



HEREFORDSHIRE ARCHAEOLOGY

Survey and Conservation work associated with a Cairn and Limekiln, Craswall, Herefordshire



Report prepared by Tim Hoverd

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Herefordshire Archaeology
Environment, Planning and Waste
Economy, Communities & Corporate Directorate

Herefordshire Council



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Tim Hoverd BA ACIfA

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***Herefordshire Archaeology
Economy, Communities & Corporate
Herefordshire Council,
Herefordshire Archives & Record Centre,
Fir Tree Lane
Rotherwas
HEREFORD,
HR2 6LA.
01432 383352***

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Summary:

Remedial conservation work to repair scaring on a cairn and limekiln was required in order to mitigate further, more serious, deterioration of the monument. The monument was surveyed in order to determine its true nature and condition and detailed recording of the surviving upstanding masonry associated with the limekiln was undertaken prior to the areas affected by erosion being covered with local topsoil and turf.

It appears that the cairn comprises a kerbed, stone built and then turf covered cairn dating from the Bronze Age; similar to one excavated during 2010 in the Olchon Valley approximately 2.5km to the west. The western side of the cairn has been cut into during the late 18th or early 19th century and a single entrance, top loading limekiln inserted. This has given the cairn the appearance of having two peaks. The limekiln appears to have completely collapsed and much of its stonework has been quarried and removed. Stones recovered during ploughing have been tipped into the hole created by the collapsed limekiln.

During the course of the fieldwork a considerable quantity of flint was recovered from the northern environs of the cairn, indicating a considerable amount of activity must have taken place during the Bronze Age. Flint fragments were also recovered from a small mound approximately 100m to the south of the cairn. Both the cairn and the mound are linked by a natural “causeway” or low ridge between two marshy areas.

Disclaimer: It should not be assumed that land referred to in this document is accessible to the public. Location plans are indicative only. National Grid References are accurate to approximately 5m. Measured dimensions are accurate to within 1m at a scale of 1:500, 0.1m at 1:50 and 0.02m at 1:20m

Figures contained within this report contain material from the Ordnance Survey. The grid in this material is the National Grid taken from the Ordnance Survey map with the permission of the Controller of Her Majesty's Stationery Office (OS Licence 100024168). This material has been reproduced in order to locate the site in its environs.

Contact details: Herefordshire Archaeology, Economy, Communities & Corporate, Herefordshire Council, Herefordshire Archives & Record Centre, Fir Tree Lane, Rotherwas, Hereford, HR2 6LA. 01432 383352

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Background to the project

As part of a Higher Level Stewardship (HLS) Agreement under Natural England's Environmental Stewardship Scheme, Historic England have required that remedial works are undertaken in order to mitigate further erosion and to afford the future protection of the masonry and earthwork remains of what appears to be a multi-phase site containing one (or more barrows) and a lime kiln (HER 6127). This group of features has been designated under the Ancient Monuments and Archaeological Areas Act 1979. It is set within a landscape defined as HHE393 - Contour Defined Enclosure - Axially Aligned Enclosure.

This document has been produced in response to a brief received from Natural England and is intended to cover the following outcomes:

A site where the erosion of the mounds, limekiln and associated stonework has been halted and where remedial work has contributed to the monument's long term stability and survival.

It is understood that this will involve the following actions:

- Archaeological examination and recording of exposed stones on north west side of monument.
- On site investigation of the arrangement of exposed stone to contextualise and make sense of what is visible on the north west side, an area of loose stone which is vulnerable to stock damage. The examination, recording and interpretation of this part of the monument is necessary prior to proposed minimalist intervention to prevent further displacement and loss of fabric through covering the exposed area with topsoil and re-seeding to prevent incursion of weeds.
- A Watching Brief for reburial and an Archaeological Report to be lodged with Herefordshire Historic Environment Record with copies to Agreement Holder, Natural England and Historic England.

Whilst not 'at risk', Natural England has allocated grant under a Higher Level Stewardship Scheme to help manage and protect this archaeological feature. Guidance has been sought from Historic England who has recommended the reburial of exposed stonework on the southwest of the feature caused by the actions of stock and the elements. It is recommended that the site is subject to archaeological recording both prior to and post-reburial. The loose stones will be re-gathered and buried once more using soil from the many mole hills on site and the area reseeded with an appropriate mix of grasses. The work should be done manually and will be subject to a small scale archaeological watching brief.

The public value for money of any conservation work to Natural England, aside from the intrinsic historical interest, is that the site is both visible from Offa's Dyke Path running along the hills above and accessible from a public footpath to the north of the monument.

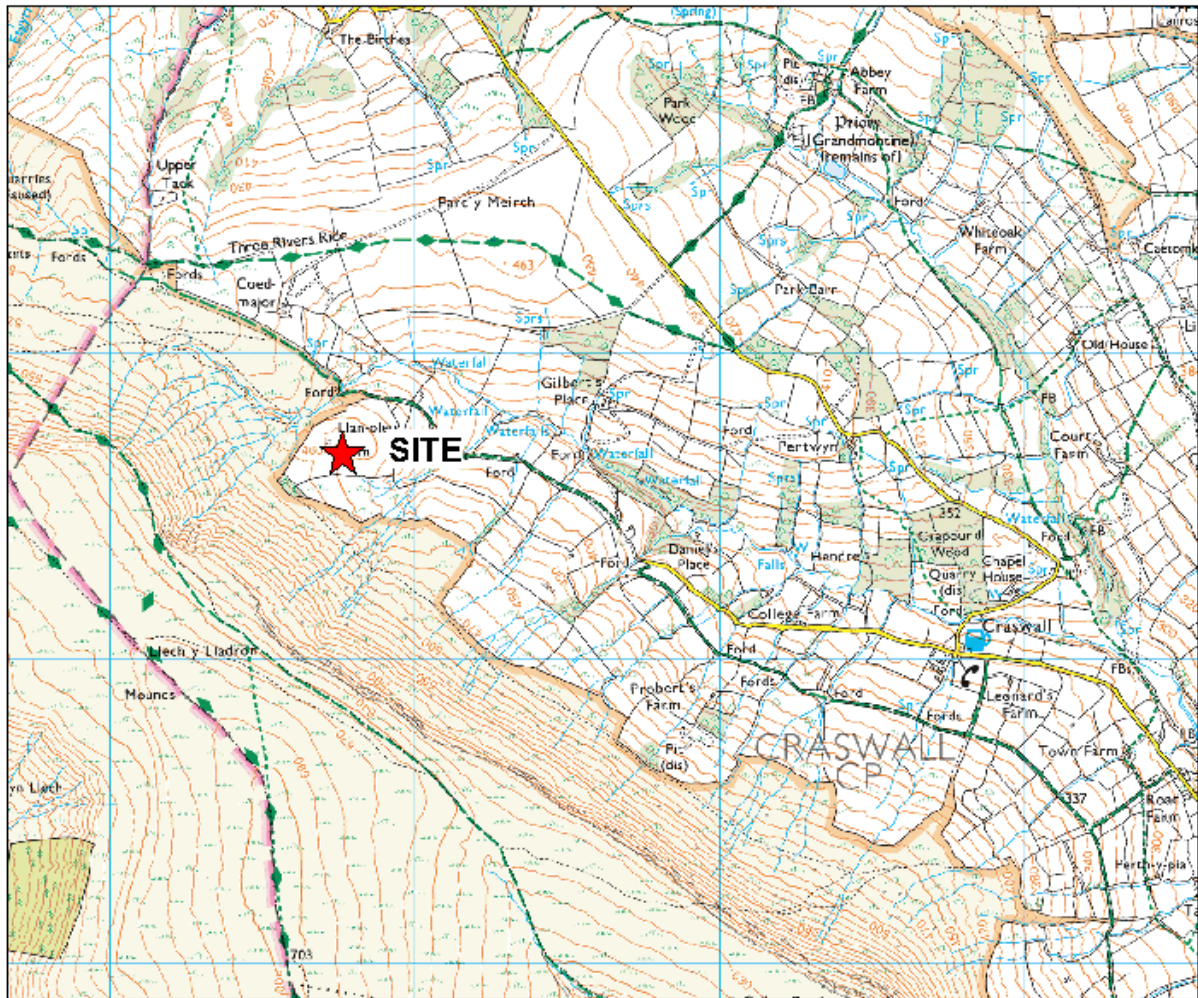


Figure1: Location of the cairn and limekiln in relation to Craswall.

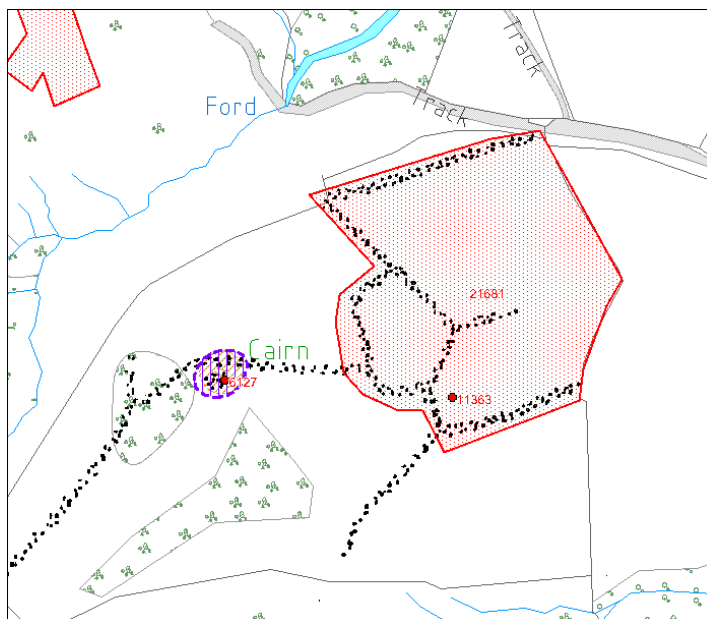


Figure 2: Mapping from the Historic Environment Record showing the extent of known and suspected sites.

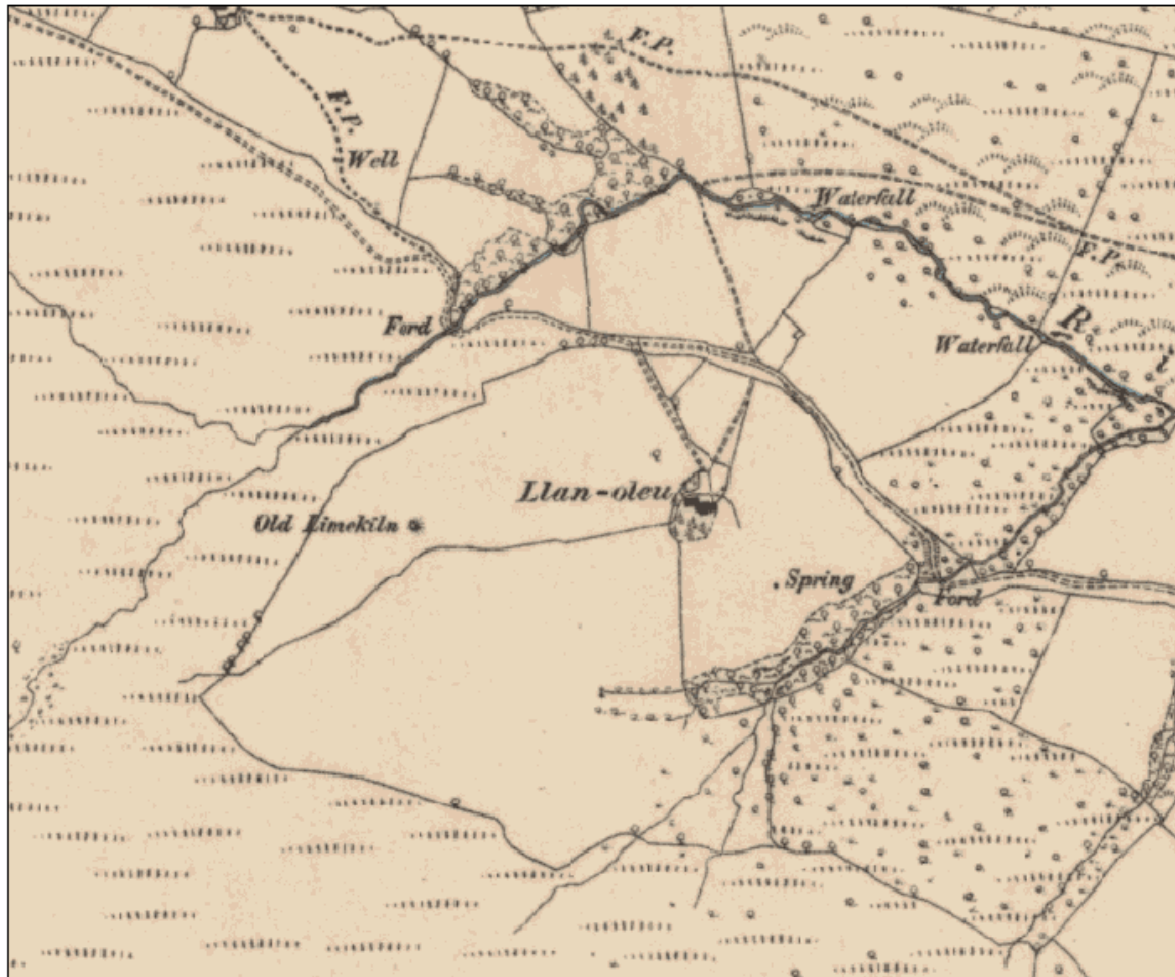


Figure 3: Extract from the 1st Edition Ordnance Survey Map 1886-7 showing the Old Limekiln.

Site location and geology.

The geology of the area comprises Devonian period sandstones, assigned to the Senni Formation on the upper slopes of the ridges. They overlie weaker mudstones of the St. Maughans Formation (British Geological Survey 2004).

The site lies close to the top of Craswall valley, on a low knoll immediately below Black Hill and Hay Bluff, (figure1).

It is understood that the field in which the cairn sits has been ploughed but is currently under pasture. The cairn and Limekiln are designated as Scheduled Ancient Monuments and are therefore of national importance. The Historic Environment Record contains mapping showing a possible enclosure (HER 21681) to the east of the scheduled site. There is also a possible cairn (HER 11363) (Figure 2), although this appears to be a natural rock outcrop.



Figure 4: 2009 vertical aerial photograph, showing the cairn in its environs.



Figure 5: Detail of 2009 aerial photograph showing stone collapse of the limekiln on the western side.

Historical background

The Scheduled Monument known as “Two bowl barrows and a lime kiln 220m west of Llan Oleu” (Listing No: 1014546) and shown as ‘cairn’ on the OS Map is protected under the Ancient Monuments and Archaeological Areas Act 1979. It is set within a landscape defined as HHE393 - Contour Defined Enclosure - Axially Aligned Enclosure. The monument is held under private ownership by R W & C S Richards of Park Farm, Craswall.

The following is an extract from the English Heritage's National Heritage List:

The monument 220m west of Llan Oleu represents two well preserved examples of bowl barrows, and their unusual relationship and later use for lime burning enhances interest in the individual components. The barrow mounds will retain details of their method of construction and evidence for the burial or burials within. The surfaces sealed beneath them will retain environmental evidence for land use immediately prior to their construction, and will preserve dating evidence to elucidate the time lapse between the completion of the underlying barrow and the construction of the second. The fills of the surrounding ditch will preserve evidence for the activities which took place at the monument throughout the period of its use. Limekilns have been used in Britain since Roman times to produce lime for plaster and mortar, for fertilisers, or for use in the tanning and pharmaceutical industries. The earliest examples are simple structures consisting of a hearth in the bottom of a pit, which could be clay or stone lined and may have been dug into a hillside. After the Roman period there was little demand for mortar until after the Norman Conquest, when the replacement of timber buildings with stone made lime burning widespread and the kilns themselves were generally larger and more sophisticated. Medieval limekilns thus have a wide distribution across the country, while Romano-British examples are much rarer. They are often associated with the structures for which the mortar was required, and may have been in use for a single episode of firing. Many examples, however, were in operation for a more prolonged period. The limekiln 220m west of Llan Oleu will retain details of its method of construction and operation. The hearth deposits will preserve evidence for its date and length of use. Its unusual location and association with the earlier burial monuments increases interest in the kiln. The monument as a whole is a notable landmark in the area, easily seen from Offa's Dyke path on the ridge above, and accessed from the footpath which passes below it to the north.

Below is the entry from the Historic Environment Record for Herefordshire:

On a slight knoll, cairn 25m NE-SW x 17m. Appears to consist of two mounds, one superimposed upon the other. Underlying is kerbed - 18 stones can be seen. Smaller earth mound measures some 10m x 9m and lies off-centre on SW end of the other. A lime kiln has been inserted into the first mound. The remains appear to be hollow measuring c. 8m across and rising to the top of the mound. The barrows have a domed profile rising to a height of 1.2m.

The survey:

The survey was intended to comprise a detailed plan created by using a Leica Builder 905 Total Station. However extreme weather conditions on the day of the survey made this largely impossible. The high winds buffeted the survey instrument to such an extent that only a very few measurements could be taken. These points were therefore used as fixed points and a 30m tape used to triangulate further points. Points that were not able to be surveyed in using either of these techniques, were located using a hand held GPS unit.

The surviving wall elevations associated with the northern wall of the lime kiln were recorded by stone by stone drawing at a scale of 1:20.

The survey has documented that the monument comprises a mound, approximately 24m long (east / west) and 18m (north south) reaching a maximum height of approximately 3.2m. The schedule description appears to be inaccurate in that there is only a single cairn (not two as previously thought) and the limekiln which has been cut into the western side of the cairn has formed the higher “peak”, giving the impression of two cairns.

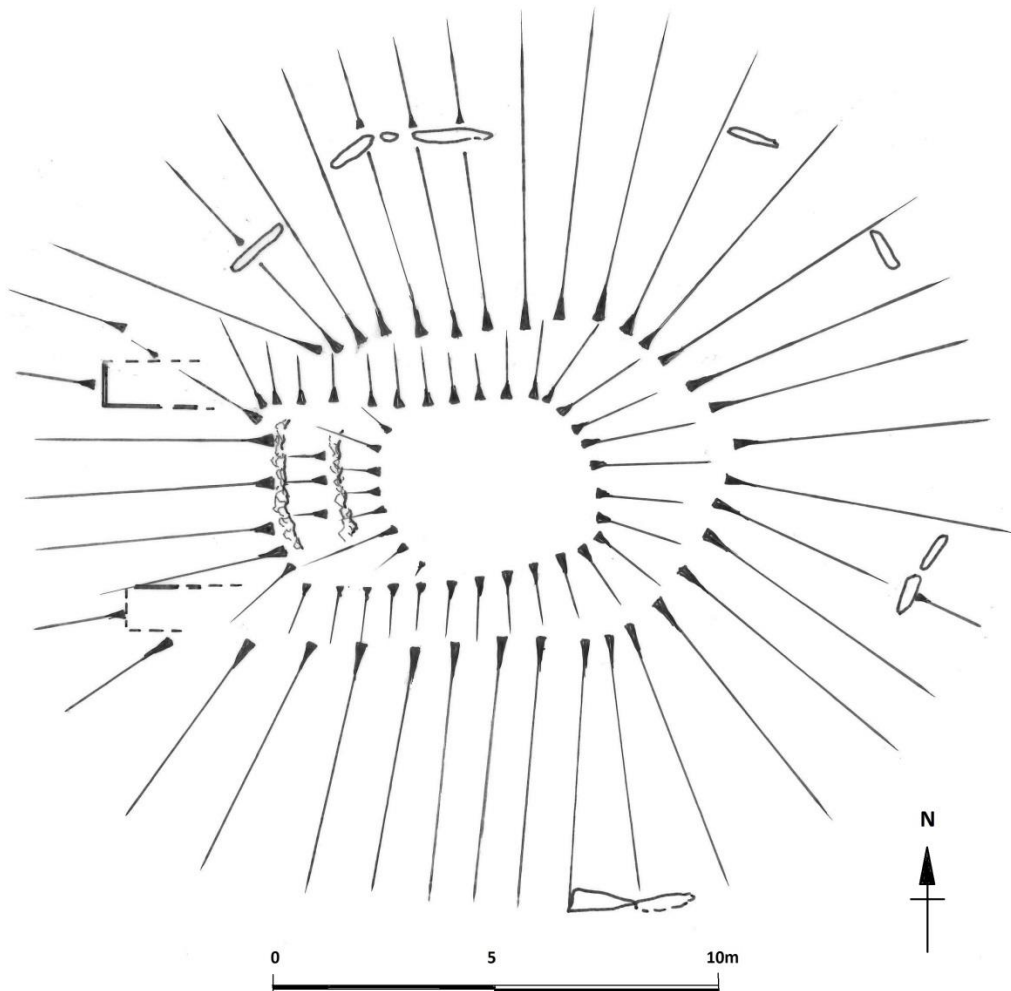


Figure 6: Hachure plan of cairn and limekiln showing visible stone kerbing and remains of kiln walls.

The cairn

The cairn appears to comprise the remains of a series of vertical stones sets, forming a kerb approximately 18m in diameter within which sits a roughly circular stone core, covered in a turf or earthen mound. This stands to a maximum height of 2.6m and is situated on the top of a natural knoll. It may be slightly elongated on its west-east axis compared to its north-south axis, but this is at present difficult to confirm due to the disturbance to the cairn caused by the insertion of the limekiln.

The schedule description describes a total of 16 kerb stones being visible, at the time of this survey only ten kerb stones were visible. This does not necessarily mean that the eight stones have been removed, more likely is that the turf and ant hills have grown over them.

As part of the survey, a walk over inspection was made of the environs of the cairn. This revealed that the natural knoll, on which the cairn was constructed, is linked to a second, more subtle, knoll or area of slightly raised ground approximately 100m to the south by a slight ridge between two watersheds. An inspection of the large number of molehills resulted in the recovery of eleven fragments of flint from within 20m of the northern edge of the cairn and a further 3 small fragments of flint from the rise to the south of the cairn. The flints recovered from the area to the north of the cairn comprised some large fragments of Brandon type flint together with a heat shattered scraper and a number of small debitage flakes. In contrast, the flints recovered from the smaller rise to the south comprise three tiny fragments of re-touch debitage only, possibly suggesting that some form of manufacturing or processing was taking place at this location rather than apparent ritual deposition that appears to be taking place at the cairn.

The Limekiln

The limekiln is shown as “old limekiln” on the 1886 1st Edition Ordnance Survey map, suggesting that it dates from the early 19th century or earlier. The kiln comprises a single entrance, top loading kiln. It is in poor condition, having completely collapsed and been substantially quarried, (probably for building stone). The lower courses of the northern and southern walls survive, these are approximately 4m apart and survive for a maximum of four courses in height. The kiln appears to have collapsed past the loading hole and this has left two vertical steps close to the crest of the earthwork associated with the kiln. The upper step is made of stone and appears to be the outer core of the kiln cone. The lower step is made up of vitrified stone and appears to be the internal face of the remains of the cone. The Void which was the cone and the entrance has been filled with stones, some from the kiln itself and others found whilst ploughing the field and tipped in (R.Richards, *pers com*). This has helped protect the surviving elements of the kiln. In recent years some of the stones which make up the top courses of “*in situ*” walling have become displaced by livestock.

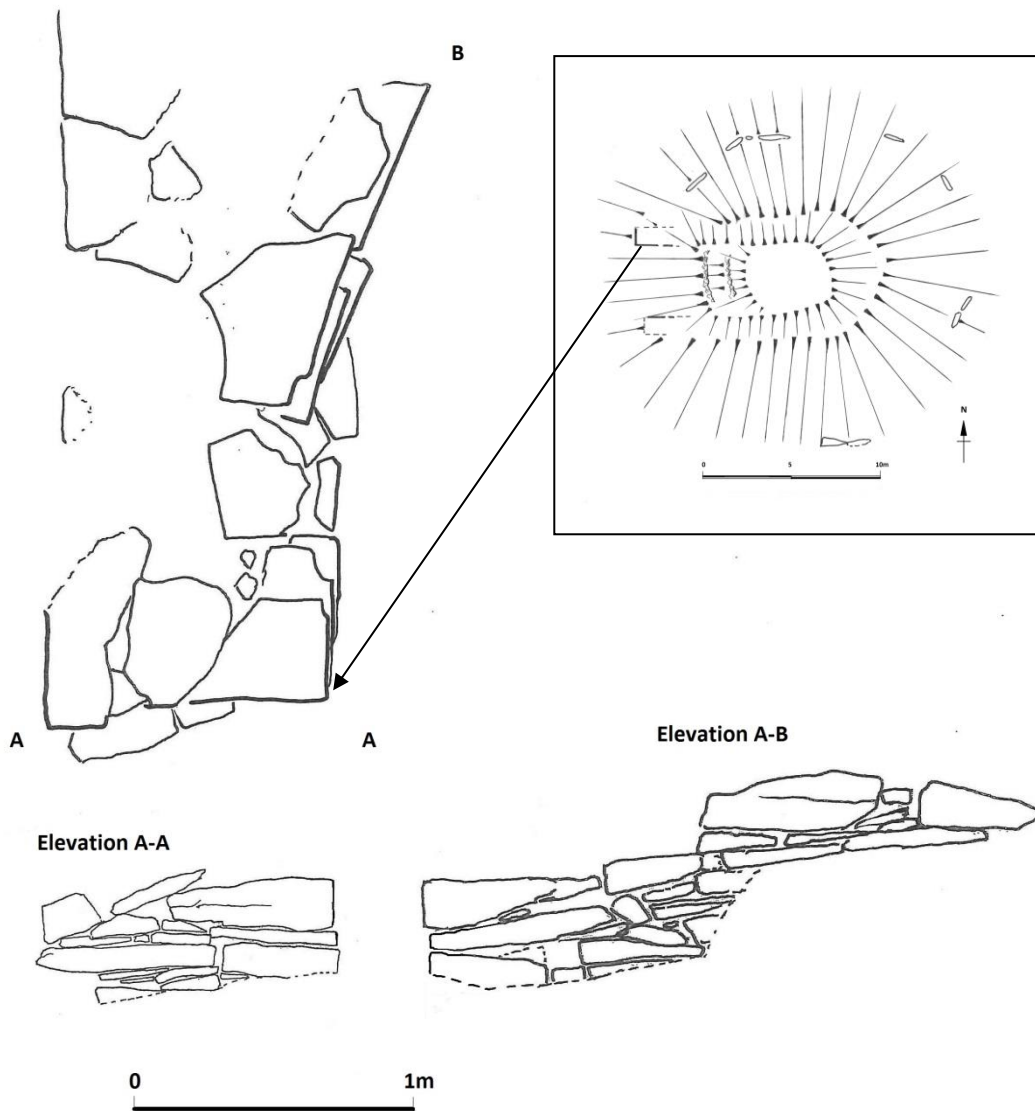


Figure 7: Detail of remaining elevations of northern wall of Limekiln (West facing (A-A) and south facing (A-B) elevations).

Discussion:

The survey has clarified the description from the schedule designation and has made it clear that only one cairn is present on the scheduled site and that this has been cut into on its western side in order to construct a limekiln. Map regression analysis would suggest that the limekiln was constructed in the early 19th century or earlier – as it documented on the 1886 Ordnance Survey Map as being old/ disused.

The remainder of the cairn appears to be in relatively good condition with what appears to be a dense deposit of flint around its northern environs. The topography would suggest that the cairn is linked to the base of the hill by a low ridge or causeway, the southern end of which appears to have been used for retouching or some other purpose during the Bronze Age and appears to be linked to the cairn, both topographically and archaeologically.

Recommendations for further work

The following recommendations are suggested in order to ensure that the Scheduled Monument is protected from further erosion:

1. The material deposited over the scaring is monitored for slumping and more material added if needed.
2. Additional material is gradually added over the limekiln collapse in order to cover and preserve the last remains of the side walls and not present an area of shelter for livestock.
3. The moles are controlled / eradicated – in order to prevent further intrusion into what appears to be an archaeologically significant deposit surrounding the cairn and at the southern end of the ridge to the south of the cairn.
4. The causeway and the low rise to the south of the cairn should be incorporated into the HER and taken into account during any future Farm Environmental Plans.

The Watching Brief.

The landowner had collected clean topsoil and turf from nearby and this was spread over the upper scar caused by the collapse of the kiln cone. The lower area of rubble between the two wall stubs was left alone as it is likely that some of the material deposited on the upper scar will be washed down and create grass infill between the stones therefore achieving stability of this part of the monument whilst still rendering the kiln visible.



Plate 1: Scar after infill with topsoil and turf.



Plate 2: Showing the scar above the limekiln rubble.

Archive and artefact deposition

The finds archive comprises:
14 fragments of flint.

The paper archive comprised
18 digital images (photographs)
7 Mapinfo data files
1 correspondence file
This document.

The Archive will be deposited with Herefordshire Museum Service.

Acknowledgments

The author would like to acknowledge the help of Esther Stevens and Richard Richards

Bibliography

British Geological Survey 2004 *Talgarth* England and Wales, Sheet 214, Solid and drift geology. 1:50,000 (Keyworth, Nottingham: British Geological Survey)