

Possible Site of the Original Bluestone Ring.

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Background.

The rocky outcrop at Craig Rhosyfelin is a strange place. It is easy to imagine that it was one of the quarries from which one or more of the Stonehenge bluestones was extracted and it looks as if the quarrymen could have downed tools within the last few years.



The “quarry” at Craig Rhos Y Felin.

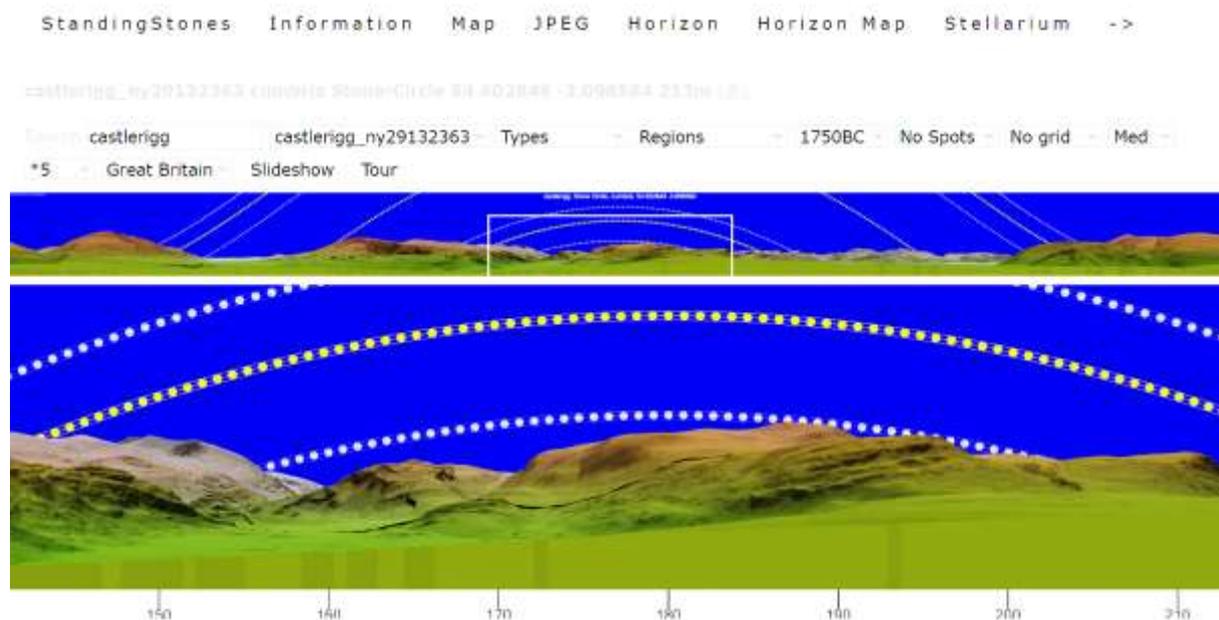
The dating of these operations though was given as pre 3000BC and the men did not leave any tools behind. One or more of the stones from here have been claimed to have arrived at Stonehenge 4500 years or more ago. If this is true it seems that the stones could have been used locally in the intervening time, possibly in a ring of some sort, before being transported to the Stonehenge site, but if so, where was that that ring?

The Challenge.

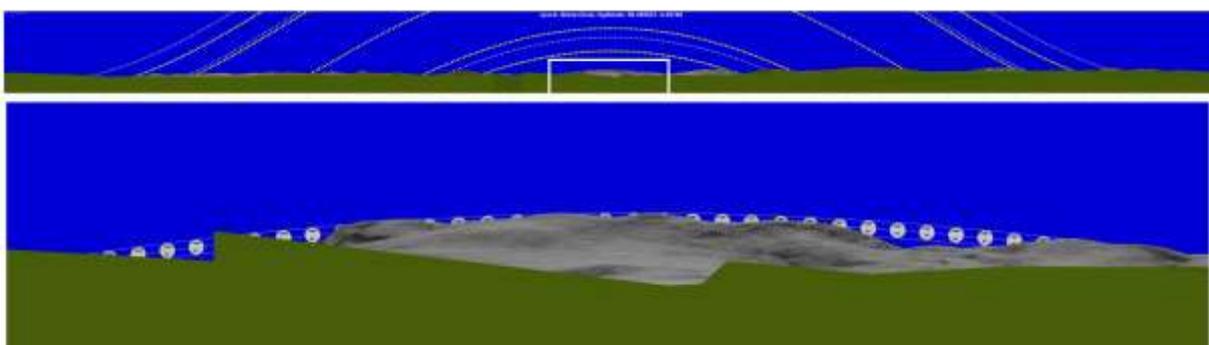
In discussing this with my youngest son David, he threw out a challenge, which was “with your knowledge, you should be able to predict the place where the ring was.” After further discussions I told him that there probably was no definite answer to that challenge, but it would be a good puzzle and you never know what might turn up.

The Skyline Program. standingstones.org

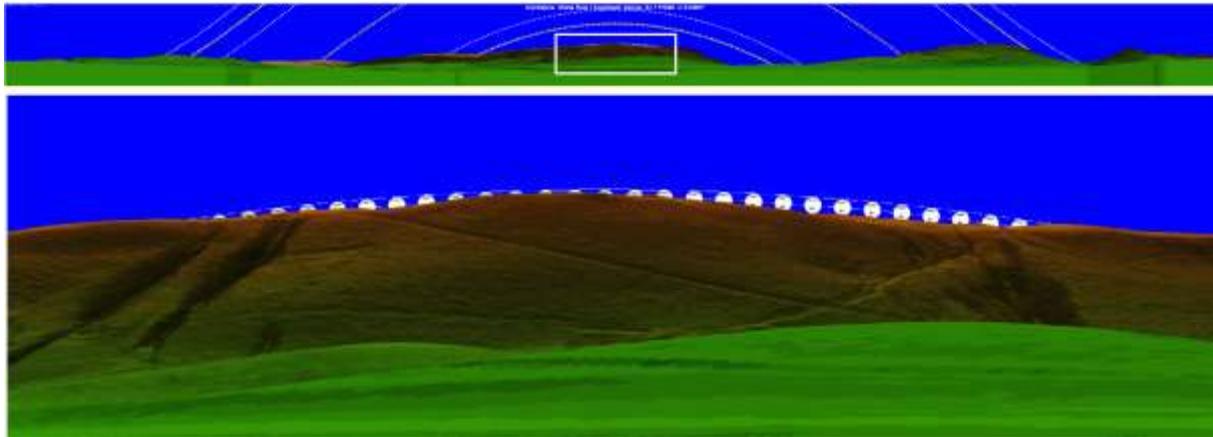
Whilst I considered the problem, David worked on a computer program to produce a skyline, as seen from any particular place. He then superimposed various limiting positions of the Sun and Moon on the sky, in order to show their rising and setting points. This was made possible because the Ordnance Survey had given free access to a grid of heights covering the whole of the U.K. It was possible to improve on this as NASA had published similar height data, but with a finer mesh. The Environment Agency had done a similar thing, but in even more detail, although at that time it did not cover the whole of the U.K. Corrections to the skyline were made for atmospheric refraction and Earth curvature and another for mean parallax of the Moon. The program was then applied to all prehistoric remains that could be found in the U.K. as well as many countries in Europe. The resulting skylines were then made available on standingstones.org. In all there are several thousand skyline profiles stored, all to a high degree of accuracy. The example below shows the screen for the Castlerigg stone circle in the Lake District. Of particular interest here is the track showing the lowest limiting position of the Moon. The area within the white rectangle is shown enlarged below.



Skylines where the lowest limit of the Moon is seen to track the horizon are not uncommon and two other examples are given below.



From Syre b Stone Circle. Northern Scotland.



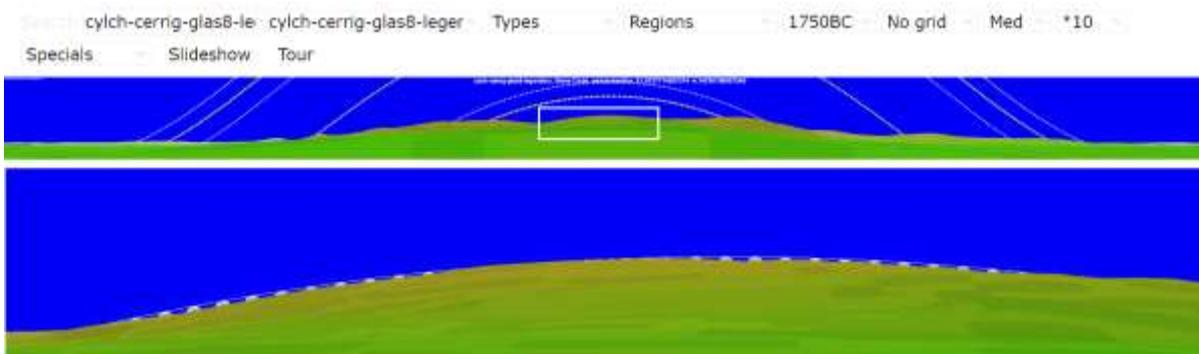
From Bryntwppa Stone row, Powys.

Use of Skyline Program.

I made use of this program to help me to try to find a site in the Preseli area which had similar astronomical properties to the examples given above. That is, to find a position from which the lowest positions of the Moon's path followed the curvature of the hill to the south. The assumption being made is that, if I were to find such a position, it might just be a rediscovery of the position of the supposed long lost ring. In the event I was successful and the position was also associated with three other highly accurate astronomical sightlines. This was extremely unexpected and very encouraging. The position was a little to the north of the enclosed area called Hafod Tydfil at:

lat. 51.97276, long. -4.74292 Grid ref. SN 11691 34031

The skyline for this site is shown below.



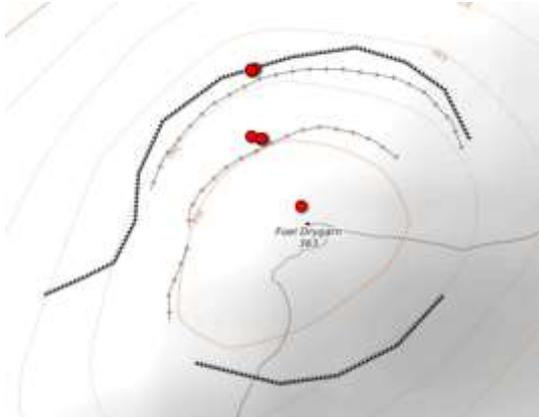
The lower limit of the Moon's position follows the hillside very accurately.

The reconstruction shows the limiting position of the Moon when at its lowest position at a Major Standstill and this follows the curve of the hill more closely than any other similar skyline that I had yet seen. Trained observers there would have had little difficulty in deciding if the Moon had reached its lowest position. If this happened at the equinox, then an eclipse would follow about six days later. It is not convenient to go into more details here, but observations of the extreme lunar positions and of the equinox are two of the keys for eclipse prediction.

Other Sightlines.

The position given above also has several other horizon features that indicate important astronomical events. Note that the small red circles on the following maps and aerial views mark the positions where the top, middle or bottom of the Sun or Moon touch the horizon.

1. Equinoctial Sunrise over Foel Drygarn.



The lower limb of the Sun just skims the summit cairns of Foel Drygarn.

This sightline is as good as it is possible to be. The hill is very prominent. The rising Sun appears a little to the left of the hill and gradually rises and moves south till the lower limb becomes visible when it is just over the central cairn.

2. Equinoctial Sunset over Waun Mawn

Indications of this equinox sunset sightline are not satisfactory. It takes place over Waun Mawn and is fairly close to what appear to be standing stones. However this is the place where Professor Parker Pearson suggests that there could well have been a stone circle. If so there would have been more standing stones there in the past and it is possible that one of these could have accurately indicated the equinox. As things stand though it should not be taken seriously as an astronomical sightline, but this may change. (Perhaps it should be noted that the standing stones here do not appear to have any astronomical significance when used in conjunction with skyline features.)



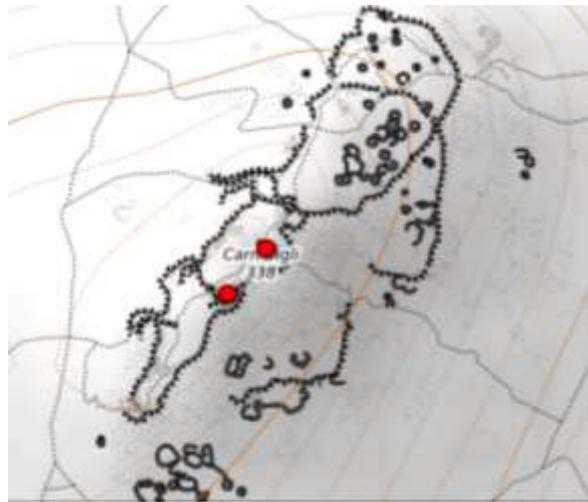
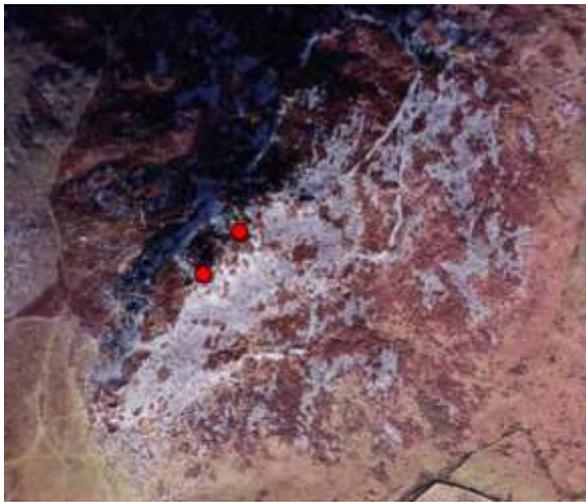
Equinox sunset over Waun Mawn, with possible positions of some early standing stones.

It is only mentioned here because future excavations may result in changes to this outlook.

3. Most Northerly Moonset at the time of the Minor Standstill

To the north west of the proposed ring position the summit of Carn Ingli is just visible and it marks the most northerly setting point of the Moon at the minor standstill. The accuracy of this sightline is

extremely high and Carn Ingli is a prominent and imposing hill. The setting point of the top of the Sun takes place behind some higher land to the south east and is not significant. This is another sightline that could find use for eclipse predictions.



Setting points of Moon's lower limb and centre over Carn Ingli. The upper limb disappears below some higher land to the south east.

4. Summer Solstice Sunset

At first glance at the skyline there is little to indicate that this could be an important sightline, nor is there any indication on the contour map that there is anything of significance at this position. It is only when looking at the aerial view that prominent rocky outcrops are seen and the summer solstice sunset takes place amongst these. The place goes by the name of Carnedd Meibion Owen and is interesting as there is a large rock perched on the top of one of the outcrops. This must have intrigued Neolithic man and perhaps gave it a mystical quality. These outcrops do form an accurate foresight for the summer solstice sunset.



The strange rock formations of Carnedd Meibion Owen.

Other possible sightlines.

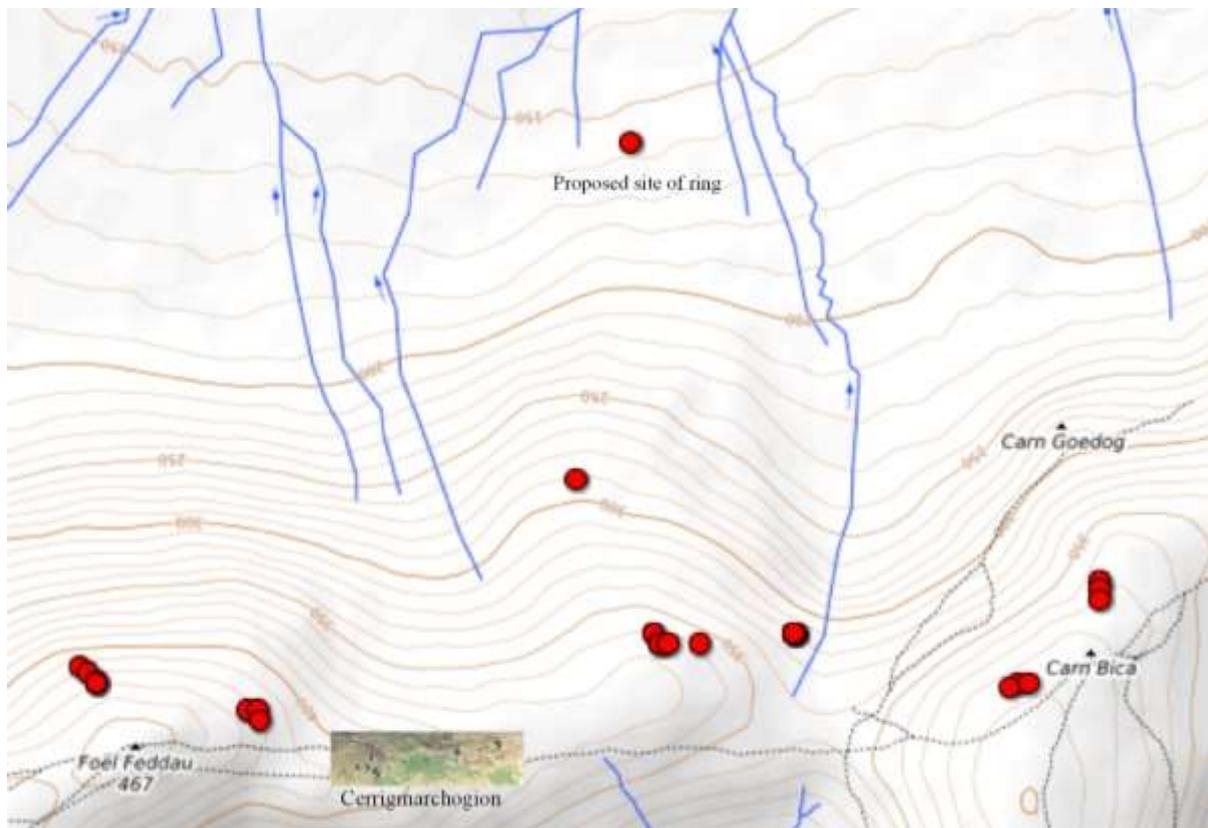
There do not appear to be any other sightlines visible from this backsight. There are possible sightlines from position close to it and in particular the extreme rising point of the Moon at a Minor Standstill over Carn Bica can be seen from a point about 250m to the south south east of the above site. This was one of the first places that I tried. (Lat 51.970841 Long -4.742404)

Summary.

It is not difficult to find a position from which an important astronomical sightline can be indicated by a horizon feature. It is more difficult to find two such sightlines indicated from a single position and more difficult still to find three. Here there is a position from which the horizon accurately follows the lowest position of the Moon as well as three other accurate sightlines. This is incredibly rare. It may be that I have been exceptionally fortunate, but as I was looking for a ring in the area with some such properties, it is more likely that the people of the area discovered it and built a ring there, or at least marked the spot in some way and I simply rediscovered it. If I am correct then the position given must be accurate to within a few metres. Move a little east or west and the hillside no longer corresponds with the lowest limit of the Moon. Move a little north and the view of Carn Ingli disappears. Move a little south and the equinoctial sightline of Foel Drygarn loses some of its accuracy.

Sources of suitable Stones.

The map below shows the position of the proposed ring in relation to nearby sources of suitable stones



The red circle near the top of the map shows the position of the proposed ring and the other red circles mark some of the rising and setting points of the Sun and Moon as seen from the ring.

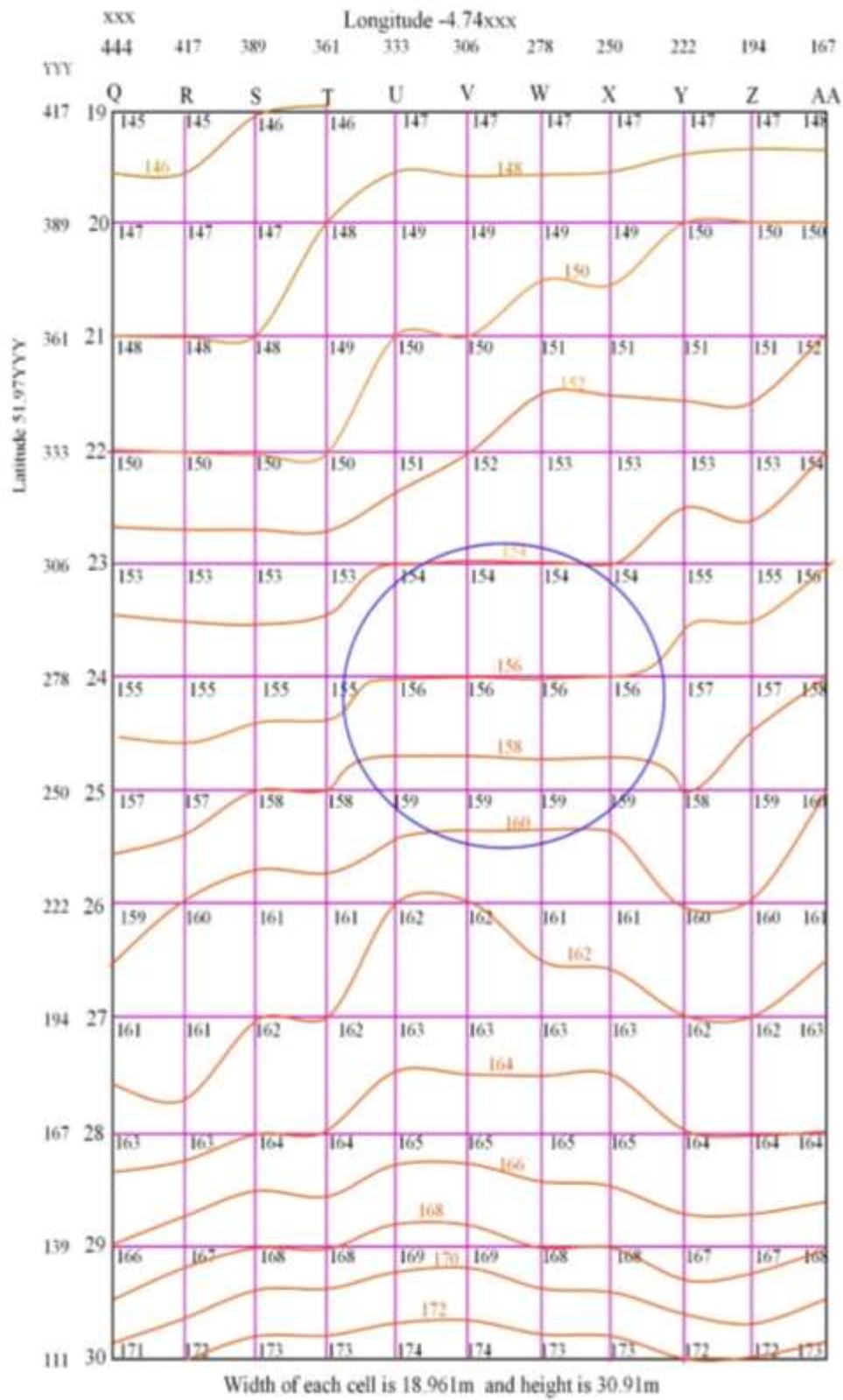
It is seen that Carn Goedog is the closest source and Cerrigmarchogion is not much further away. In the case of Moel Goedog the stones only need to be pulled downhill, whilst the stones from Cerrigmarchogion initially would have to be pulled along the level, or perhaps even a little bit uphill, before moving downhill for the rest of the distance. The exact places from which the bluestones were taken is still in doubt, but it is fairly certain that Moel Goedog was one of the main sources of stones and Cerrigmarchogion was of lesser importance. Other sources of stones have not been identified with any certainty. The position of this ring position fits well with these observations.

The Suitability of the Site.



An aerial view of the possible ring position. Without going to the site it is not possible to determine if the numerous small “blobs” are stones, or possibly sheep! but they do seem to be scattered around parts of the ring. They could be the packing stones from the base of standing stones, or simply the result of wishful thinking.

If a ring had been built as shown on the map then the ground would not have had to be too undulating. To investigate this without going to the site I asked if David could find and give me the heights of land in the surrounding area. This he did and I was able to construct a contour map of the area with contours at 2m vertical height intervals. In the area covered, the position of the ring corresponds with the most suitable position. The land runs gently down to the north, but there are no changes in height from east to west.



Contour map of the area around the ring position.

Conclusions.

None of the above proves that a ring was built in the indicated position, but if there was a ring and the local tribes were interested in predicting eclipses then this would have been an excellent place to build it. It would be as good as it is possible to be for their astronomical observation. The sources of stone for building the ring would have been easily accessible, of good quality and transport from Moel Goedog, being all downhill, would have been relatively easy.

If, as seems likely, the astronomers converted their observations into good predictions, they could have gained an enviable reputation for fortune telling and this in turn could have brought in considerable wealth and prestige. To protect this they would have had to keep their methods secret and the stones themselves may have been seen as the source of their success. Whatever the truth was, the myth tells us that the peoples of Stonehenge went to Ireland to acquire this stone circle. The assumption that is normally made is that Ireland in the myth is the modern Ireland. This is not necessarily the case. Not far from where I live is a small stone ring called Eglwys Gwyddelod, which translates as Irishmen's Church. There are other names denoting Irish occupancy and around 400A.D. the Irish were expelled from Anglesey. It is more than likely that Irish people were living in West Wales in 3000B.C. and that this place was also known as Ireland.

Unlike many people I think that British tribes were just as bloodthirsty as those anywhere else and those around the Stonehenge area defeated the Welsh, or Irish, tribe and utterly destroyed their ring, or rings. Then, as was usual, they enslaved those who remained and used them to transport the stones to Stonehenge, thus destroying the tribe and its culture. Genetic evidence concerning the later Beaker People indicates that they did similar things to other local tribes and DNA evidence for their later existence all but disappears.

The above is pure conjecture, but it fits in well with the 'myth' of the bluestone transportation and perhaps could explain why it may have been successfully done. The more slaves that died, the more complete their defeat. It could also explain why little was done with the stones when they arrived at Stonehenge, as the power was not in the stones, but in their surroundings and they did not work at Stonehenge.