# CADW SCHEDULING ENHANCEMENT PROGRAMME 2017-19:

# CAVES IN SOUTH WEST WALES (Phase 2)



The 1966 Window entrance into Ogof Gofan (PRN 7391).

Prepared by Dyfed Archaeological Trust For Cadw





#### DYFED ARCHAEOLOGICAL TRUST

RHIF YR ADRODDIAD / REPORT NO. 2018-43 RHIF Y DIGWILLIAD / EVENT RECORD NO. 114183

CADW PROJECT NO: DAT 144

Mawrth 2019 March 2019

#### CADW SCHEDULING ENHANCEMENT PROGRAMME 2017-19:

#### CAVES IN SOUTH WEST WALES (Phase 2)

by

C Enright

The copyright of this report is held by Cadw and Dyfed Archaeological Trust Ltd.

The maps are based on Ordnance Survey mapping provided by the National Assembly for Wales with the permission of the Controller of Her Majesty's Stationary Office, Crown Copyright. All rights reserved. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. License No.: 100017916 (2014).

Historic mapping reproduced here is covered under Crown Copyright and Landmark Information Group. All rights reserved. Dyfed Archaeological Trust Ltd. On behalf of Welsh Government 2014.

Scheduled Ancient Monument polygon data in this report is based on Cadw's Historic Assets Data. Crown Copyright. Cadw.



Ymddiriedolaeth Archaeolegol Dyfed Cyf Neuadd y Sir, Stryd Caerfyrddin, Llandeilo, Sir Gaerfyrddin SA19 6AF Ffon: Ymholiadau Cyffredinol 01558 823121 Adran Rheoli Treftadaeth 01558 823131 Ffacs: 01558 823133 Ebost: <u>info@dyfedarchaeology.org.uk</u> Gwefan: www.archaeolegdyfed.org.uk



Llywodraeth Cymru Welsh Government

Dyfed Archaeological Trust Limited The Shire Hall, Carmarthen Street, Llandeilo, Carmarthenshire SA19 6AF Tel: General Enquiries 01558 823121 Heritage Management Section 01558 823131 Fax: 01558 823133 Email: info@dyfedarchaeology.org.uk Website: www.dyfedarchaeology.org.uk

Cwmni cyfyngedig (1198990) ynghyd ag elusen gofrestredig (504616) yw'r Ymddiriedolaeth. The Trust is both a Limited Company (No. 1198990) and a Registered Charity (No. 504616) CADEIRYDD CHAIRMAN: PROFESSOR J PROTHEROE JONES. CYFARWYDDWR DIRECTOR: K MURPHY BA MIFA

#### **CRYNODEB GWEITHREDOL**

Yn ystod Cam 1 y prosiect hwn, y nifer o gofnodion ogofâu ychwanegol posibl a adnabuwyd fel rhai addas i'w cofnodi yng Nghofnod Amgylchedd Hanesyddol Dyfed (HER) oedd 468. Ar y pryd roedd yr HER yn cynnwys 74 o gofnodion mewn perthynas ag ogofâu. Nodwyd yr holl gofnodion newydd posibl hyn ar gronfa ddata'r prosiect. Roedd y gronfa ddata hon yn cynnwys ystod o fathau o ogofâu gan gynnwys: ogofâu, llochesi mewn creigiau, ogofâu môr, dolinau, ffynhonnau, ymholltiadau, ceubyllau, cloddiadau archwilio ogofâu. Nid oedd y rhan fwyaf o'r cofnodion hyn yn cynnwys gwybodaeth fanwl, megis disgrifiadau. Yn ystod Cam 2 y prosiect, aethom i weld ystod o ogofâu a hidlo'r gronfa ddata i gael gwared ar bob math o ogofâu nad oedd ganddynt unrhyw botensial neu elfen archaeolegol. O ganlyniad, mae 133 o gofnodion ogofâu bellach wedi cael eu cynnwys yn yr HER gan gynrychioli 82 achos unigol. Mae pob un o'r cofnodion hyn yn cynnwys disgrifiad, a lle bo'n bosibl, lluniau. Mae'r prosiect hwn wedi arwain at set ddata gydlynol o safleoedd ogofâu yn rhanbarth Dyfed, gan gynrychioli portread cywir o'r safleoedd sy'n cynnwys neu sydd â'r potensial i gynnwys gwaddodion archaeolegol.

#### **EXECUTIVE SUMMARY**

During Phase 1 of this project the number of potential additional cave records identified as suitable for recording on the Dyfed Historic Environment Record (HER) was 468. At the time the HER contained 74 records relating to caves. All these potential new records were held on a project database. This database included a range of cave types including: caves, rock shelters, sea caves, dolines, mines, springs, fissures, potholes, digs/caving excavations. Most of these records contained no detailed information, such as descriptions. During Phase 2 of the project we visited a range of caves and filtered the database to remove all cave types that had no archaeological potential or component. As a result 133 cave records are now included in the HER representing 82 individual caves. Each of these records includes a description and, where possible, photographs. This project has resulted in a coherent dataset of cave sites in the Dyfed region representing an accurate portrayal of sites that contain or have the potential to contain archaeological deposits.

#### **CRYNODEB GWEITHREDOL**

#### **EXECUTIVE SUMMARY**

#### CONTENTS

1.	INTRODUCTION	1
2.	AIMS AND OBJECTIVES	3
3.	METHODOLOGY	4
4.	RESULTS AND DISCUSSION	6
5.	CONCLUSIONS	14
6.	SOURCES	15

#### FIGURES

Figure 1:	Distribution of caves sites recorded in Phase 1 of the project.	2
Figure 2:	Location of caves visited 2018-19.	4
Figure 3:	Distribution map of caves sites recorded in the HER after removing natural and man-made land forms (excluding site type Cave Occupation).	13
PHOTOS		
Photo 1:	View from Mewsford Point to Saddle Head.	6
Photo 2:	Bullslaughter Bay at Castlemartin, the site of two sea caves visited.	7
Photo 3:	The entrance of Ogof Bran Goesgoch (PRN 264) with the damaged fence.	7
Photo 4:	View inside Ogof Bran Goesgoch (PRN 264) showing significant ground disturbance.	8
Photo 5:	Entrances to caves Cave 3 (PRN 110497) and Cave 4 (PRN 110498)	9
Photo 6:	Entrance of cave 2 (PRN 110496).	10
Photo 7:	Entrance to Wood Cave 1 (PRN 110500).	10
Photo 8:	Chamber of Wood Cave 2 (PRN 110501).	11
Photo 9:	Entrance to at least one element of Pant-y-Llyn cave at the Carmel Nature Reserve.	11
Photo 10:	Example of a doline found at Herberts Quarry recorded on the HER.	12
Photo 11:	Caves in the cliff face of Herberts Quarry, PRN 825 and 827.	12

#### 1. INTRODUCTION

- 1.1 In 2017, Dyfed Archaeological Trust undertook a Cadw grant-aided scheduling enhancement programme of caves in south-west Wales (Bell 2018) with the objective of significantly enhancing the record and improving the representation of caves as an archaeological resource in the region.
- 1.2 Caves can provide an exceptional environment for the preservation of human and environmental past and caves in south-west Wales have yielded significant archaeology during excavations undertaken since the 19<sup>th</sup> century. However, prior to the scheduling enhancement programme, cave sites in the region were under represented in the archaeological record maintained by Dyfed Archaeological Trust (Bell 2018). Where they were recorded it was often in a piecemeal fashion, often inaccurate and lacking information (Bell 2018). One reason for this may be that they are not readily recognisable as archaeological sites and are usually the focus of research by geologists (Dowd 2015). Most archaeological discoveries in caves are rarely made by archaeologists but by cavers (Bell 2018).
- 1.3 The initial scheduling enhancement programme comprised an audit of the information already held in the Historic Environment Record (HER) and other available documentary resources and as a result the number of potential cave records was increased from 74 to 468, representing 403 individual caves (Figure 1). This included 31 dolines, 20 potholes, 227 caves, 6 rock shelters, 88 sea caves, 14 occupational deposits and 82 unspecified types (fissures, springs, mines, potholes and digs). Of these 468 records, 363 were extracted from the Cambrian Cave Registry but with no further information recorded.
- 1.4 The schedule enhancement programme (Bell 2018) also touched on the complex issues regarding caves and acknowledges the diversity of interests, issues and potential conflicts which impact upon the management of this resource.
- 1.5 Following on from the results of Phase 1 (2018), the Trust applied to Cadw for further grant-aid to undertake site visits and for further record enhancement of a number of cave sites. This application was successful and the project, including fieldwork, was undertaken in 2018-19.

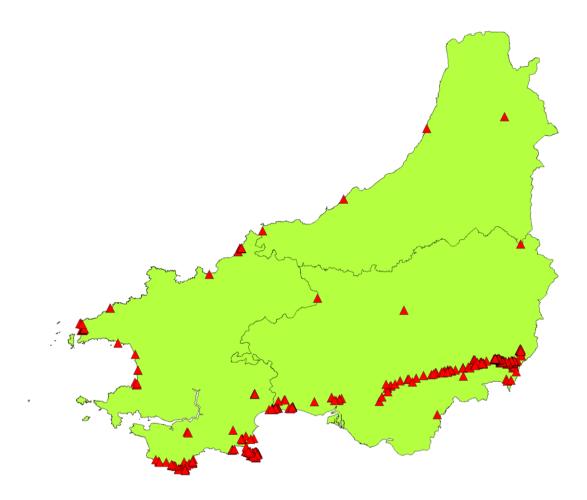


Figure 1: Distribution of caves (468) recorded in Phase 1 of the project.

#### 2. AIMS AND OBJECTIVES

- 2.1 The overall project's **aims** are:
- To create an up-to-date record of cave and caves sites on the Dyfed HER.
- To make scheduling recommendations for cave and cave sites.
- 2.2 The project's **objectives** are:
- To collate information on caves and cave sites from a variety of sources.
- To engage with non-archaeologists to ensure all interests are accounted for, such as the natural environment and caving interests.
- To undertake field visits to trial assessment methodologies on selected sites to assess survival, condition and vulnerability of archaeological and environmental evidence.
- To enhance existing HER records and create new HER records of cave and cave sites.
- To identify sites that are of national importance and make scheduling recommendations.
- To produce a short report on the project.

#### 3. **METHODOLOGY**

- 3.1 Baseline data created during Phase 1 was very basic, usually containing no descriptive text. During Phase 2 data were refined, sites that had no archaeological element were removed and where possible descriptions were added to the record. Cambrian Cave Register provided the most useful source of information for this exercise.
- 3.2 Caves in five areas were targeted for site visits, as it was considered that these had the greatest potential to contain previously unrecognised archaeological deposits, or had potentially vulnerable deposits (Figure 2):
  - Castlemartin Firing Range
  - Carreg Cennen Castle
  - Herbert's Quarry, Black Mountain
  - Carmel Nature Reserve
  - Ludcurch

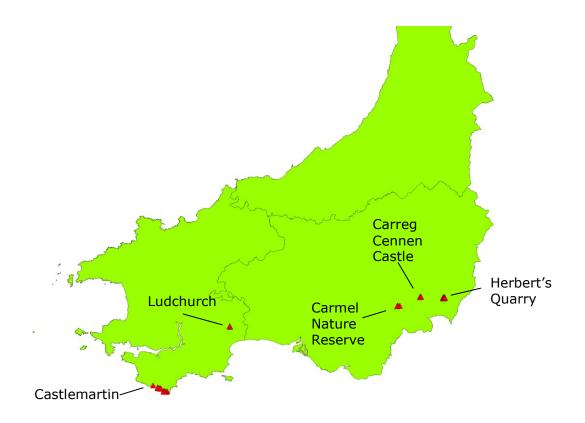


Figure 2: Location of caves visited 2018-19.

3.3 Site visits consisted of a visual assessment of cave entrances. Only caves where no specialist equipment or training for access were assessed. No invasive work was undertaken.

Cadw Scheduling Enhancement Programme 2017/18: Caves in South West Wales (Phase 2)

- 3.4 All findings were used to enhance the existing record of each cave where necessary. As well as field visits any documentation or archival material, information from local informants and knowledge of experienced cavers encountered over the course of the project was also used to enhance the record.
- 3.5 The following contacts were made at the onset of the project:

The President of the South Wales Caving Club (SWCC)

Stuart France (professional caver)

Phil Knight (professional caver)

The National Trust (South Wales)

Brecon Beacon National Park

Pembrokeshire Coast National Park

Defence Infrastructure Organisation

Natural Resource Wales

National Museum of Wales

Father Gildas (Caldey Island)

3.6 Site visits were made to Castlemartin with Stuart France and Carreg Cennen Castle with Phil Knight.

#### 4. **RESULTS AND DISCUSSION**

4.1 **Castlemartin:** Castlemartin is located on the south-west peninsula of Wales. The rocky coast line is dominated by steep sea cliffs of carboniferous limestone. Due to the extremity of the coastline, many of the caves are only accessible with professional equipment and training; visiting these caves was beyond the scope of this project. Photograph 1 shows the view from Mewsford Point to Saddle Head and the extremity of the cliffs. A number of known caves are located within this area including Ogof Gofan, a site previously visited and known for its difficult access. Most other caves listed in this area (with the exception of Ogof Bran Goesgoch (PRN 264) are as difficult to access and are only visited by experienced cavers. If they are not frequently washed in and out by the tide then the potential for surviving archaeological deposits remains.



Photograph 1: View from Mewsford Point to Saddle Head.

4.2 Located on Bullslaughter Bay, Ogof Bran Cefn-Ddu (PRN 110999) and Bullslaughter Bay Cave (PRN 111000) were accessible and visited. Both caves had previously been identified as having a high potential for archaeological deposits. Both were situated at sea level (Photo. 2) and are regularly inundated by the tide. Therefore archaeological deposits are likely to be long gone.



Photograph 2: Bullslaughter Bay at Castlemartin, the site of two sea caves visited.

4.3 Of noteworthy mention is Ogof Bran Goescoch (PRN 264), which was visited. This cave is proven to contain archaeological deposits when in 1977 three human bones were thrown up by burrowing rabbits. No excavation was carried out into what is probably a prehistoric burial site and a wire fence was erected in 1992. During the 2018 visit it was noted that the fence has been pulled down and there appears to be ground disturbance inside the cave; it is unclear if this is from borrowing animals or crude excavation (Photos. 3 and 4). The cave is located close to the coast path and is accessible to curious visitors.

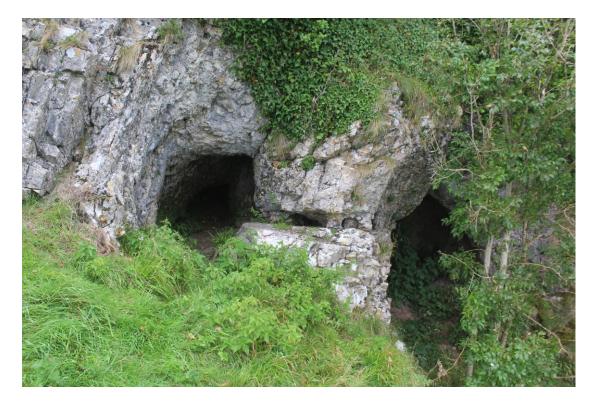


Photograph 3: The entrance of Ogof Bran Goesgoch (PRN 264) with the damaged fence.



Photograph 4: View inside Ogof Bran Goesgoch (PRN 264) showing significant ground disturbance.

- 4.4 **Carreg Cennen Castle:** Carreg Cennen Castle is a rocky outcrop of Carboniferous Limestone on the western edge of the Brecon Beacons National Park; seven caves are recorded in the vicinity of the castle on the HER.
- 4.5 Cave 1 (PRN 3999) is accessed via the castle (Scheduled Monument CM001) and is a popular tourist attraction. The cave was allegedly extended during the medieval period times to create a well for the castle. This is likely to have compromised archaeological remains. That said, notable finds of human bone and teeth and needle/pin like objects have been reported over the years. During the site visit further bone was seen exposed in the calcite efflorescence at the walls of the cave. The path through the cave is well trodden and frequently visited by tourists; this poses a great risk to further bone and artefacts being exposed. A quick assessment of graffiti in the cave found the earliest to be dated 1873, but earlier examples are probably present given the age of the castle and easy access to the cave.
- 4.6 Cave 3 (PRN 110497) and Cave 4 (PRN 110498) are a pair of cave entrances located at the top of the cliff below the southern curtain of wall of the castle (See Photo. 5).



Photograph 5: Entrances to caves Cave 3 (PRN 110497) left and Cave 4 (PRN 110498) right.

- 4.7 Cave 3 (PRN 110497) is the easier to access of this pair of caves. It is infilled with soil, potentially burying older deposits. Cave 4 (110498) is separated from Cave 3 by a difficult traverse, so although the entrance is clearly visible it is not so easy to gain access. A noteworthy mention in the HER records describes the presence of "flowstone". "In this instance the preservation of such undisturbed deposits is promising". The entrance and aspect of this pair of caves is approximately at the same level as Cave 1 (PRN 3999) where significant archaeology is known to be present. Given this information, this pair of caves is likely to be of high archaeological potential.
- 4.8 Cave 2 (PRN 110499) and 5 (PRN 110496) are actually two different entrances of a long cave approximately between 1.5m wide and 0.5m wide. The cave is accessible from a public path around the castle (Photo. 6) and is presumably accessed regularly by animals seeking shelter and curious visitors to the castle. Despite this there are deposits in the cave which may contain archaeology.



Photograph 6: Entrance of cave 2 (PRN 110496).

4.9 Wood cave 1 (PRN 110500; Photo. 7) and 2 (PRN 110501; Photo. 8;) are located within the woodlands around the castle. Both caves are well hidden and only likely to be visited by keen enthusiasts. Each cave opens to a chamber at the entrance which contains built up sediments which could contain archaeological deposits.



Photograph 7: Entrance to Wood Cave 1 (PRN 110500).



Photograph 8: Chamber of Wood Cave 2 (PRN 110501).

- 4.10 **Carmel Nature Reserve:** Carmel Nature Reserve is made up of ancient deciduous woodland and disused quarries where limestone has been extracted from since the medieval period. During limestone extraction in 1813 quarrymen reported the discovery of 12 skeletons, said to have been found with the bones of elk and wild boar. This cave has no exact location and the name likely refers to several remnants located throughout the quarry.
- 4.11 A number of the caves sites listed on the HER could not be located, and may possibly have been destroyed through quarrying. One cave was found in the vicinity of PRN 815, and could be an element of Pant-y-Llyn (Photo 9). The small entrance was located next to the public footpath and its opening was approximately 0.5m wide and 1.0m high. The passage is narrow and inclines steeply downwards. The floor is covered in foliage and made hide sediment possibly containing archaeological deposits.



Photograph 9: Entrance to at least one element of Pant-y-Llyn cave at the Carmel Nature Reserve.

- 4.12 **Ludchurch:** St Elidyr's Church sits on a hilltop within a rectilinear churchyard. The hilltop is surrounded by an old flooded, limestone quarry. There are seven caves listed on the HER within the disused quarry below St Elidyr's Church. Those to the north of the church lie within private property and the remainder are now flooded and can only be accessed by boat.
- 4.13 **Herbert's Quarry:** A number of HER records for cave sites located at Herbert's Quarry are actually described as dolines, a funnel shaped depression in the ground surface commonly found in limestone regions (Photograph 10). Often at the base of these a "dig" has been created, a seemingly recent excavation by cavers taking advantage of weak spots in the rock at the base of the doline. A number of these had been recorded on the database, but they have no archaeological potential and so have been removed. Some of the more obvious caves can be found in the cliff face of Herbert's quarry (Photo. 11).

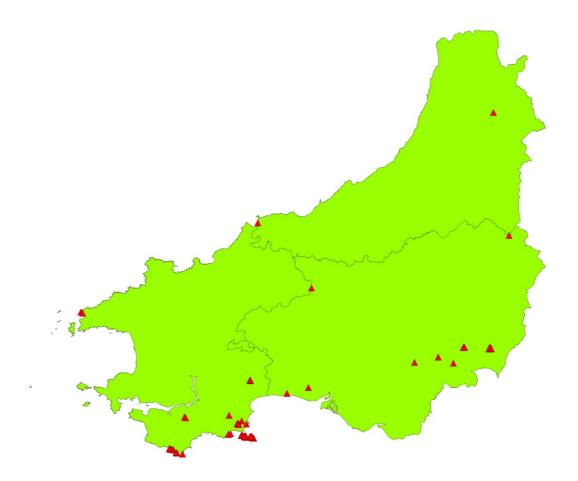


Photograph 10: Example of a doline found at Herbert's Quarry.



Photograph 11: Caves in the cliff face of Herberts Quarry, PRN 825 (left) and 827 (right).

- 4.14 Following visits to a number of sites it transpired that a many cave types, including natural and man-made land forms, had been recorded on the database and, as such sites contained zero to little potential for archaeological deposits, they have not been included in the HER. These include:
  - Fissures
  - Dolines
  - Sink holes
  - Mines
  - Springs
  - Potholes
  - Digs/caving excavations
- 4.15 The total number of cave records on the HER now stands at 133 representing 82 individual caves that could have an archaeological potential (Figure 3).
- 4.16 Descriptions and photographs (where possible) were added to each HER record using a range of documentary resources and expert knowledge. All types are now listed as **Cave, Sea Cave, Rock Shelter or Cave Occupation**.



*Figure 3:* Distribution map of caves recorded in the HER after removing natural and man-made land forms (excluding site type Cave Occupation).

#### 5. CONCLUSION

- 5.1 Caves in south-west Wales that have archaeological potential are mainly found within the limestone geology and karst landscapes of Carmarthenshire and Pembrokeshire (Bell 2018). Determining the current archaeological potential of a cave site is by no means an easy task. Each cave represents a unique and dynamic environment resulting from various geological and environmental phenomena over the course of millions of years. A thorough understanding of these processes is essential to help identify likely archaeological deposits. To complicate matters further caves sites as they are now are likely to be completely different environments to what they were during prehistoric times. For example, a now inaccessible sea cave was once several miles from the sea and easily habitable, and a cave located high up a steep cliff face accessible by only professional climbing equipment may have once been accessed via a pleasant stroll up a gradual hill slope.
- 5.2 At the onset of this project 468 potential cave sites were identified representing 403 individual caves. This list was produced by conducting an audit of the information already held in the HER and other available documentary resources. Sites included dolines, potholes, fissures, springs, digs, as well as a number of unspecified cave types.
- 5.3 After visiting a selection of cave sites that were considered to have the greatest archaeological potential records were updated to include a description and photograph. The remaining database records were then filtered to remove all records that had no archaeological potential (i.e. fissures, springs, dolines, potholes and digs/caving excavations. As a result 133 records were created or enhanced on the HER, representing 82 individual caves. Each of these 133 records was assigned a specific type: **Cave, Rock Shelter, Sea Cave** or **Cave Occupation.** This has resulted in a concise dataset of cave sites that contain or have the **potential** to contain archaeological deposits
- 5.4 This project has resulted in a coherent dataset of caves in south-west Wales that have the potential to contain archaeological deposits, as well as identifing caves that do contain archaeological deposits (through archival research). Further investigation of each site type is required to determine its true archaeological potential. Such work should be undertaken by individuals experienced in cave archaeology whilst being mindful of the difficult access requirements of many caves.

#### 6. SOURCES

#### Published

Dowd, M., 2015. The Archaeology of Caves in Ireland. Oxbow books, Oxford.

#### Unpublished

Bell, M., 2018. Cadw Scheduling Enhancement Programme 2017/18: Caves (in South Wales), DAT Report No.2017/43.

## CADW SCHEDULING ENHANCEMENT PROGRAMME 2017-19: CAVES IN SOUTH WEST WALES (Phase 2)

### **RHIF YR ADRODDIAD / REPORT NUMBER 2018-43**

### **CADW PROJECT NO: DAT 150**

Mawrth 2019 March 2019

Paratowyd yr adroddiad hwn gan / This report has been prepared by C Enright

Swydd / Position: Project Manager Field services

Llofnod / Signature ...... Dyddiad / Date 31/03/19

Mae'r adroddiad hwn wedi ei gael yn gywir a derbyn sêl bendith This report has been checked and approved by K Murphy

ar ran Ymddiriedolaeth Archaeolegol Dyfed Cyf. on behalf of Dyfed Archaeological Trust Ltd.

Swydd / Position: Director:

Llofnod / Signature .....

..... Dyddiad / Date 31/03/19

Yn unol â'n nôd i roddi gwasanaeth o ansawdd uchel, croesawn unrhyw sylwadau sydd gennych ar gynnwys neu strwythur yr adroddiad hwn

As part of our desire to provide a quality service we would welcome any comments you may have on the content or presentation of this report

