

TREGESAL STONE CIRCLE

co305
St Just, Penwith
Cornwall

Preliminary report on management issues
To be read in conjunction with CC Report 2010R107 (Preston-Jones 2010)
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Background

Following stabilisation in 2009 a number of the stones have again become loose, including one that was subject to further stabilisation, albeit of an emergency nature, in April 2009. This stone has again become loose and now requires stabilisation urgently.

Whilst the de-stabilisation of the stones is of concern, the stones in question have been re-erected historically and therefore their archaeological context will be unaffected because of previous interference. The main effect of the de-stabilisation being the amenity value of the circle allied to health and safety concerns in the case of stone 10(?).

A note on previous grazing by cattle. The following is an extract from an illustration of Tregeseal in 1862 by William Cotton. Of interest is the apparently wider area of grazing available to cattle.



Management

In order to encourage positive management of sites such as Tregeseal EH have to work with landowners, tenants and other interested parties and government agencies. EH have extremely limited resources for undertaking any works on monuments and, unlike listed buildings, there is no recourse to 'urgent works' notices or compulsory purchase. An owner of a scheduled monument has no duty to maintain said monument, the only legal requirement being that they do not damage it.

Field monuments may be managed (vegetation control) by cutting, rolling and/or poisoning, whether by machine or by hand. These methods require the continued input of paid or voluntary personnel and for this reason the best form of management for field monuments is grazing, preferably by sheep supplemented by a smaller number of cattle. This mixture ensures more complete grazing of vegetation.

All grazing needs to be controlled. Overgrazing in wet or dry conditions can lead to poaching and erosion, irrespective of species or breed. Sites should be monitored and stock numbers and access controlled as necessary. This may require the use of electric fencing or portable hurdles.

Causes

It is clear that loose stones are not a new problem at the site. It would also appear that the problem relates to re-erected stones. It is most likely that the continued causes of destabilisation are,

- Depth of stone in ground

The stones are not large and it is likely that when re-erected they were not buried deep enough or properly packed.

- Ground conditions

Ground conditions, particularly after a protracted period of dry weather, can be a factor in the stability of any upstanding monolith or unsupported structure. This is due to shrinking of the soil surrounding the feature, resulting in a slight void.

- Stock pressure

A restricted area available for grazing allied to a lack of alternative rubbing posts will inevitably lead to increased pressure on the circle. It is clear that the cattle are a contributory factor. What is not clear is whether this is a result of the restricted area available or, the size of the stock employed.

- Visitor pressure

There is always a tendency for visitors to interact with the stones. Hugging, climbing, use as backrests etc are not uncommon activities and all have a risk of loosening or further destabilising stones. In this instance there is the added complication of regular 'checking' of the stones for looseness (see video of Ian McNeil-Cook demonstrating looseness). It is likely that this 'checking', allied to ground conditions and stock pressure are the main reasons for the continuing destabilisation of stones.

Following press and internet reports regarding the circle it is likely that many visitors have been tempted to visit and that many of them will also have 'checked' the stones.

Management Solutions

There are a number of possible solutions to the continued de-stabilisation of stones at Tregeseal. All have positive and negative points.

- Removal of stock
 - Pro – elimination of cattle as possible cause of de-stabilisation
 - Con – vegetation will re-colonise without alternative control
 - Cost
 - Further damage to archaeological stratigraphy
- Fencing
 - Pro - elimination of cattle as possible cause of de-stabilisation
 - Con - vegetation will re-colonise without alternative control
 - Cost
 - Further damage to archaeological stratigraphy
 - introduction of further enclosure of historic open ground
- Controlled grazing
 - Pro – removes need for alternative control methods
 - Cost
 - continued protection of archaeological stratigraphy
 - Con – continued threat of de-stabilisation by stock

Controlled grazing should include the following

- Close monitoring of the stones
- Close monitoring of ground conditions
- Close monitoring of stock
- Controlled access for stock.
- Opening up (clearance) of adjacent moor in vicinity of circle to reduce stock pressure
- Introduction of alternative boundary stones/rubbing posts in adjacent area

Repairs

Repairs to the loose stones could take a number of forms dependant on the future management of the site, funding availability, archaeological impact and views of interested parties.

Although not strictly required in the current situation, it should be mentioned that the site has not been subject to any geophysical survey. It may be that the production of such a survey, technical considerations notwithstanding, may aid future management by supplying information on the buried nature of the monument.

Repairs may include any of the following methods and will require varying degrees of archaeological mitigation,

- Repacking with rab/rab mortar
- Excavation and setting in concrete
- Excavation and setting in granite socket stone (below ground)

Summary

Whatever the causes or solutions to the current problem there will be a need for continued monitoring of the monument in order to ensure early detection of further problems.

It is likely that even if stock were removed from the monument the stones would continue to become loose at times. It is also likely that this is a seasonal effect and that in the past, when there was less concentration of interest on the monument; this may have been a cyclical occurrence. Were it not for public concern it is likely that left to their own devices stones that become loose after prolonged dry spells will 'firm up' when the moisture content of the soil increases.