



Druim Mor Cupmarks

Sworddale Hill, Evanton, Easter Ross.

Douglas Scott©

2011

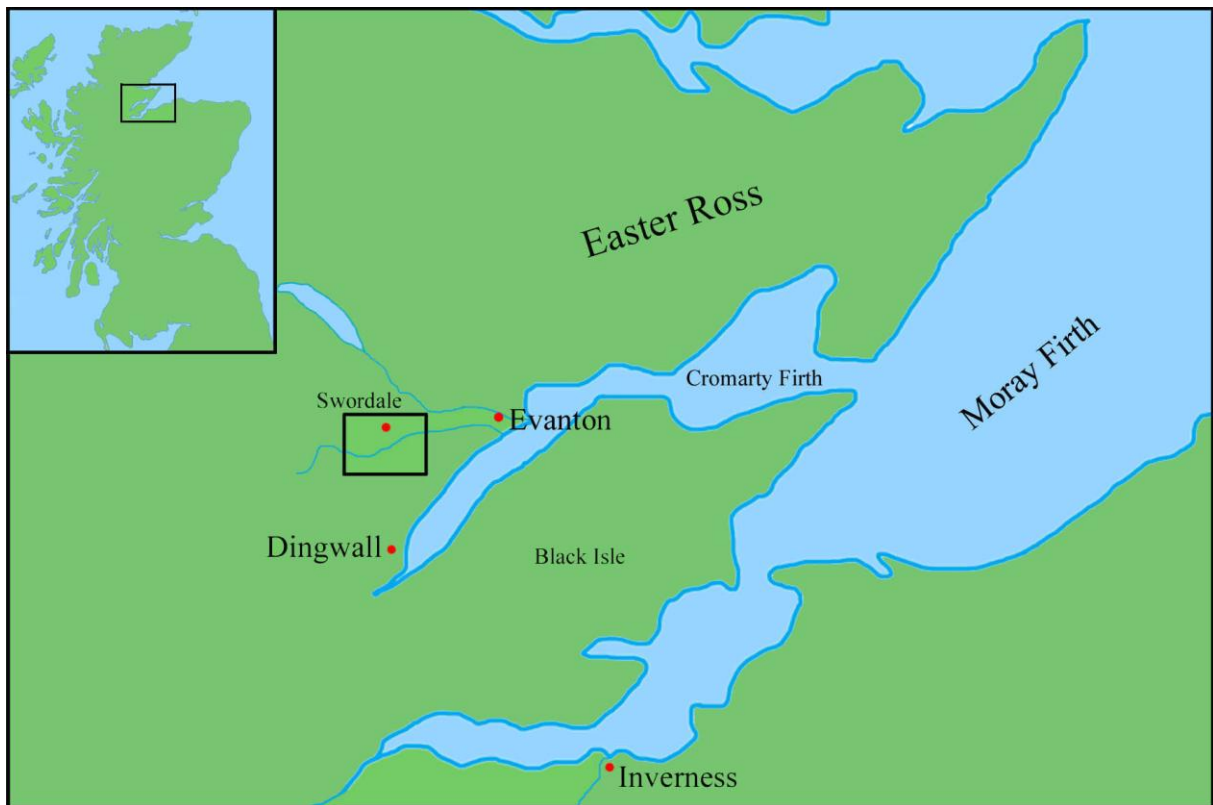
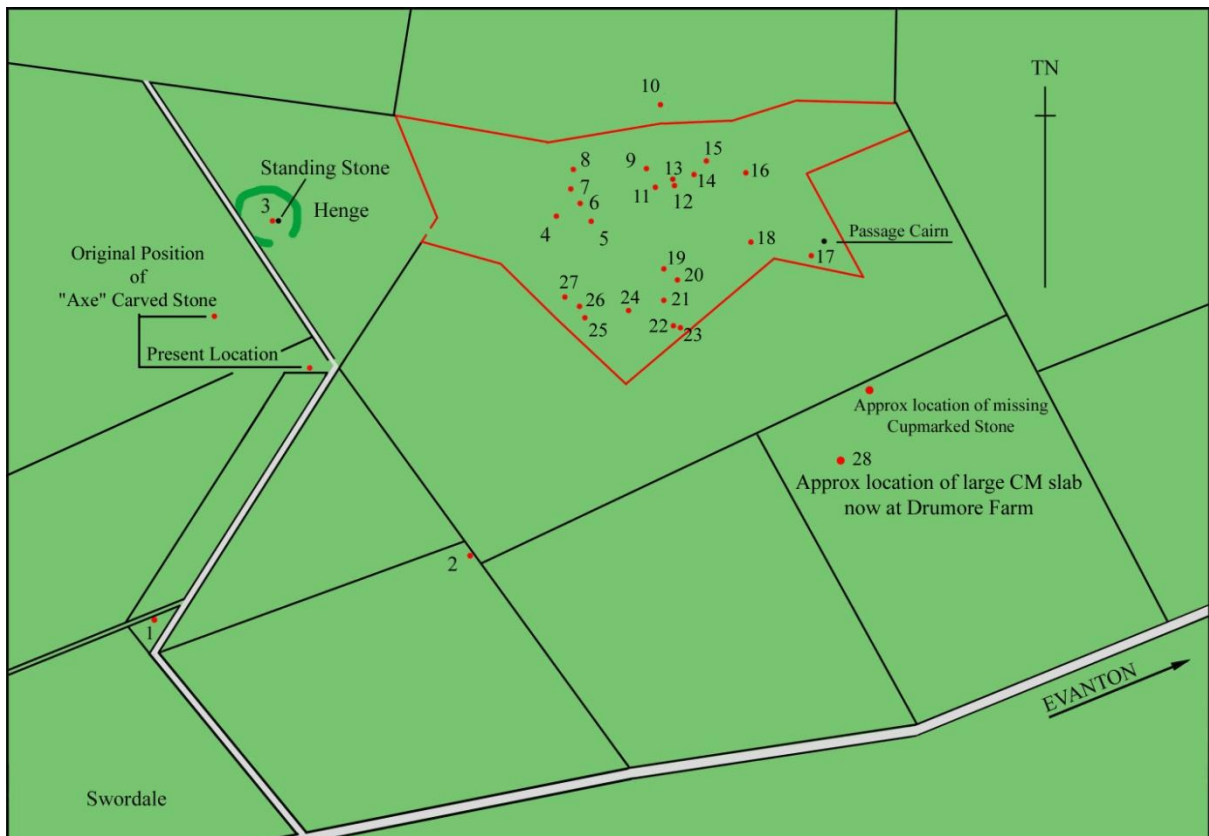


Fig.1 & 2. The approximate cup mark positions in Fig.2 are marked with red dots and are in a new configuration from Gourlay and Scott's 1986 OS map survey shown on page 2. The scheduled area is also marked in red.



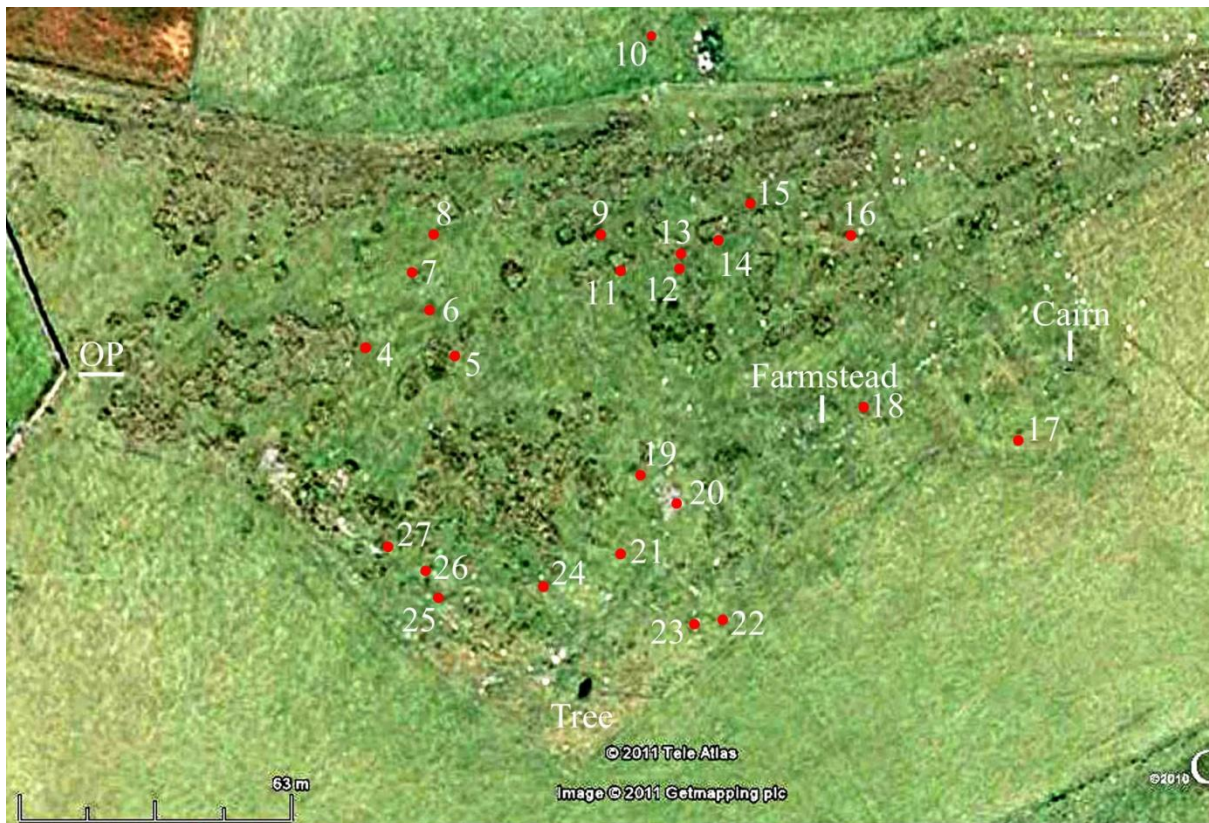
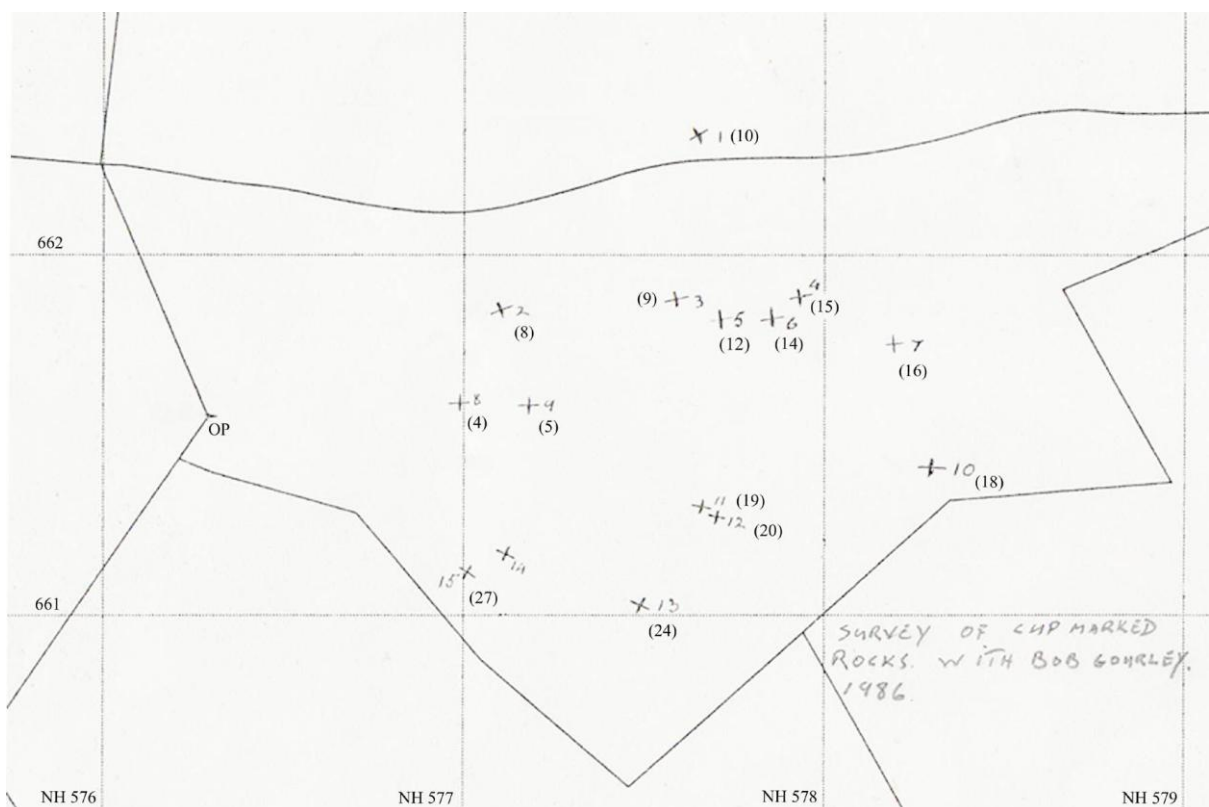


Fig 3 shows the cupmark positions on a Google Earth image of the scheduled area.

Fig 4. shows the positions and numbers of the cupmarks from the 1986 survey on an OS map. They were originally numbered from the north, west to east. The new 2011 numbers are bracketed. A photographic guide is used to locate the cupmarks, most of which lie within a 100m area, as grid references and latitudes and longitudes could not be assessed with any accuracy at this scale.





Druim Mor, Sworddale, Evanton, Easter Ross. NH 577 661.

Located in a rocky area on Sworddale Hill's Druim Mor ridge on the northern side of Strath Sgitheach (*Skiach*), are two known cupmarked stones (8 & 17), one of which, Stone 17, is near an Orkney-Cromarty (OC) chambered cairn. There are 2 other known cupmarked stones, (1 & 2) on the ridge's southern side and a large cupmarked slab was found in the lower fields by Mr. J. Campbell of Drumore Farm in 1985 (*Fig. 2*). Mr. A. MacDonald of Sworddale Farm also found some cupmarked stones during the demolition of a farm building and there is another cupmarked stone 1km to the southeast at Knockancurin Farm. It is likely that the stone circle which is said to have stood on the ridge (*N. Macrae, p. 341, 1923*) is, in fact, the remains of the OC cairn. A kilometre northeast is the Carn Liath OC passage cairn, and both cairns are described in *Henshall & Ritchie. P. 186, 194, 2001*.

In 1986 the author and the late Bob Gourlay, then Highland Regional Archaeologist, found and photographed a further 14 cup marked rocks on the ridge which were later scheduled. A lost copy of their survey, placed in the Highland Archaeological Sites and Monuments Record, was replaced in HER in 2011 by the author (*Fig.4 page 2*). In 2011, 9 extra cupmarked rocks were found, bringing the total to 28, but a few of these may be natural. Stones 4 to 16 are on the ridge top, while 17 to 27 are on the southeast slope, but each group is not intervisible. To the west of the cupmarked area a c40m wide circular ditched enclosure with a southeast entrance was also found. The ditch has a low outer bank on its east side and this, along with a small central standing stone next to a cupmarked stone, suggests the enclosure is the remains of a henge. In the field below the henge (*Fig 2*) there is a possible c2.5m fallen standing stone which has two grooves next to a stone-axe shaped depression. On the ridge are two ruined farmsteads and some squared enclosures. The above aerial picture taken by Mr. Jim Bone in 2010, shows the henge and a runrig field system. The picture also shows about 55 circular features which may be the scars of cattle feeders. From the ridge there are wide views across the fertile lands of the Cromarty Firth, the Black Isle and the distant Cairngorms.

The Surveys

In 1986 the positions of the 14 cupmarked stones, plus that of Stone 8, were surveyed by theodolite and measured by tape from an observation position (OP) (*Fig 4, page 2*). The position of Stone 17, near the chambered cairn, was not included in the survey despite having been recorded in 1973, the author only learning of it in 2011. The only stone that, to date, has not been found from the 1986 survey is number 14, which might have become covered by grass. Some of the cupmarked stones are lying almost flush with the ground and are hidden by or covered with grass, making the more distant difficult to see. Because of this, only those cupmarked stones that were obviously genuine and could be seen from their closest neighbours, were astronomically assessed. It should perhaps be pointed out that we do not have a complete picture of the layout of the cupmarked stones on Druim Mor as the original locations of those found in the farm buildings are unknown. Some of those on top of the ridge may also have been moved in the post medieval period. Any solar/lunar orientation between the cupmarked stones should be regarded as being general and not highly accurate. Because of the ridge's height, most of the horizon altitudes from the northeast round to the southwest are near or below 0°. In the cupmarked pictures the mirrored side of the compass shows true north.

Conclusion

The finding of up to 28 cupmarked rocks on Druim Mor makes this the largest concentration of cupmarked stones so far found in the north of Scotland. At first there was nothing obvious to suggest any "function" for the cupmarks or to explain why only certain rocks were chosen, while other suitable rocks nearby were ignored. However, the surveys suggest there could have been general orientations between some cupmarked stones to the rising and setting midwinter and midsummer sun and to the sun around the equinoxes. There is also evidence of an interest in the rising and setting of the northern and southern major standstill full moon.

This is in keeping with the author's previous surveys of over a 100 groups of cupmarks on a range of prehistoric monuments throughout Scotland which were in line with the sun and moon. The orientations of the radial grooves of cup and ring marks on a number of rock outcrops, such as Achnabreck or Cairnbann in Argyll, were found to be aligned in the general direction of the midsummer and midwinter sun. Similar solar/lunar orientations have been found from cupmarked rocks on Ben Lawyers in Perthshire. Cupmarks can also be found throughout Europe, where they are associated with carvings of the sun, solar chariots and boats - the latter believed to carry souls of the dead each night to the underworld. A similar belief in solar boats can also be found in ancient Egypt. From the evidence of solar orientation of ancient burial monuments throughout Western Europe, it is likely that the sun and moon were commonly worshiped as gods.

The position of the cupmarks between the OC passage cairn and the henge, suggests that this was one of the most important ritual sites in the area during the Neolithic or Bronze Age. It is proposed that cupmarks were created as a means to contact the spirit ancestors in the underworld as the sun or moon rose out of, or set into the land of the dead. For a more detailed view of the author's work on cupmarks, see "*Watchers of the Dawn*" 2003, *Antiquity Online Journal* 2010, and "*The Clava Cairns 2011*".



Stone 1 has 12 cupmarks on its southern side and these have been marked with earth. The stone is easy to find among the trees about halfway up the road to Druim Mor, and it is likely that it has been moved (*Fig.2*).

Stone 2 has been built into the base of a wall lower down the field.





In the field at the top of the access road is a c2.5m long stone, possibly a fallen standing stone. Mr. Collier and Mr. Macdonald confirm that this stone originally lay partially exposed some c30m up the hill and was only moved to its present position in 2010. On the stone's southern side there are two grooves next to a deep depression shaped like a stone axe. A smaller c1m long pointed stone fragment originally found next to the larger stone is now lying just over the fence to its west.





NH 5753 6615. Near the centre of the henge is the stump of a 1m high standing stone and a cup marked stone. The line of the ditch and two large boulders, which might be the remains of a fallen standing stone, can be seen in the henge's entrance. The carved stone has about 12 cupmarks some of which are very worn; it also has a deep hole on its upper surface. There is a flat axe shape on the cupmarked stone, but it is not known if this is a natural feature. It is possible that this stone once formed the upper part of the standing stone.





Near the centre of the henge's entrance there are two large boulders lying on top of a low c2m long grass covered mound of smaller stones. The drill hole on the edge of one boulder shows that it was split and it's possible that these fragments are the remains of a fallen standing stone which would have been located near its original position. The ditch's worn outer bank can be seen to the right of the picture below and there are traces of later buildings and field clearance within the henge.





A survey showing that the entrance of the henge is in line with the midwinter sunrise was confirmed at about 9:00am on the 18th December 2011. It is suggested that fallen “standing stone” was used to mark the rising midwinter sun, Azi. 140°.Alt.0°10'. Decl. -23°30'. The stump of the standing stone below is aligned to where the other “standing stone” with the deep axe-shaped depression was found in the field on the other side of the road. A survey suggested that they could have indicated the setting southern major standstill full moon, Azi. 200°. Alt. 1°30. Decl. -30°.



Southern Major Standstill Moonset



Looking east from the corner of the wall shown as OP in Fig. 3, Stone 4 is marked by Ros at the centre of the above picture c50m away on a bearing of c86°, directly below the entrance to the Cromarty Firth. The stone has a faint shallow cupmark at its centre and there may be two worn cupmarks on its southern side. The approximate distance and true north bearing are shown as a guide to the following cupmarked stones.





From Stone 4, Stone 5 marked by Ros is 21m away at 95°, roughly in line with the trees of Drumore Farm. As Stone 4 lies on the north edge of one of the runrig ditches it might have been moved. However, Stones 4 and 5 are in line with the sunrise around the equinoxes. Stone 5 below is a rough gritty c2m wide stone and has about thirty cupmarks, some of which form lines.





The picture above shows the view from the stone to the southeast over the Cromarty Firth and the Black Isle. Due to its size, it is likely that this stone is still in its original position. A large stone under its southern side causes the slab to slope down slightly to the north.

From Stone 5, Stone 9 is in line with the rising midsummer sun, Azi. 48° . Alt. $0^\circ 30'$. Decl. $+22^\circ$.





From Stone 5, stones 6, 7 and 8 are easy to find as they lie only a short distance to the northwest in line with a small stony mound. In low light the runrig ditches can be seen running between these stones from east to west.

Stone 6 has a possible cupmark on its top curved edge.

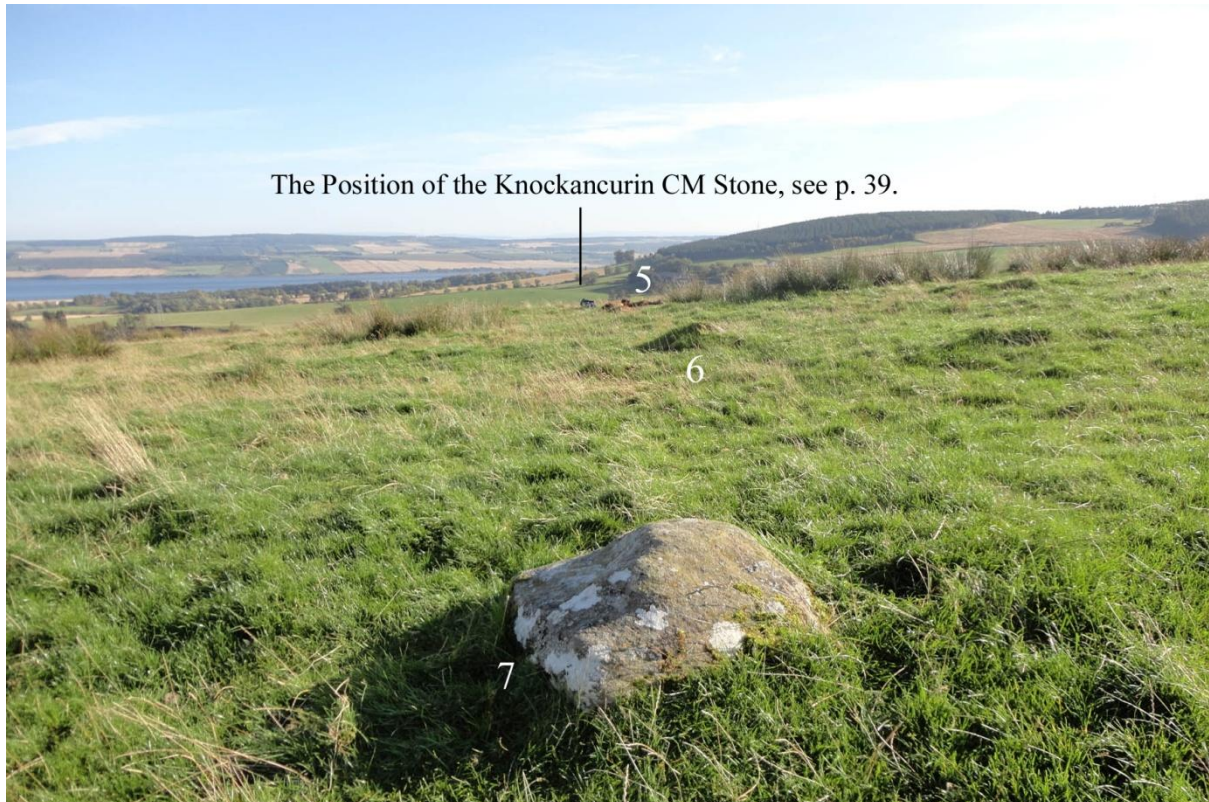




Stone 7 has what might be a natural shallow cupmark on its top.

Stone 8 has 5 cupmarks, two of which are very faint.





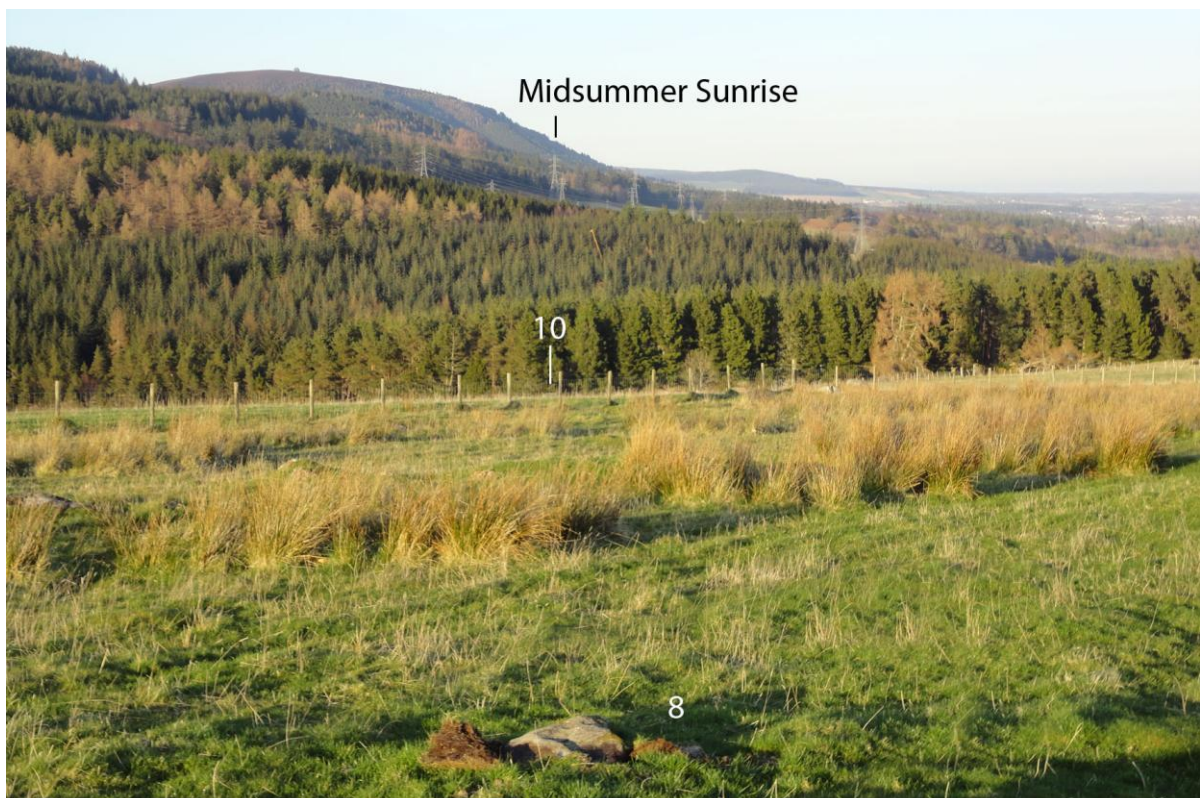
From the small mound, Stones 7, 6 and 5 are generally in line with the Knockancurin cupmarked stone on the southeast side of Strath Sgitheach, but it is likely this stone has been moved. Lying between 6 and 5 is a flat c 1m squared stone veined with thick bands of white quartz and crystals.

From Stone 8, Stone 5 is in line with the southern rising major standstill full moon. One of the runrig ditches can be seen running between Stones 7 & 8.





From Stone 8, Stone 9 is a large white stone, marked by Ros at the centre of the above picture, and it is 48m away at 90°. The stone has a shallow cupmark on its top and is in line with the equinox sunrise. From Stone 8, Stone 10 can be seen 75m away and is in line with the midsummer sunrise Azi.44°. Alt.1° 30'. Decl. +24°. In the opposite direction the stones are in line with the midwinter sunset, but it is unlikely that Stone 8 could have been seen as it is level with the ground.





CM shows the position of a shallow cupmark on top of Stone 9. This stone was one of the original cupmarked stones found in 1986. At that time, Bob Gourlay and the author discussed whether it was a natural indentation in the rock or a cupmark and Bob concluded that it was a cupmark. From Stone 9, Stone 10 lies outside the scheduled area, but is easy to find across the fence a short distance to the north of a pile of large boulders.





Stone 10 has 3 cupmarks on its flat top. Most of this large stone is covered with grass, but investigation revealed that it does not have any other cupmarks. It's easier to show the position of Stone 11 from Stone 9, see next page. From Stone 10, Stone 9 is in line with the southern setting major standstill full moon.





From Stone 9, Stone 11 is located 12m away and it is a 1.25m long east-west aligned stone carved with one shallow cupmark.

To the southeast these stones are in line with the midwinter sunrise, Azi. 140°.Alt. 0°.Decl. -23° 30'.





Stone 11.

From Stone 11, Stone 9, to the northwest is in line with the midsummer sunset, Azi.315°.Alt.2°30'. Decl. +24°.





From Stone 11, Stones 12 and 13 are located 12m away, Azi. 80°. Ros is standing behind Stone 12 with Stone 13 just to her right. From Stone 13 Stone 14 is located some 11m away to the east and they are generally in line with the Carn Liath OC cairn above which the sun will rise about the 16th April or 19th October. Stone 12 has 12 worn cupmarks with that to the upper right perhaps being surrounded by a faint ring.





Stone 13 has 3 cupmarks, which seem to mimic the triangular shape of the stone.

From Stone 13, Stone 12 to the southwest is in line with the setting southern full moon during a major standstill, Azi.195°.Alt.0°.Decl. -30°.





From Stones 12 & 13, Stone 14 is 11m away to the centre right of the above picture.

Stone 14 has about 7 cupmarks.





From Stone 14, Stones 13&11 are in line with the setting sun a few days before and after the spring and autumn equinoxes.

From Stone 14, Stone 15 is situated some 11m away and is in line with the northern major standstill full moon rising over Fyrish Hill, Azi. 40°.





Stone 15 has about 21 worn cupmarks, three of which appear to be located along the longer of two natural cracks forming a cross, the long axis of which is generally indicating the midwinter sunrise, as shown below at 9:05am on the 18th December 2011. Stone 16 is 25m away towards Drumore Farm at 104°, but there is no obvious solar/lunar orientation in either direction.





From Stone 15, Stone 14 is in line with the midwinter sun set, while Stone 9 is in line with the setting sun a few days before and after the spring and autumn equinoxes.





Stone 16 is a c2.5m sandstone slab carved with 32 faint ringed cupmarks. Most are carved in a flattened snake like line which is cut through by some of their radial grooves which connect to a long lower crack. These are generally aligned to the rising midwinter sun (shown below at 9:10am on the 18th December 2011). The cupmarked slab' long axis is aligned to the rising and setting midwinter and midsummer sun. From Stone 16 the OC cairn is 67m away at 140°.





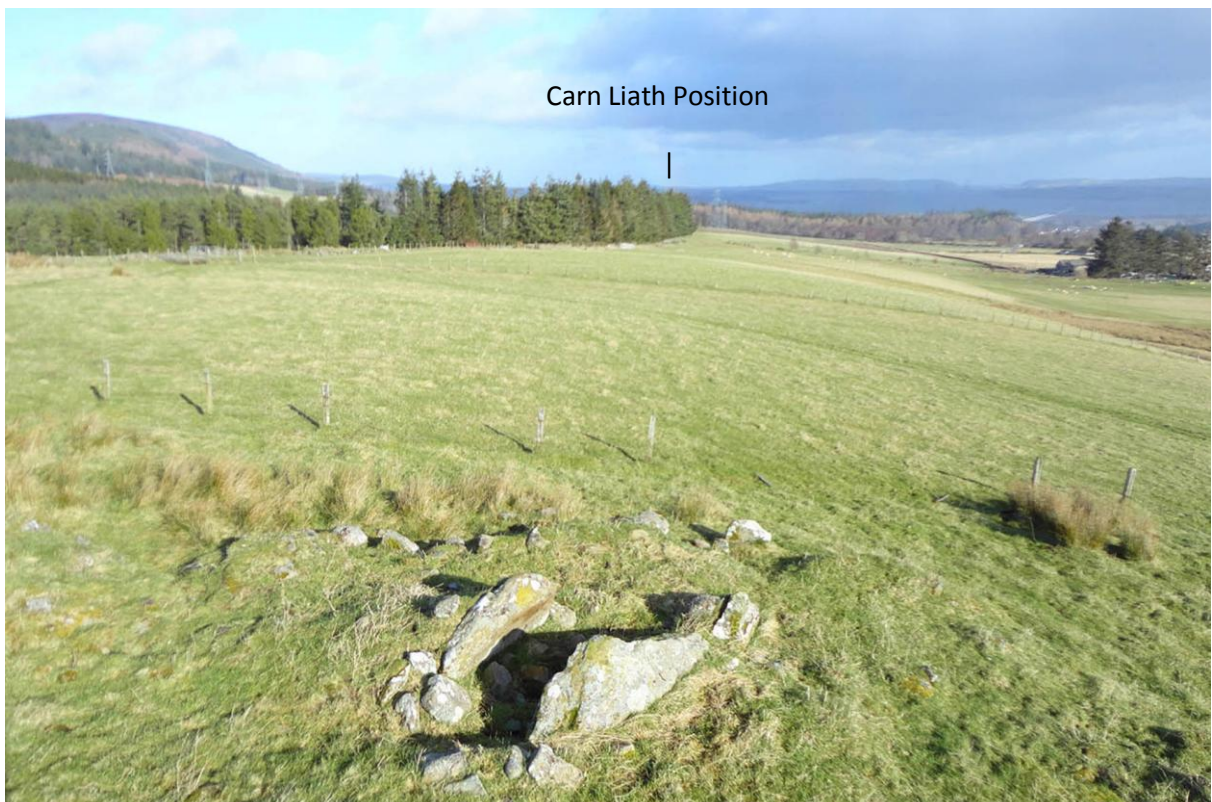
NH 578 661. The remains of the passage cairn to the northeast.

The entrance of the passage leading to the chamber.



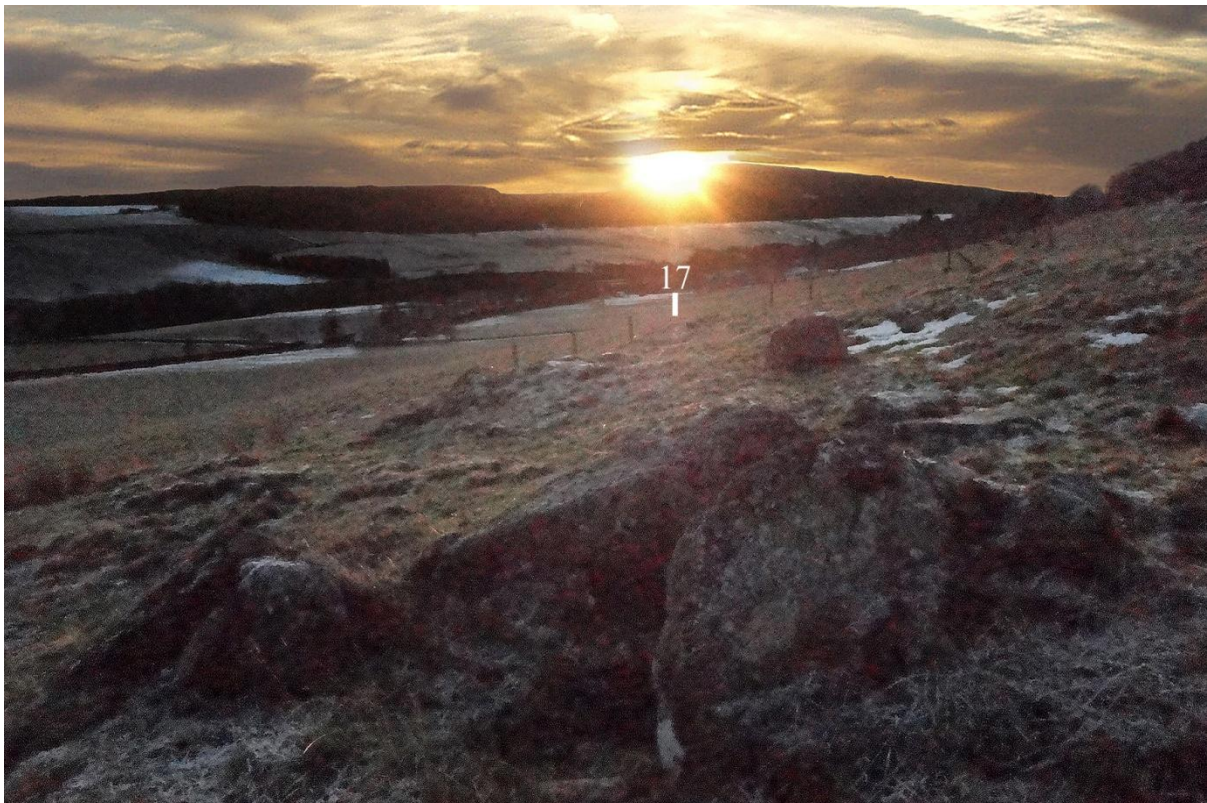


This overhead view of the remains of the cairn shows the passage was aligned at a slight angle to that of the central burial chamber on the right. The passage is aligned towards the Carn Liath OC cairn which is just hidden by the trees below. Although this has no accepted solar or lunar significance, the sun would have risen and shone into both cairns about the 16th of April and 19th October and this is the same alignment of Stones 11-14, see p.22.





Stone 17 is a large rock located some 20m to the southwest of the passage cairn at 218° and has 10 cupmarks on its top with 6 of these forming an arc open to the southwest. From the passage cairn the cupmarks on Stone 17 are generally in line with the setting midwinter sun. The midwinter sunset at 2:45pm on the 16th December 2011.





Stone 18 is located some 37m away at 278° and is difficult to see from Stone 17.

Stone 18 has what may be 2 faint cupmarks on its top, but as it lies on a low linear mound some 4m from the eastern end of the ruined farmstead's gable end, it might have been moved.





Stone 19 is located some 56m away at 252° directly under the highest tree to the centre right of the above picture.

Stone 19 is carved with 9 cupmarks and its aspect is to the east.





From Stone 19, Stone 20 is located 14m a short distance downhill amongst some boulders to the right at 122°. Stone 20 at the centre of the below picture has only 1 cupmark on its upper side. This is the dark spot above the white patch of lichen. It is likely that it and the boulders are field clearance.





From these boulders a faint track leads obliquely downhill towards Sworddale Farm and was possibly used to reach the farmstead on the ridge. From Stone 20, Stone 21 below is 18m away at 223° beyond the pointed boulder in the centre of the above picture. As shown below, it is carved with 3 faint cupmarks.





From Stone 21, Stones 22 and 23 are located 27m downhill at 144°. In the above picture, although Stone 22 is hidden by grass, its position can be seen from Stone 21 and they are roughly in line with the midwinter sunrise.

Stone 22 below has a line of 7 cupmarks, one of which is very faint and appears to have been broken off suggesting that the outer part of the rock has sheared away.





Stone 23 is located a few metres downhill from Stone 22 and appears to have about 10 worn cupmarks along its edge. To find Stone 24 go back uphill to Stone 21.

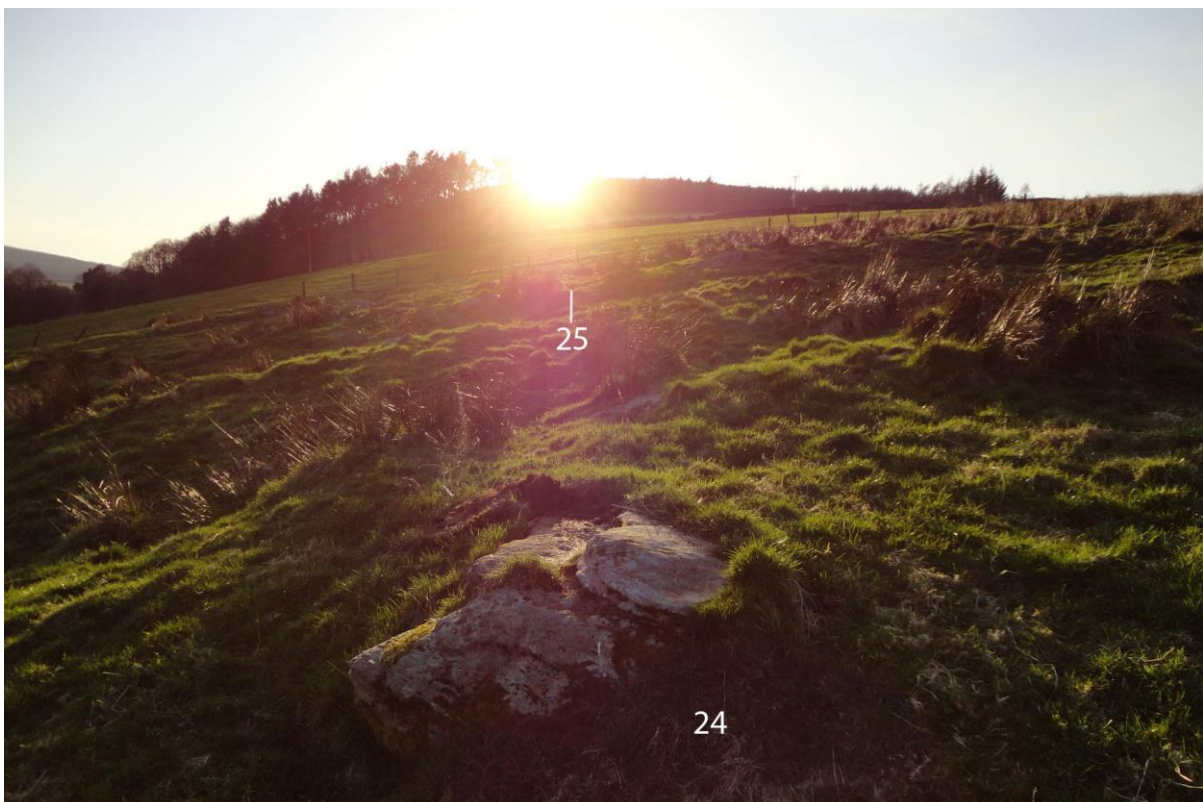
From Stone 21, Stone 24 is 20m away at 264° roughly in line with the last tall tree near the centre of the above picture and, as shown below, is generally in line with setting sun a day or so before the spring equinox on the 22nd March 2012. The position of Stone 25 is also shown.





Stone 24 has 3 cupmarks one of which is very worn.

From Stone 24, Stone 25 is 25m away at 262° and while it is almost flush with the ground it can be seen from stone 24. Although the horizon is tree covered, as shown below, Stone 25 is in line with the setting equinox sun on the 22nd March 2012.





Stone 25 has 4 faint cupmarks, one of which has a faint ring and radial groove, which is aligned in the general direction of the midwinter sunrise. From stone 25, stones 26 and 27 are situated a short distance uphill. These stones lie just to the east of two rows of large stones, set about 8m apart, which run up the hillside parallel to the fence line. The general line up the hill is towards the midsummer sunset.





Stone 26 above has two deep cupmarks. The northern one has a faint curved radial groove and may be surrounded by worn rings, but these could simply be ripples in the rock.

Stone 27 has 4 cupmarks on its upper part. About 5m uphill from this stone is an earth fast 1m high stone forming the SW corner of a c3 X 4m squared enclosure and a slightly larger enclosure lies 15m to the east. A short distance further uphill are a further two joined enclosures.





Stone 28 above was found by the farmer, Mr. John Campbell, in the mid 1980s, and is covered with about 25 cupmarks. It is now at Drumore Farm. Another cupmarked stone was said to lie in rough ground to the north of where this stone was found, but this was not located in 1986 or 2011, Fig.1 Stone 29, below, is also at Drumore, but its original location is unknown.





NH 58200 65220. About 1km away to the SSE at Knockancurin Farm on the opposite side of Strath Sgitheach is a flat east-west aligned slab covered with cupmarks, some of which form kidney shapes.

