

Tregeseal Stone Circle St Just, Cornwall

Conservation work



Historic Environment Projects



Tregeseal Stone Circle, St Just in Penwith, Cornwall

Stabilisation of stones and clearance of vegetation

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Acknowledgements

This report describes work co-ordinated by Historic Environment Projects, Cornwall Council, to stabilise stones at Tregeseal Stone circle and clear vegetation from around the site.

The work was stimulated in the first instance by Ian Cooke and Craig Weatherhill of Save Penwith Moors, who drew attention to the fact that a number of the stones in the circle were loose, and might be at risk given the recent introduction of grazing to the area. In drawing up plans to address this problem, Vaughan Robbins of Natural England and Nick Russell of English Heritage were involved. The landowner (Warren Farm Trust) and their agent Clive Williams were agreeable to the project going ahead, as was Kenny Trembath, the grazier.

The work on site was carried out by Adrian Thomas and team.

The work was undertaken as part of the Scheduled Monument Management 'Conserving Cornwall's Past' project: a project funded jointly by English Heritage, the Heritage Lottery Fund, the Cornwall Heritage Trust, Cornwall Council and other partners.

Cover illustration

Work in progress at Tregeseal stone circle.

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Abbreviations

BTCV	British Trust for Conservation Volunteers
CASPN	Cornwall Ancient Sites Protection Network
EH	English Heritage
HBSMR	Historic Buildings, Sites and Monuments Record
HEFA	Historic Environment Field Advisor
HE CC	Historic Environment, Cornwall Council
NE	Natural England
NGR	National Grid Reference
PRN	Primary Record Number in Cornwall HER

1 Summary

In July 2009, the English Heritage Historic Environment Field Advisor (EH HEFA) and Ann Reynolds of Historic Environment Advice at Cornwall Council were informed by Ian Cooke and Craig Weatherhill of the Save Penwith Moors pressure group that the stone circle on Tregeseal Common, St Just in Penwith, was at risk: recently re-introduced cattle grazing on the common was considered to pose a threat to a number of the stones in the circle, which were loose in their sockets.

Following discussion of this problem, it was agreed with English Heritage, Natural England and the owners of the site that the problem could be addressed through Cornwall Council's current Scheduled Monument Management project ('Conserving Cornwall's Past'). A methodology was agreed and work rapidly organised to stabilise the stones. All the stones which were loose were ones which had fallen and been re-erected in the past, and in the event four of these were stabilised by wedging rab down into the gap between the stones and the surrounding ground. A further, slightly loose, stone will be monitored. At the same time, an area of dense vegetation around the site was cleared, to give more space for the stock to move around, to help reduce the possibility of any conflict between cattle and visitors to the site.

The stone circle is a Scheduled Monument, Cornwall 305. Located at SW 3865 3236, it is number 16152.01 in Cornwall Council's (CC's) Historic Buildings, Sites and Monuments Record.

2 Introduction

2.1 Summary

Tregeseal Stone Circle is located on the edge of an extensive area of downland in the parish of St Just in Penwith (Figs 1 and 2). Following the recent re-introduction of grazing to the area, the circle was considered to be at risk. Five stones in the circle were loose in the ground and there was a fear that the cattle now grazing the area might knock one or more of the stones over by rubbing against them.

After this problem had been drawn to the attention of Historic Environment and EH, a proposal for conservation work was drawn up; this was for minimal intervention to stabilise the stones which were most at risk and to reduce the risk to the others by clearing scrub from the vicinity of the stones so that cattle would have more space to move around in.

2.2 The monument

The stone circle which survives on the downs is part of a complex which includes two, possibly three, original circles. Of these, only that which is the subject of this proposal survives well. The second, of which only a few stones remain, is partly built into the hedge to the west of the first circle and partly under pasture in an adjoining field. The third is suggested from air photos only.

The extant circle is itself far from original. From an examination of antiquarian records, Barnatt has shown that the circle was extensively reconstructed, probably in the early 20th century (Barnatt 1980, 162-5). Others have been replaced more recently (Cheryl Straffon, *pers comm*). Although there are now nineteen stones standing only seven are apparently *in situ* and unrestored, the remainder having been either re-erected or brought in to replace missing or destroyed stones. The original *in situ* stones stand on the east side of the circle; those on the west are entirely reconstructed, with four standing in the hollow of a small quarry or tin stream working (Figs 3, 4 and 5).

2.3 Condition of the monument

With nineteen stones still standing in a relatively stable setting, the monument is overall in good condition. However, the history of the monument noted briefly above indicates that this has not always been the case. Even as late as 1984, when there was a threat of moorland clearance in the area, it was recorded:

All vegetation recently burnt. There is a disturbed area in the centre of the circle 6ft x 4ft x 20ins deep. A stone on the east side has been uprooted and is roughly replaced with loose rocks around it. It is not at all stable... (EH Field Monument Warden's report, March 1984)

And according to local people, some of the other stones have also been loose in the ground for a considerable time (Cheryl Straffon, Craig Weatherhill, *pers comm*).

Over recent years, the greatest threat to the site has been from occasional 'pagan' visitors, some of whom light small fires at the centre of the circle.

Until lately, the surrounding downland had been entirely unmanaged and affected by occasional uncontrolled fires. As a result, vegetation had been gradually encroaching on the circle. To the south, west and east of the circle is a swathe of extremely dense, tall bracken and bramble. To the north is an area of thick heathland vegetation. The vegetation in the

centre of the circle, previously dense heather and gorse, was cleared by volunteers from Cornish Ancient Sites Protection Network (CASPN) and the British Trust for Conservation Volunteers (BTCV) in 2000 and in subsequent years has been maintained by CASPN, whose members also monitor the site and repair any fire pits (see air photos in Figs 6 and 7). The site is approached by two paths from the north-north-west and north-north-east.

2.4 Background to the present project

In Winter 2008, the downs as a whole were stock-proofed, with funding from Natural England's (NE's) HEATH project. This summer, on the first occasion for many years, cattle have been put out to graze the down, this being a requirement of the Higher Level Stewardship agreement for the area. Unfortunately, this was done without any preliminary vegetation management, thereby restricting the area that the animals have to move around in. One of the areas that the cattle moved into was the stone circle, because it had been regularly cleared and as a result was more grassy. This led to alarm amongst the local community for two reasons:

- There was a threat that the stones which are loose might be knocked over by cattle rubbing against them
- There was concern about the safety of visitors to the site because the space the cattle had to move around in at the circle was very restricted.

Visits to the site established the fact that at least five stones were loose, and confirmed the potential for conflict between stock and visitors. The stones which were loose were all stones that had been re-erected or were replacements for originals; their loose state at the time was thought to be in part due to the fact that the ground was parched and cracked following exceptionally dry weather in June 2009.

2.5 Aims of the management work

The aims of the project and the methods by which the work would be carried out are described in the original project design (Preston-Jones, 2009).

The principal aims were to

- Reduce the risk of damage to the circle from stones falling over
- To make the stone circle safe for visitors
- Initiate work to improve the management of the site

In summary, the work simply involved further assessment of the stability of all stones, filling the cracks in the ground at the base of the loosest stones with well compacted rab and stones, and cutting vegetation in the immediate vicinity of the circle.

The management work is described in more detail in section 3 and the results of the accompanying recording are noted in section 4.

3 The conservation work

The conservation work was undertaken by Adrian Thomas and David Cutting of St Just, and Nathan Thornton, on Friday 23rd, Saturday 24th July and Monday 13th September 2009.

3.1 Stabilising the loose stones

The proposed method for stabilising the stones was to

- Cut all vegetation from around the loose stones, to expose the cracked ground at their base.
- Tamp rab (granite subsoil, brought in from outside the Scheduled area) into the crack in the ground at the base of the stone until the crack was filled and there was no longer any movement in the stones.
- Where the crack was not large enough to fill easily it would not be touched and the stones' stability would be monitored only.

In reality, due to concern about the need to make the stones as solid as possible, as quickly as possible, and given the prevailing very dry hot weather, a small amount of lime was added to the rab (1:10) to stiffen the earth and make the local 'clob'; the mixture was put in dry and then wetted. Some small stones and slates were also used to wedge and secure the standing stones.

An initial assessment was made of the stability of all of the stones in the circle: this confirmed that five were noticeably loose. Four of the loose stones were stabilised following the method described above. All these stones were on the north side of the circle, adjacent to the points at which people enter the circle, and where they were therefore particularly vulnerable. Three were stones which had been re-erected in the 19th century (one of which had fallen and been set up again about two decades ago) and one was the stone re-erected twenty-five years ago. A fifth loose stone, on the opposite side of the circle, which moved only very slightly, was not stabilised because the gap in the ground at the base of the stone was not sufficiently large for filling.

The stabilisation of the stones is illustrated in Fig 10; the stones which were affected are shown in Fig 11.

3.2 Vegetation clearance

Vegetation around the circle was cut in order to reduce the potential for conflict between cattle and people on the site. It was hoped that the clearance of vegetation would also enable stock to graze over a wider area, thus relieving the pressure on the circle itself.

Around the circle, the vegetation consisted of dense bracken and bramble to the south and heathland (principally heather and gorse) to the north (see the air photos, Figs 6 and 7). July is exactly the right time of year for managing bracken whether by spraying, rolling or cutting, because the bracken is putting all of its energy into growing and least into the rhizomes. Cutting at this time of year therefore had the potential to not only reduce pressure on the circle at the present time but also to reduce the vigour of the bracken in the area more generally. On the other hand, it was not a good time of year for cutting heathland because of the risk to nesting birds and other fauna.

Around the site, the heather, generally about 0.5 metres high, was flowering spectacularly at the time work took place, and the bracken and bramble mixture was over a metre high and extremely dense.

In the event, only the bracken was extensively cleared, while the heathland was cut along the paths leading to the site and around the northern perimeter of the circle only. All vegetation clearance was done using a tractor-mounted flail (Fig 9), except inside the circle, where the bracken was hand-pulled

- The vegetation flanking the paths leading into the site from the north-north-west and north-north-east was cut back by approximately one metre to either side.
- The vegetation around the northern perimeter of the circle was cut back by approximately one metre.
- The bracken growing around the stones of the circle was hand-pulled.
- Vegetation around the circle on the south, west and east, was cut back as far as the surrounding hedge, in so far as the uneven nature of the ground permitted.
- Cuttings were raked up from around the edge of the circle and dumped in the ditch of the surrounding hedge, but time did not allow the cuttings over the whole area to be raked up.

4 Results of the accompanying recording

4.1 Archaeological input

An archaeologist was on site constantly when the management work was taking place. The work had minimal potential for disturbance to the monument because all the stones that were loose were ones known to have been re-erected in the recent past (the latter in itself an interesting observation). However, the work was closely monitored because this is a sensitive site and the grazing of the downs a sensitive issue.

On site, the archaeological input involved

- Making notes of the processes involved in stabilising the stones
- Recording which stones were stabilised, and which would require monitoring in the future
- Taking digital photos to record the process
- Recording the extent of vegetation clearance undertaken
- Liaising with any members of the public visiting while the work took place

4.2 Observations made in the course of carrying out the conservation work

As vegetation clearance progressed it was surprising to discover how disturbed the ground around the site was. None of this had previously been recorded, other than the ‘quarry’ (more likely tin streaming) on the west, which was apparently cut in the second half of the 19th century and which is shown on Barnatt’s plan (Barnatt 1980, 162-3). Even the National Mapping Programme had failed to pick this up from air photos, presumably because of the density of bracken in the area. However, a continuation of this mining activity was noted around all other sides of the circle and in it. Regrettably, the scope of the project did not include recording of these features.

No other observations were made, as there was no significant intervention: other than that the methods used by the prehistoric people who first created the site have proved far more enduring than those employed in recent efforts to restore it.

5 Discussion

A month later, all the stones were still solid, and it was not at all apparent that anything had taken place. Cutting the bracken and bramble to the south had not only created a much larger clearing around the site, but had also enhanced the setting of the monument, enabling it to be appreciated in a more open landscape, more akin to its original heathland setting.

A year later, three of the stones remain stable but one can be moved slightly. This is Barnatt's stone 10, located at exactly the point where the main path to the site enters the circle, and therefore the stone most likely to be leant on and generally examined by visitors. Alternatively, it may be loose because cattle are rubbing against it – there is plentiful evidence that cattle are grazing the site.

The bracken has returned, but it is thinner and far less vigorous, and in a state which is very much easier now for CASPN volunteers to maintain. Continued grazing will hopefully also help maintain this improvement. (Fig 12).

6 Recommendations

As a result of this work, the following is recommended:

- Monitor the site and the stability of the individual stones regularly, especially the stones which still move a little, and others known to have been re-erected in the more recent past.
- Clear bracken from around the south side of the circle (by annual cutting or rolling) to reduce vigour and create more space around the circle, if cattle grazing does not seem to be proving effective in controlling its growth.
- The vegetation clearance revealed the fact that cuttings arising from CASPN clear-ups have been dumped amongst the heather quite close to the circle. This has caused the vegetation underneath to die back, leaving an unsightly brown patch once removed. It is recommended that in future, CASPN volunteers remove the cuttings from site, or at least find somewhere more discrete to dump them.

7 References

7.1 Primary sources

Ordnance Survey, c1880. *25 Inch Map* First Edition (licenced digital copy at HES)

Ordnance Survey, c1907. *25 Inch Map* Second Edition (licenced digital copy at HES)

Ordnance Survey, 2003. *LandLine Digital Mapping at 1:2500*

Tithe Map and Apportionment, c1841. *Parish of Paul* (microfiche copy at HES)

7.2 Publications

Barnatt, J, 1980. *Prehistoric Cornwall: the Ceremonial Monuments*, Turnstone Press, Wellingborough, Northamptonshire.

Preston-Jones, A, 2000. *Tregeseal Stone Circle: report of scrub clearance*, CAU report

Preston-Jones, A, 2009. Proposal for conservation work at Tregeseal Stone Circle, St Just.

8 Project archive

The HE project number is **2008227**

The project's documentary, photographic and drawn archive is housed at the offices of Historic Environment, Cornwall Council, Kennall Building, Old County Hall, Station Road, Truro, TR1 3AY. The contents of this archive are as listed below:

1. A project file containing site records and notes, project correspondence and administration, copies of historic maps etc.
2. Digital photographs stored in the directory `..\Images\Sites Q-T\Tregeseal`
3. This report held in digital form as: `G:\HISTORIC ENVIRONMENT (DOCUMENTS)\HE PROJECTS\SITES\SITES T\TREGESEAL\2009 PROJECT\TREGESEAL STONE CIRCLE RESTORATION REPORT 2009.DOC`



Fig 1 Location map

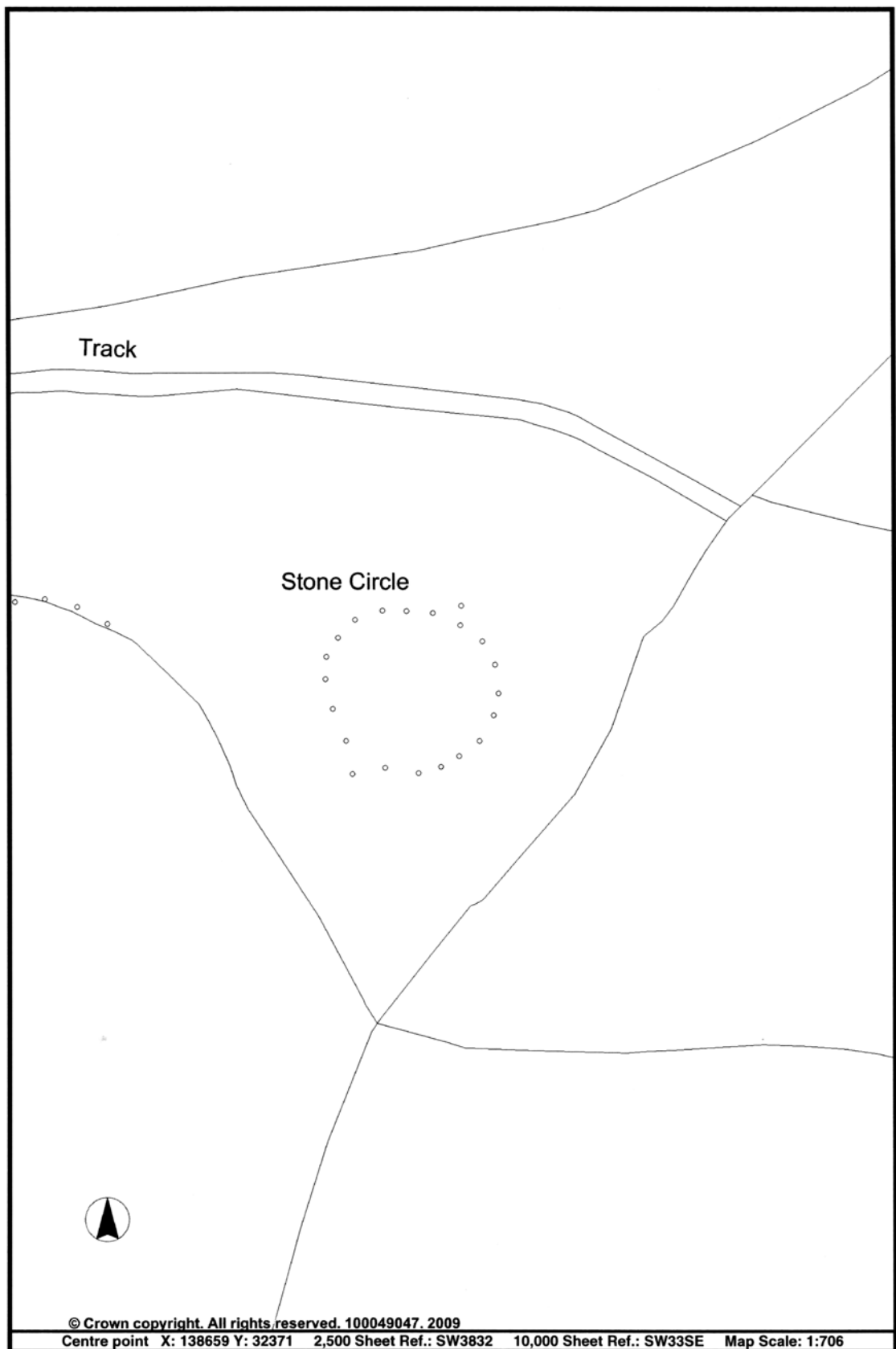


Fig 2 Tregeseal Stone Circle: OS Landline Mapping

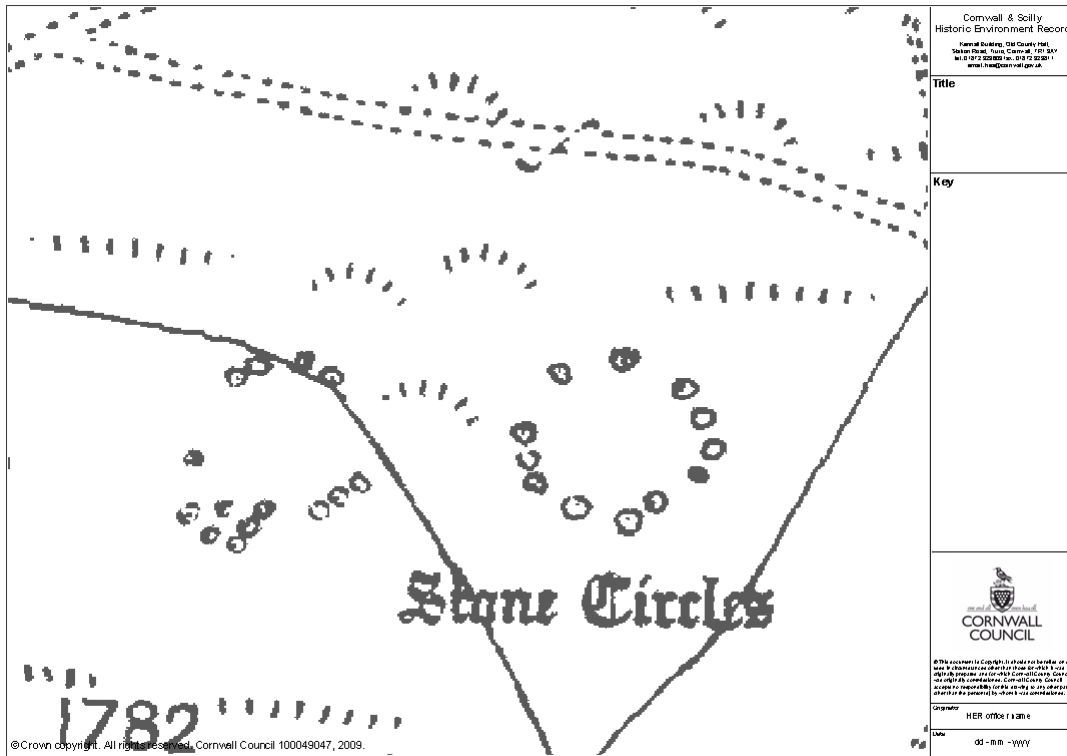


Fig 3 First Edition of the Ordnance Survey 25 Inch Map, 1880

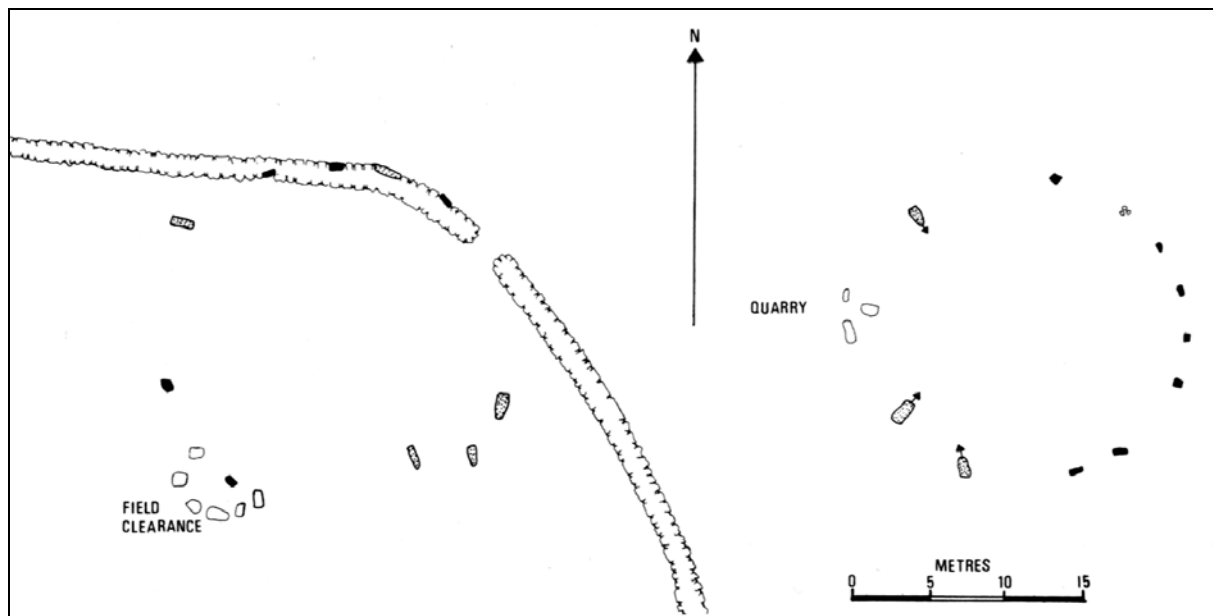


Fig 4 Plan of the stone circles at Tregeseal, before 20th century modifications, from Barnatt 1980, 164

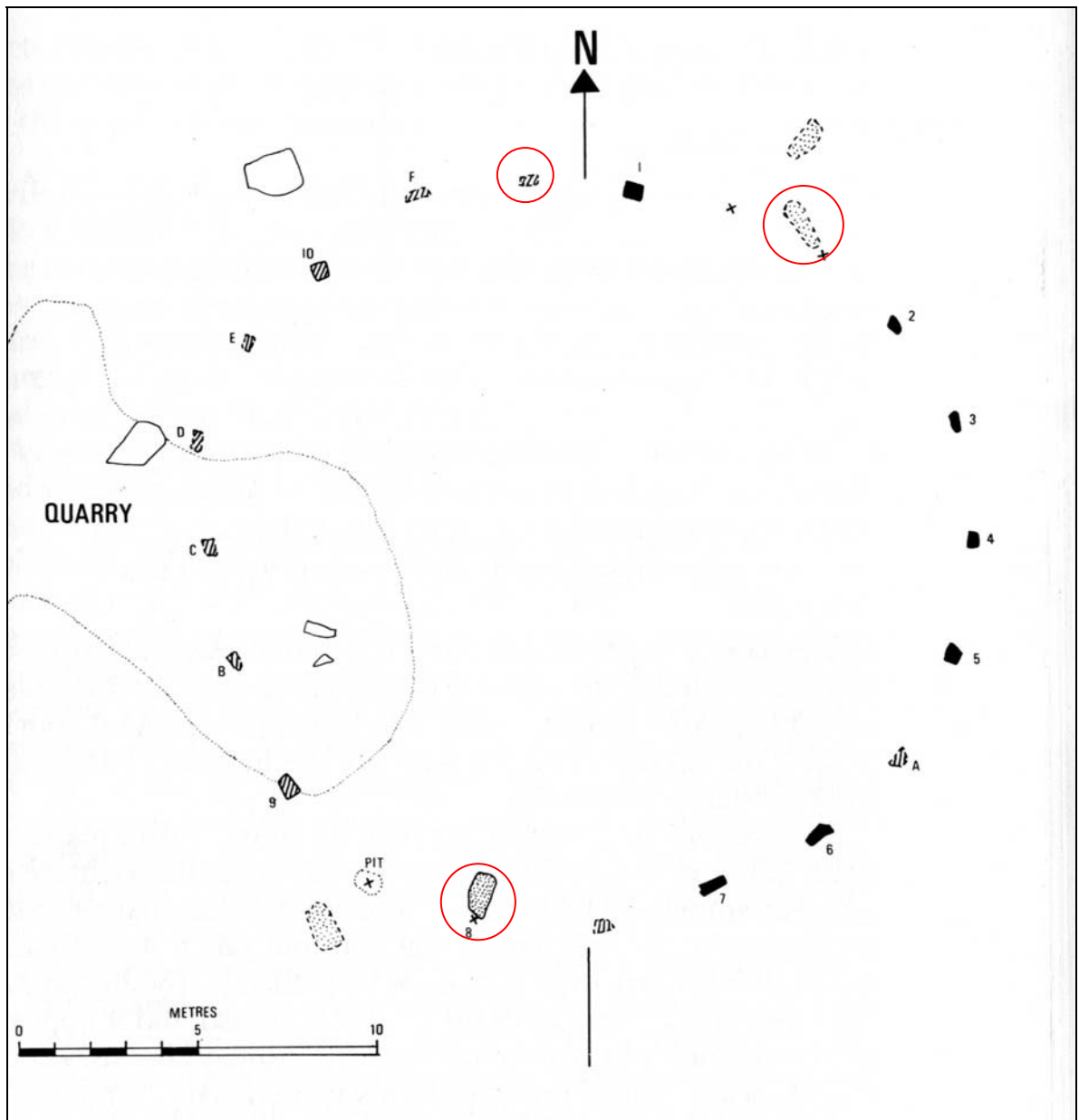


Fig 5 Plan of eastern Tregeseal stone Circle from John Barnatt, 1980, *Prehistoric Cornwall: the Ceremonial monuments*, 163.

In this plan, stones which are original and in situ are shown in solid black. Stones which have been re-erected are shown with a solid black outline and cross-hatched. Stones which have been introduced to the site to replace missing ones are shown with a dashed outline and are cross-hatched. Fallen stones are stippled.

Stones set up by local people subsequent to this plan are circled in red.

Note the quarry (tin streaming) on the west.



Fig 6 The stone circle from the air in 1999 (NMR 18470.12) showing the setting, with heathland vegetation to the north (ie left in this picture) and bracken to the south (right). The encroachment of vegetation into the circle is clearly seen, and contrasts with the situation by 2005



Fig 7 2005 air photo. ©Crown Copyright. All rights reserved. Cornwall Council 100049047. 2009.



Fig 8 Tregeseal stone circle from the north in July 2009, showing heathland in the foreground and dense bracken to the south



Fig 9 Cutting bracken around the site in July 2009



Fig 10 Stabilising the stones by tamping rab into the cracks between the stones and the ground

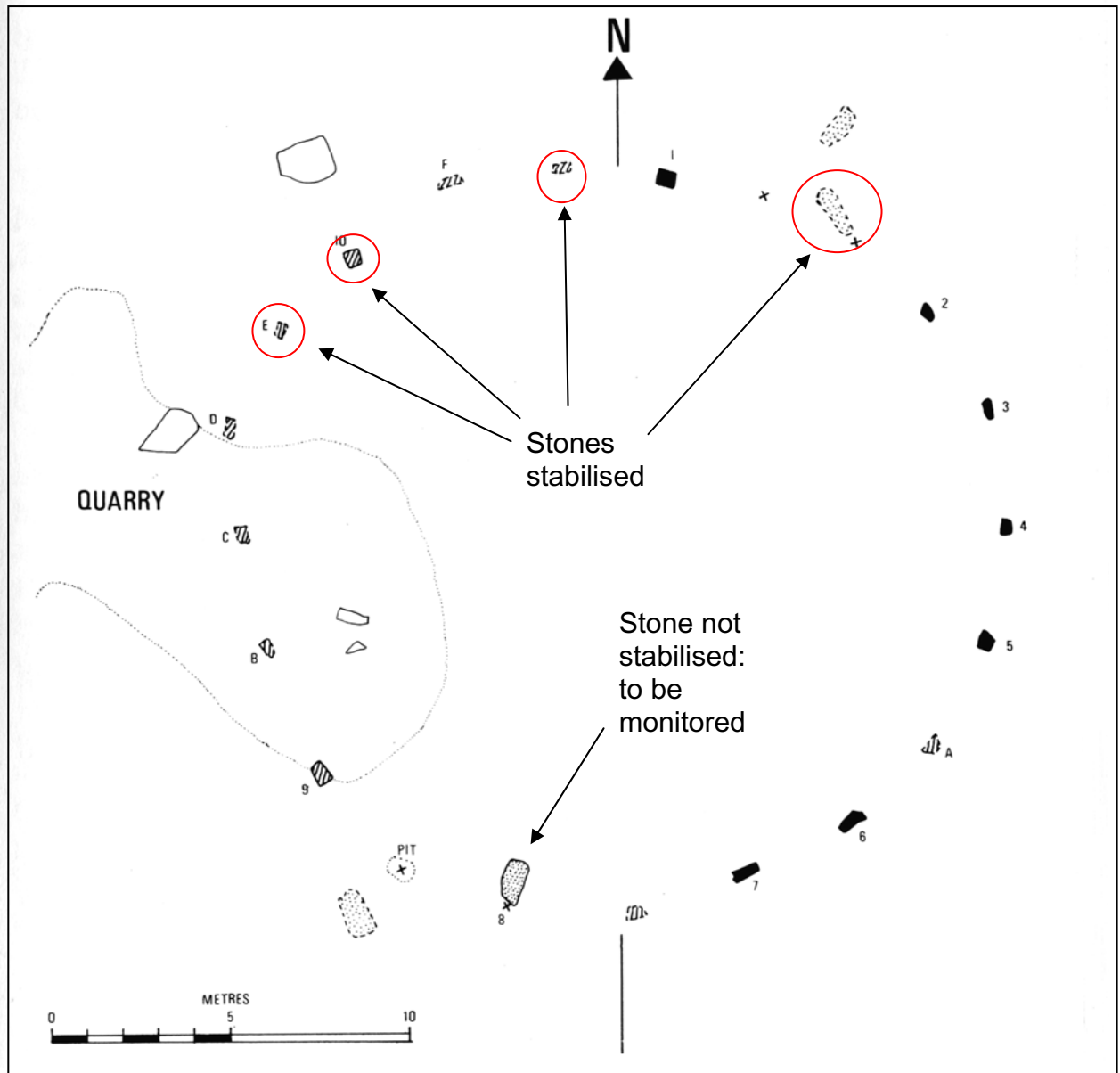


Fig 11 Plan showing the locations of the stabilised stones



Fig 12 The stone circle in 2010, a year after conservation work, following a 'clear-up' by CASPN