

**LAND AT COLD LAW, NORTHUMBERLAND**

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**TOWN AND COUNTRY PLANNING ACT 1990**

**TOWN AND COUNTRY PLANNING (INQUIRIES PROCEDURE) (ENGLAND) RULES  
2000**

**APPEAL BY VISCOUNT DEVONPORT**

**WRITTEN RESPONSE BY SIMON HITCHENS TO THE NOTE PRODUCED BY DR  
WEST AFTER MR HITCHENS GAVE EVIDENCE CONCERNING TRI-RADIAL  
CAIRNS ON THE RAY ESTATE**

**PINS Reference: APP/P2935/W/20/3244389**

**LPA Reference: 19/00247/FUL**

**MARCH 2021**

1. On the second day of the inquiry (10 March 2021) a note was submitted from Dr West in response to the evidence that I had already submitted both in writing and orally on the first day of the inquiry regarding the presence of tri-radial cairns at the Ray Estate as one of the many sources of inspiration for *Ascendant* (see paragraph 5.2.14(c) and image 16 of my proof of evidence).
2. Broadly, Dr West seeks to make two points. First, it seems she questions the existence of tri-radial cairns on the Ray Estate. Second, she does not accept any evidence of a linkage between such cairns and the Bronze Age and astronomy. In producing her note, Dr West states that she has sought advice from Dr Frodsham with whom she has been working on *Revitalising Redesdale* which has involved mapping areas of archaeological interest in the Redesdale landscape known as *The Redesdale LiDAR Landscapes Project* ("the Project"). Dr West goes on to state that no tri-radial cairns have been spotted thus far in the LiDAR mapping of Redesdale.
3. I note that the Project has produced a report ("the Report") entitled *Redesdale LiDAR Landscapes*, of which Dr Frodsham is the author. I attach extracts of the Report to this note – see Appendices 1, 2, & 4.
4. The first thing to note is that the Project has not extended to that part of the Ray Estate to which I referred in my evidence i.e. as shown on image 16 at page 23 of my proof where the tri-radial cairns were discovered. In fact, the LiDAR mapping for the Redesdale valley stops short of my stated location.
5. To assist:
  - (a) I attach a copy of map 1 that shows the Project area outlined in brown (see page 5 of the Report);
  - (b) I have produced map 1A below, which is an enlarged version of map 1 with identification of the relevant part of the Ray Estate;
  - (c) I attach a copy of map 2 that shows (shaded grey) the extent of lidar coverage within the Project area (see page 6 of the Report);
  - (d) I have produced map 2A below, which is an enlarged version of map 2 with a focus on the relevant part of the Ray Estate;
  - (e) I have also produced map 3, which is a reproduction of image 16 (per page 23 of my proof of evidence), but with the addition of a black ring highlighting Sunnyside; and

- (f) I have also produced map 4, which overlays my image 16 on to map 2A and shows that the LiDAR mapping area for the Project did not cover the area to which I referred in my evidence.
6. I therefore do not accept the basic suggestion in the note produced by Dr West that the Project mapping suggests that there is no evidence of tri-radial cairns on the Ray Estate as a result of the mapping carried out by the Project. The Report does not extend to the relevant part of the Ray Estate where tri-radial cairns were found.
  7. I was first made aware of the discovery of tri-radial cairns on the Ray Estate and their location by the Appellant himself, the owner of the Ray Estate. The Appellant had, in the late 1990s, been approached by Philip Deakin and subsequently welcomed him and the team including Professor Ford to the Ray Estate for their archaeological investigation. The Appellant, therefore, knew that such an investigation had taken place on the Ray Estate. He was in turn informed that the tri-radial cairns had been discovered on the Ray Estate and the connection between the Bronze Age and their potential astronomical use had been made. It was this which gave me part of the inspiration for that part of Ascendant which I describe in my evidence.
  8. Although neither the Appellant nor I have immediate access to the original research paper recording the archaeological finds, I append extracts of a document entitled *Resource Assessment: Neolith and Early Bronze Age* which makes reference to that archaeological find. The document was in fact authored by (amongst others) Dr Frodsham and other members of the Neolithic and Early Bronze Age Specialist Group. Section 5.4 of the document is entitled *Chalcolithic and early Bronze Age burial monuments* and states that:

'...12. *The excavation of Turf Knowe South roughly coincided with the recognition of several apparently similar monuments elsewhere in Northumberland, all of which are now classified as 'tri-radial cairns'. They were first recognised by BillFord and a team from the Borders Archaeological Society, who excavated an example at Ray Sunnyside (Ford et al 2002).'*
  9. This reference to Ray Sunnyside is a reference to 'Sunnyside' as indicated in image 16 of my evidence (see black ring in map 3 below, appendix 6), just above the upper right-hand end of my marked 'Sites of tri-radial cairns'.
  10. The same document goes on to say that '*Eight tri-radials have been identified at Lordenshaws, four at Hartheugh and three at Ray Sunnyside; other examples are known at Brands Hill, Heddon Hill and Turf Knowe.'* (section 5.4, paragraph 12).

11. In addition, and in response to the surprising comment made in Dr West's note – 'that any mention of these tri-radial cairns being used by Bronze Age people as "astronomical markers of solstices" is pure fantasy' - I would simply refer again to this same document I have appended. In particular, it not only describes them as "tri-radial cairns" and notes their existence at the Ray Estate, but identifies them as early Bronze Age.
12. As to their use, my own quick web-search refers to a record of a BBC Radio 4 Science programme titled 'Unearthing Mysteries – Tri Radial cairns in Northumberland' (dated 19 August 2003 @ 11 – 11.30 am). The synopsis of this programme refers to the very same Borders Archaeological Society:

*'The archaeologists quickly ruled out the possibility that it was a recent sheep shelter. You wouldn't shelter many sheep behind a low structure like that. In that case, as with the others surveyed so far, the three arms of the cairn are aligned in roughly similar directions, one pointing north and the others at 140 and 240 degrees. That alignment means that they could be pointers to the mid-summer and midwinter sunrise and sunset.'* (4<sup>th</sup> paragraph of web page synopsis).

**Simon Hitchens**  
**17/3/21**

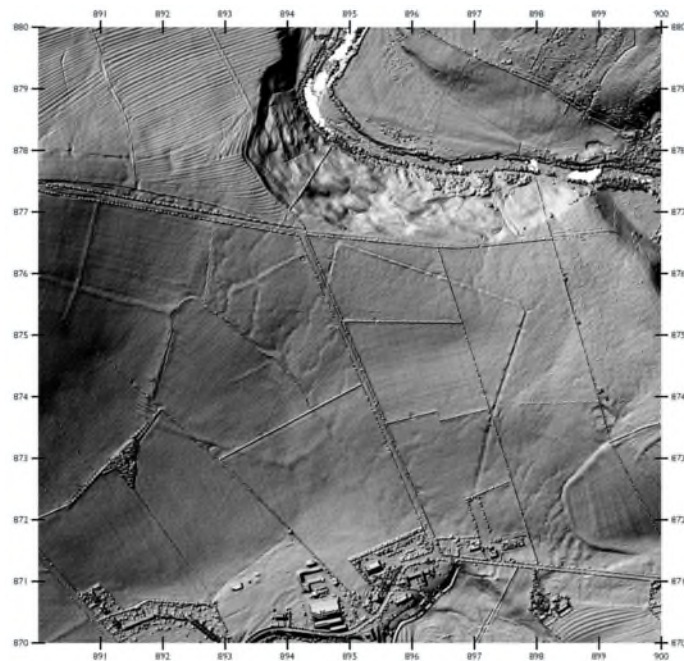
**Appendix 1.**

Front cover of 'the Report' – Redesdale LiDAR Landscapes



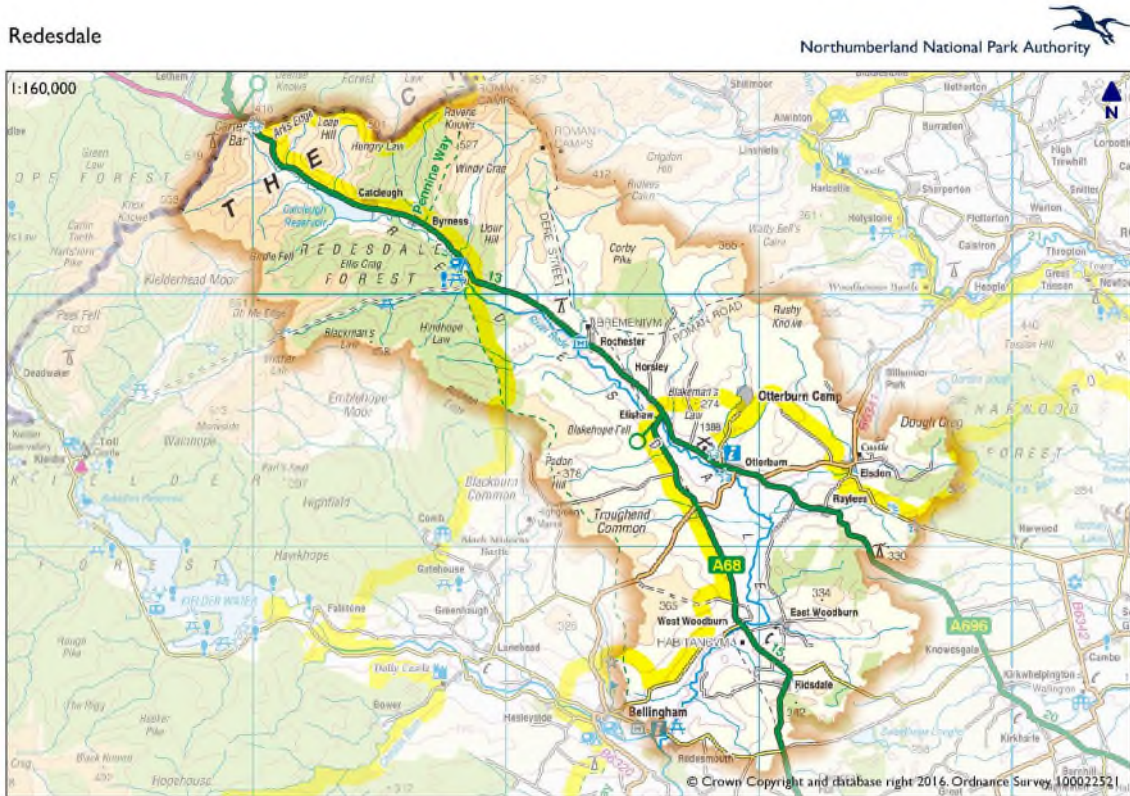
# REDESDALE LIDAR LANDSCAPES

## Project Report



## Appendix 2.

Page 5 of 'the Report'



Map 1. OS map showing the Revitalising Redesdale project area, outlined in brown. The Northumberland National Park boundary is shown in yellow. The core of the project areas within the national park, but substantial areas in the north-west and south-east lie outside its boundary. The area is wholly within the county of Northumberland. The purple line straddling the north-west corner of the map is the Anglo-Scottish border.

Map produced by Northumberland National Park Authority.

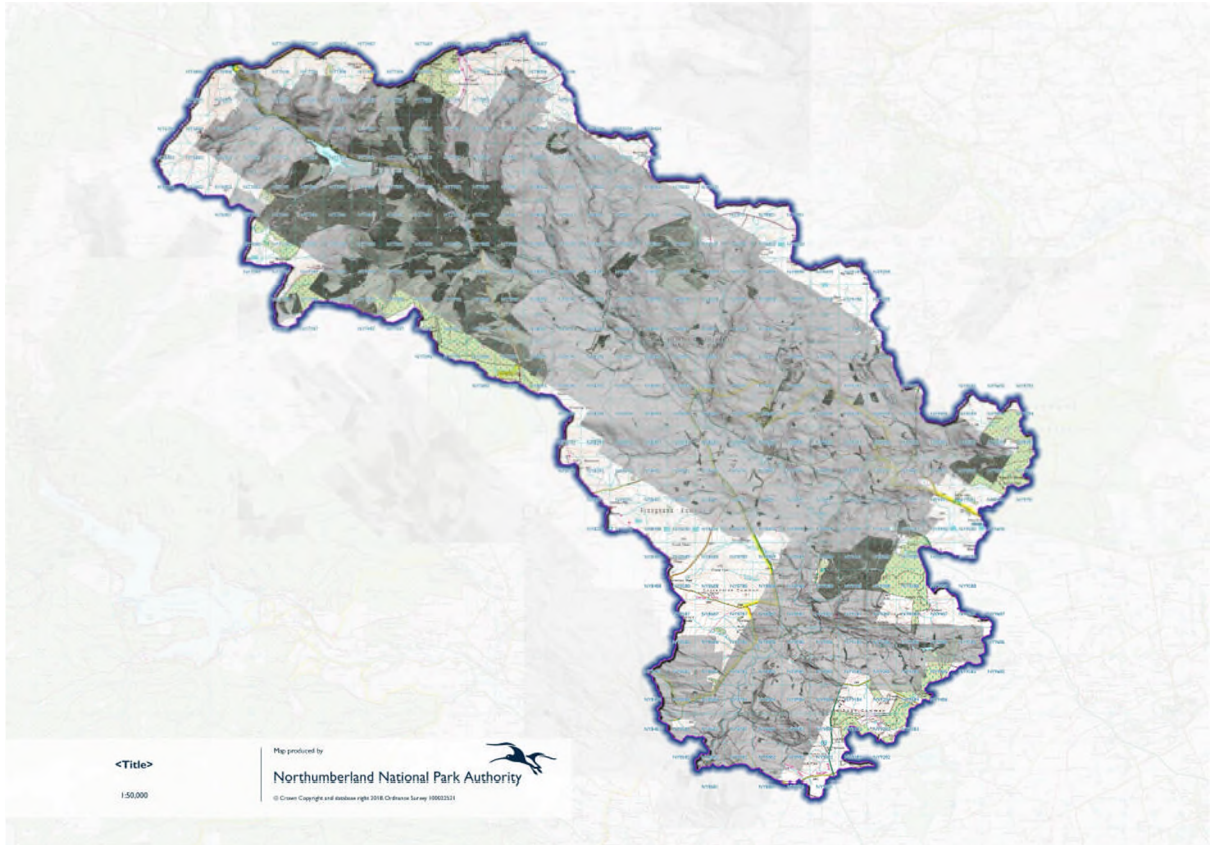
**Appendix 3.**

Map 1A. An enlarged area of map 1. which concentrates attention to the area concerned – The Ray Estate.



## Appendix 4.

Page 6 of 'the Report'



Map 2. Map showing individual OS km sq map references and extent of lidar coverage within the revitalising Redesdale project area.

The Revitalising Redesdale project area is outlined in blue, with available lidar coverage shaded grey.

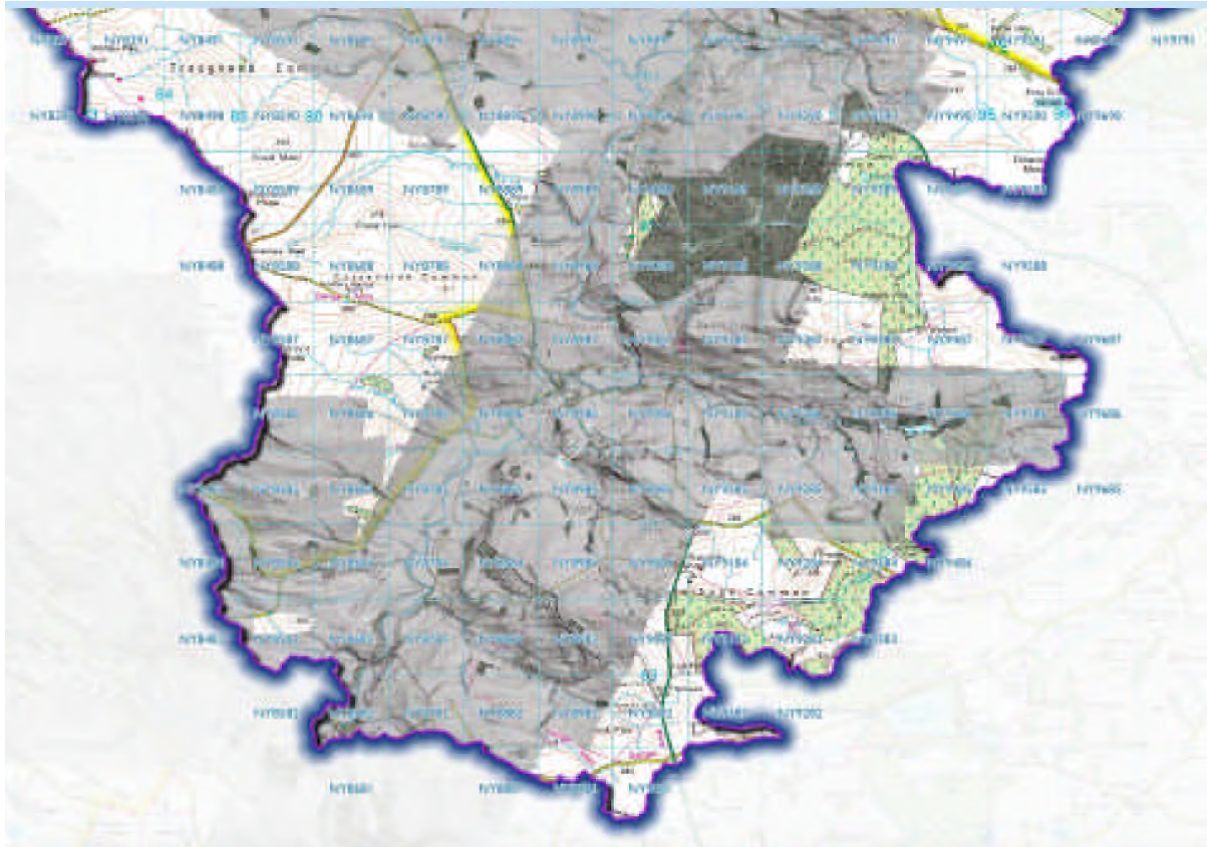
(Note: although of little use if printed at A4, this map becomes clear if enlarged onscreen).

Map produced by Northumberland National Park Authority.



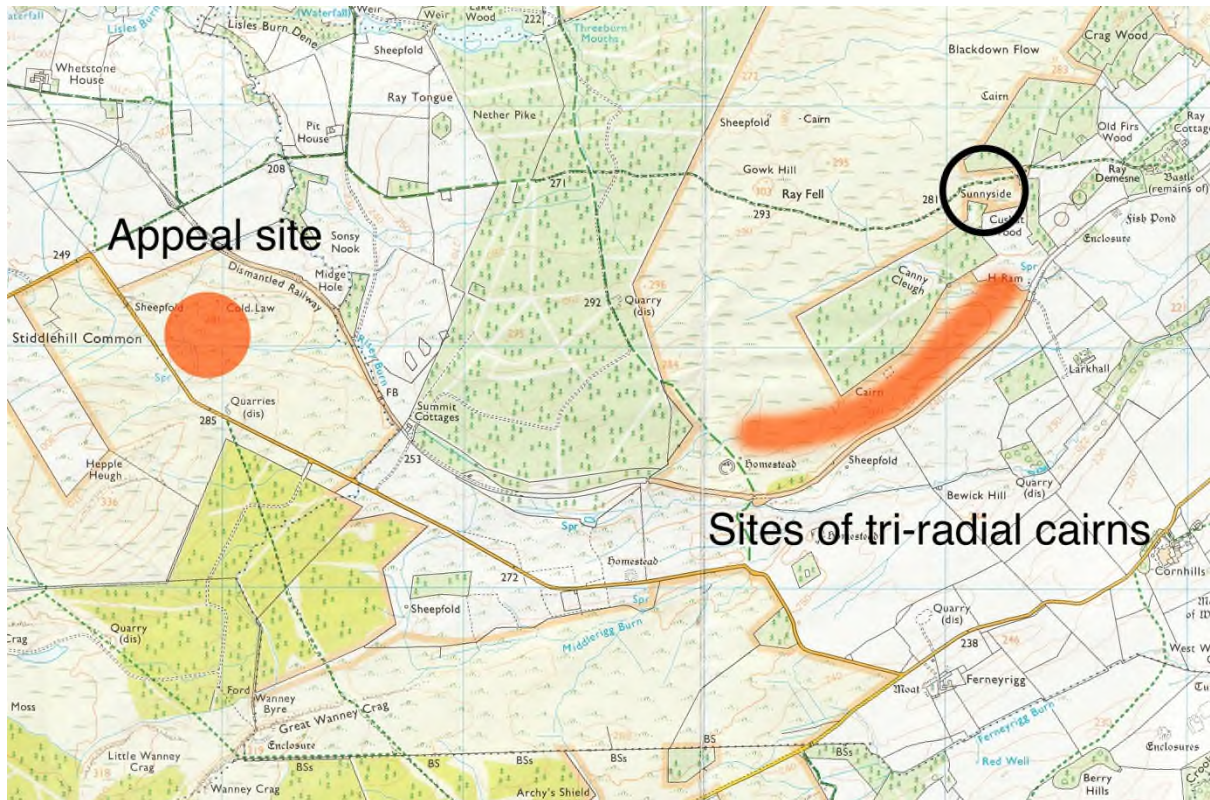
**Appendix 5.**

Map 2A. An enlarged area of Map 2. which concentrates attention to the area concerned – The Ray Estate.



## Appendix 6.

Map 3. image 16 (per page 23 of my proof of evidence) but with the addition of a black ring highlighting Sunnyside



**Appendix 7.**

Map 4, which overlays my Image 16 on to map 2A and shows that the LiDAR mapping area did not cover the area to which I referred in my evidence. (Pixelated but accurate to scale)



## Appendix 8.

Cover page of: *Resource Assessment: Neolith and Early Bronze Age* as referred to in point 7.

### Resource assessment: Neolithic and Early Bronze Age

#### Consultation draft

Neolithic and Early Bronze Age Specialist Group members:

Paul Frodsham (ORACLE Heritage Services. Group convenor), Stan Beckensall (independent), Phil Bowyer (Tynedale North of the Wall Archaeology Group), Paul & Barbara Brown (independent), Lucy Cummings (University of Newcastle), Ben Edwards (Manchester Metropolitan University), Chris Fowler (University of Newcastle), Roger Miket (independent), Chris Scarre (University of Durham), Kate Sharpe (independent), Pete Topping (University of Newcastle), Blaise Vyner (Blaise Vyner Archaeology Consultancy), Clive Waddington (Archaeological Research Services), Rob Young (independent).

Note (not for inclusion in actual Assessment!).

In some ways it would have been better to start from scratch with this, but the brief is for an 'update', so that is what I have attempted, retaining much of the original structure and (where possible) much of the original text. I have tried to incorporate all relevant new material, without losing too much of the old. This consultation draft is somewhat inconsistent in that it deals with some things in greater detail than others, and it probably includes some unnecessary repetition between some sections. It still requires quite a bit of editing, but I thought I should circulate it now - all constructive comments, however critical, will be gratefully received and where appropriate worked into the next (hopefully final!) draft. It will be good to get this Assessment agreed asap so we can then get cracking with drafting the Agenda, which is in many ways the most important bit of the NERRF2 process.

## 1. Introduction

### 1.1 Defining the Neolithic and early Bronze Age

When plans for the original NERRF project were first drafted, the intention was to have three separate sections covering Neolithic, Bronze Age and Iron Age. This was later amended to two sections, with the Bronze Age effectively divided into two halves: the Neolithic and early Bronze Age (including the Chalcolithic, though debate still rages as to whether this should be classified as a 'separate' period; see the various opinions expressed in Allen, Gardner & Sheridan 2012) and the later Bronze Age and Iron Age. This distinction reflects the real division that seems to have occurred during the middle Bronze Age, in the centuries around 1500BC, from an 'ancestral landscape' of ceremonial and burial monuments to an 'agricultural landscape' of farms and fields (Frodsham 2006). Although this is in some ways a simplistic division, it does reflect a major change in the landscape, and ways in which people interacted with the landscape, which was more profound than any changes that occurred between Neolithic and Bronze Age, or Bronze Age and Iron Age. Consequently this chapter covers the first of these periods, while the next covers the latter. In the original NERRF publication, this distinction was not explicit and there was some confusion, with, for example, late Bronze Age farmsteads being discussed in the Neolithic and early Bronze Age chapter.

## Appendix 9.

Extract from *Resource Assessment: Neolith and Early Bronze Age*, page 28

*'The excavation of Turf Knowe South roughly coincided with the recognition of several apparently similar monuments elsewhere in Northumberland, all of which are now classified as 'tri-radial cairns'. They were first recognised by Bill Ford and a team from the Borders Archaeological Society, who excavated an example at Ray Sunnyside (Ford et al 2002). A burnt area sealed beneath one of the arms gave a date of c2600 cal BC; however, this does not necessarily date the structure, which could be later. Eight tri-radials have been identified at Lordenshaws, four at Hartheugh and three at Ray Sunnyside; other examples are known at Brands Hill, Heddon Hill and Turf Knowe.'*

## Appendix 10.

Extract from web search referred to in point 12.



## SCIENCE

### UNEARTHING MYSTERIES

**MISSED A PROGRAMME?**  
Go to the [Listen Again](#) page

#### Tri Radial Cairns in Northumberland

Tuesday 19 August 2003 11.00-11.30am

The moors of Northumberland are an ancient landscape. They are littered with trackways, medieval field systems, Iron Age hill forts and Bronze Age burial cairns. But among them, members of the Borders Archaeological Society began to notice rough piles of rocks in certain alignments, with arms pointing North and to the sunrise at special times. Were they just old sheep shelters with chance alignments, or could they be an important relic of ancient ceremonies in this ritual landscape?



**From left to right:** Presenter Aubrey Manning, artist Manuela Walker, archaeologists Jim Nesbit and Philip Deakin

 [Listen again to the programme](#)

There's no shortage of rocks in the Northumberland hills. Boulders rounded by ice and water are littered across the moors. In some parts they are piled up into groups of many cairns, often marking ancient burials, dating from the Bronze Age more than 4000 years ago. Some of the larger stone slabs are carved with strange, concentric 'cup marks', pounded out with stone hammers in prehistoric times.

There are other structures too: dry-stone walls and the remains of structures piled up to give sheep shelter from the biting wind. A few years ago, members of the Border Archaeological Society were surveying prehistoric remains in the hills above Wooler in Northumberland. Retired aircraft engineer Jim Nesbitt noticed a pile of stones that seemed to be laid out as three radial arms several metres long. He remembered seeing something similar further south near Rothbury. Once the archaeologists knew what they were looking for they began finding them all over the place - more than 20 to date. Eventually, they got permission to excavate one. When they began, the stones were barely visible above the peaty soil, but excavation showed that this was indeed a so-called tri-radial cairn with its three arms each about five metres long. It did not seem to be associated with a burial but was close to a field of Bronze Age burial cairns. So what was it and who put it there?

The archaeologists quickly ruled out the possibility that it was a recent sheep shelter. You wouldn't shelter many sheep behind a low structure like that. In that case, as with the others surveyed so far, the three arms of the cairn are aligned in roughly similar directions, one pointing north and the others at 140 and 240 degrees. That alignment means

that they could be pointers to the mid-summer and midwinter sunrise and sunset. We know from famous monuments such as Stonehenge that Bronze Age Britons attached great importance to these solstices. Although the precise alignment of the arms varies, they could have supported marker posts to give accurate sightings of the astronomical events.

But how old are they? It is this difficult to get the precise date on the cairns, though some do incorporate cup-marked stones and even a prehistoric grinding stone or quern. Charcoal from just beneath the cairn excavated gave a radio-carbon date of more than 4600 years ago, in the early Bronze Age. That doesn't prove that the cairn was built that long ago, but Philip Deakin of the Border Archaeological Society thinks it's reasonable to suppose that the Bronze Age people burnt off the heather in order to clear the site for the construction of the cairn.

So far, the evidence is still compelling that these tri-radial cairns were indeed constructed for Bronze Age astronomy, perhaps for seasonal ceremonies to honour the dead who are buried under nearby cairns. All around are signs of prehistoric and later activity. At the site of Lordenshaw near Rothbury, the tri-radial cairns are overlooked by an Iron Age hill fort and nearby there are traces of a medieval field system. Bit by bit the moors are giving up their secrets