South Wales RIGS Group Site Record
RIGS Description

SECTION A

General	South Wales
Site Name: King Arthurs Stone, Gower	**File Number:** Site_TW_13
RIGS Number: 793	**Surveyed by:** Tony White
Grid Reference: SS491906	**Date of Visit:** 25th December 2008
RIGS Category: Aesthetic, Scientific, historical	**Date Registered:**
Earth Science Category: Quaternary, historical	**Owner:** Unknown **Planning Authority:** City and County of Swansea
Site Nature: Neolithic chambered tomb	**Documentation prepared by:** Tony White
Unitary Authority: City and County of Swansea	**Documentation last revised:** 7th March 2012
OS 1:50,000 Sheet: 159	**Photographic Record:** Attached
OS 1:25,000 Explorer Sheet: 164	
BGS 1:50,000 Sheet: E246	

RIGS Statement of Interest:

This RIGS is a neolithic chambered tomb which is possibly a huge glacial erratic of Marros Group (Millstone Grit) conglomerate (quartz conglomerate).

This site within the Cefn Bryn SSSI and it is recommended that it be added to the citation as geological point of interest.

Geological setting/context:

Arthurs Stone is located approximately 800m to the north east of Reynoldston village and contains a burial chamber and a number of public rights of way. Scrub land with grazed rough pasture.

Arthurs Stone is a late Neolithic Dolmen (chambered tomb) which is approximately 4000 years old. It is made up of a large capstone which is estimated to weigh at least 35 tons. This stone is now split in two pieces the smaller of which has fallen to one side. The capstone was supported by smaller stones and it is thought that the whole monument would have been buried in earth. The part of the capstone still in place is estimated to weigh 25 tons and is approximately 4m long by over 2m wide. It is believed that Neolithic man excavated beneath the stone placing 12 upright stones to support its weight and creating two chambered tombs. A number of cairns are located in the locality of similar rock types to the tomb.

The capstone is a quartz conglomerate, is extremely hard and is made up of large rounded pebbles of quartz in a siliceous matrix. There has been some controversy over the years as to which formation the capstone is derived. Originally thought to be from the Uppermost Old Red Sandstone, which is found at Cefn Bryn but it could also be from the Millstone Grit (Marros Group). If this is true then it has been transported some distance. It could conceivably have been moved by Neolithic man but it could also be a glacial erratic, carried by ice. Boulders of up to 2m long are found in the glacial tills at the north end of Rhosilli. This is however significantly larger.

Arthurs Stone has been the subject of Quaternary research, providing a date for the height of that last glaciations in Wales. Glacial deposits can be subdivided using various techniques. One such technique is “cosmogenic nuclide” dating. This involves the analysis of nuclides which are produced at the surface of the earth as a response to cosmic radiation. Analysis of one of the nuclides; ^{36}Cl, in a sample from Arthur’s Stone has given a timing of the maximum of the Late Devensian glaciation in South Wales as age of 22.8 ka before present day.

References:

BOWEN, D Q. 1994. Late Cenozoic Wales and south-west England. Proceedings of the Ussher Society, 8, 209-213.

BOWNE, D Q, PHILLIPS, F M, MCCABE, A M, KNUTZ, P C, SYKES, G A. 2002. New data for the Last Glacial Maximum in Great Britain and Ireland. Quaternary Science Reviews. 21.

OWEN TR. 1964. Further thoughts on Arthur's Stone. Gower, Vol. 16

PHILLIPS, F.M., BOWEN, D.Q., and ELMORE, D. 1994. Surface exposure dating of glacial features in Great Britain using cosmogenic chlorine-36: Preliminary Results. Abstract. VM. Goldshmidt Geochemical Conference, Edinburgh.PHILLIPS, F.M., BOWEN, D.Q. and ELMORE, D. 1994. Surface exposure dating of glacial features in Great Britain using cosmogenic chlorine-36. Purdue Rare Isotope Measurement Laboratory Annual Reports 1993. 29-30.

SECTION B

PRACTICAL CONSIDERATIONS:
Please score Accessibility and Safety Red Amber or Green

Accessibility:			X
Comment:			
Safety:			X
Comment:			

Conservation status:

There are no known conservation designations of this RIGS

OWNERSHIP/PLANNING CONTROL:

Owner/tenant: Unknown

Planning Authority: City and County of Swansea

Planning status/constraints/opportunities:

There are no known planning constraints or opportunities

CONDITION, USE & MANAGEMENT:

Present use: None

Site condition: Good

Potential threats: None

Site Management: None

SITE DEVELOPMENT:

Potential use (general):

Potential use (educational):

This site is educationally interesting. It is easily accessible and tells the story of Neolithic people and the glaciations of Wales. It is also of interest as a site which has and continues to provoke discussion as to its origins.

Other comments:

Photographic Record

Photo by Tony White. Arthurs Stone capstone showing how it both pieces and some of its supporting stones

Photo by Tony White. Detail of the Arthurs Stone capstone illustrating the coarse quartz conglomerate.