin was shipped from Marseille. There is a peak in activity between the 4th and 7th centuries. Tin slag at Week Ford in Devon has been dated to 570 - 890 AD. St Piran (patron saint of tanners) is said to have landed at Perranporth from Ireland about 420 AD.

About 325 BC shortly after the death of Alexander the Great, Pytheas of Massalia travelled to Britain where he found a flourishing tin trade, according to the late report of his voyage. Pytheas, a Greek geographer from Marseilles made a voyage of exploration looking for the source of amber in the Baltic, Unfortunately, the records of his voyage were lost but they were known to later classical writers such as Timaeus, Posidonius and Pliny. The evidence of these writings is vague and conflicting but represents all that is known about the tin trade in the ancient classical world. In particular, Diodorus, a Sicilian Greek historian, writing early in the first century AD gives a description of the working of Cornish tin (by streaming from the rocks) about the time of the voyage of Pytheas, and how it was carried over to St. Michael's Mount.<sup>6</sup>

<sup>5</sup> The merchants who bought the tin were unlikely to have been *Phoenicians* or *Carthaginians*. It is more probable that the tin was shipped to Gaul by the *Veneti*, a powerful sea-faring people from Southern Brittany. The *Veneti* had close linguistic and cultural contacts with Cornwall. Their ships were described by Julius Caesar who fought a naval battle with them in 56 BC as built solidly of oak with high prows and leather brown sails. Julius Caesar was the last classical writer to mention Cornish tin, probably because the tin trade was ended by the defeat of the *Veneti* and the Romans' discovery of new sources of tin in Spain.

<sup>6</sup> From very early times St. Michael's Mount was widely known as a port and trading market. Prehistoric traders passing between the western parts of Britain and the Continent wished to avoid the rough and dangerous voyage around Land's End, and so sent their cargoes across the narrowest and most level part of Cornwall from the Hayle estuary to St. Michael's Mount. Ireland was rich in gold and copper, and the Irish traders would have found transport by sea easier than the journey along the tracks through the almost impassable forests and swamps of England and Wales. Dr. H. O'Neil Hencken in his book *Archaeology of Cornwall and Scilly*, published in 1932, suggested that by the Iron Age the island of St. Michael's Mount would have become a highly important port '...rising from Mount's Bay in full view of the early tin streamers' forts and villages.'

'The inhabitants of that part of Britain which is called Belerion [i.e. Land's End],<sup>7</sup> Diodorus says, 'are very fond of strangers and from their intercourse with foreign merchants are civilised in their manner of life. They prepare the tin, working very carefully the earth in which it is produced. The ground is rocky but it contains earthy veins, the produce of which is ground down, smelted and purified. They beat the metal into masses shaped like astralgi [knuckle-bones] and carry it off to a certain island off Britain called *Ictis*.<sup>7</sup> During the ebb of the tide the intervening space is left dry and they carry over to the island the tin in abundance in their wagons.'



In a later passage in the same context Diodorus says, 'Here then the merchants buy the tin from the natives and carry it over to Gaul, and after travelling overland for about thirty days, they finally bring their loads on horses to the mouth of the Rhone.' Diodorus mentioned both Marseilles and Narbonne by name as places to which Cornish tin was sent on the Mediterranean coast.

In 1995 an archaeological watching brief of a sewer trench found Later Iron Age pottery of the *Ictis* period and its distribution drew attention to a group of six possible round house platforms - perhaps the site of *Ictis* itself - on the south-eastern slopes of the Mount. A Neolithic flint arrowhead (circa 3500 BC) was also found adding some support to the suggestion that somewhere as dramatic as the Mount, whether rising from sea or forest, would have been from earliest times a central place of authority similar to Carn Brea, the Neolithic hill-top enclosure near Redruth.

Pliny quotes Timaeus of Taormina in referring to '*insulam Mictim*'. *Ding Dong Mine*, is one of the oldest in Cornwall just outside Penzance and according to local legend was visited by Joseph of Arimathea, a tin trader, who brought with him a young Jesus to address the miners, although there is no evidence to support this.

Truro initially grew as an important centre of trade from its port, and then as a stannary town for the mining industry. It is located in the centre of western Cornwall approximately nine miles from the south coast on the confluence of the rivers Kenwyn and Allen, which both combine to become the Truro River, one of a series of creeks, rivers and drowned valleys leading into the River Fal and then onto the large natural harbor of Carrick Roads, a large waterway created after the ice age from an ancient valley which flooded as the melt waters caused the sea level to rise dramatically, creating a large natural harbor which is navigable from Falmouth to Truro.

The catchment of the Fal is predominantly Devonian slates, shales and grits, with granite in the upper reaches. Tributaries of the River Fal include the River Truro, River Kennal, River Penryn and River Carnon. Several tidal creeks discharge into the River Fal including Mylor Creek, Pill Creek, Penpol Creek and Restronguet Creek.

<sup>7</sup> St. Michael's Mount was probably the island of *Ictis* despite the difficulty of the legend that St. Michael's Mount was within historic memory five or six miles inland from the sea in the middle of a dense forest. When William of Worcester visited the Mount in 1478 he recorded that it was formerly called "the Hore-Rock in the wood". Also the old Cornish name for the Mount meant "the grey rock in the forest". Canon Taylor in his *History of St. Michael's Mount* suggests that William of Worcester confused the English St. Michael's Mount with Mont St. Michel on the coast of Normandy and that the "Hore-Rock in the wood", referred to the French and not to the English Mount. The most likely alternative to St. Michael's Mount would be the Isle of Wight, the Roman name of which was *Vectis*, but it seems most unlikely that Cornish tin would have been carried so far for a port of embarkation. Besides, Sir Gavin de Beer FRS, a former *Director of the Natural History Museum*, suggested that it had not been possible to cross to the Isle of Wight by foot from the mainland since the days of neolithic man. He also wrote in *Reflections of A Darwinian* published in 1962 that recent scientific analysis of traces of old tree trunks in Mount's Bay indicated that the forest was submerged by the sea 1500 years before Pytheas came on his voyage of exploration in 325 BC.