

# GGAT 115: Cwm Nash, Monknash, Vale of Glamorgan

Archaeological excavation

**March 2012**

A report for Cadw  
by Rob Dunning BSc and Fay Bowen BA

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## **Summary**

*The Glamorgan-Gwent Archaeological Trust (GGAT) was informed in August 2011 that a single burial was eroding out of the cliff edge at Cwm Nash, Monknash, Vale of Glamorgan, approximately 7m high. There appeared to be two femurs visible, at approximately 7m above the beach. The consent of the landowner (Mr R Hubbard of Blaen-y-cwm, Monknash) was secured and a grant was approved by Cadw to recover the skeletal remains. The excavation took place on 05/09/2011, during extremely difficult conditions of high winds and heavy rain.*

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# 1 Introduction

## 1.1 Project background

In August 2011, the Glamorgan-Gwent Archaeological Trust (GGAT) was informed that a single burial was eroding out of the cliff edge at Cwm Nash, Monknash, Vale of Glamorgan, approximately 7m high. There appeared to be two femurs visible, at approximately 7m above the beach. The consent of the landowner (Mr R Hubbard of Blaen-y-cwm, Monknash) was secured and a grant was approved by Cadw to recover the skeletal remains. The excavation took place on 05/09/2011, during extremely difficult conditions of high winds and heavy rain.

## 1.2 Location and topography

Cwm Nash lies on the north coast of the Severn Estuary, 8km southeast of Portchcawl, in the parish of Monknash, Vale of Glamorgan (NGR SS 9044 7020). The geology is composed of Liassic limestone, cut by steep-sided valleys, created by solifluxion. The Nash Brook runs west from Monknash, before dropping into the deep valley of Cwm Nash. At its western extent the valley has been filled by a series of tufa deposits to a depth of 5m (Evans *et al.* 1978, 68). At the Nash Brook outlet, the tufa forms a flat platform to the north of the stream, on which the excavation site was located. The tufa is overlain by hillwash and covered by a thick layer of grass (Plate 1).



### 1.3 Archaeological background

The area was part of land granted to Neath Abbey following the conquering of the Lordship of Ogmore by Robert Fitzhamon in the late 11th century (Glamorgan County History 1980, 286). A church was already present in the vicinity (Williams 1984, 237), which was presumably the parish church. However, when it was granted to the monks, parochial burial and baptism rights were extinguished (with Neath Abbey being used instead), and the building became a chapel (Green 1906, 75-77).

Early-medieval metalwork (02082s), including a brooch, has been recovered from a field to the northeast of the current excavation, and post-Roman re-occupation of the Iron Age forts along the coast, including The Nash to the south and Dunraven to the north, is possible. The numerous surviving buildings of Monknash Grange have been described elsewhere (RCAHMW 1982, 262-5). Additionally, a number of related sites have been suggested, including the mill (01585s) at the head of Cwm Nash, a chapel site southeast of Cwm Nash (00398s) and a holy well (00232s) within Cwm Nash itself. Old grange sites were sometimes retained as burial grounds, for example, Llanfair Gilgoed grange continued to be used for burials into the late 18th century, in addition to Sker (Williams 1984, 235), north of Monknash.

In 1982, a human long-bone was washed out of the cliff (01584s). In 1990, GGAT was contacted by the owner of Blaen-y-cwm, who reported the exposure of human bones by marine erosion, and a site visit recovered part of a skull (Wardle 1991). In 1993, the landowner reported that further exposure had occurred, and requested that archaeological work be undertaken. Three grave cuts were visible, and a successful application was made to Cadw, with the excavations taking place in February 1993.

The excavations (Locock 1993) revealed three well-defined east-west grave cuts. Each grave-cut contained an extended adult burial. The central grave, in addition to the main burial, contained disarticulated remains of at least two further individuals. Furthermore, at the western end a skull had been carefully positioned. The upper parts of the main burials had been eroded, and some of the disturbed bones were recovered from the base of the cliff. The artefactual assemblage provided poor dating evidence, although it concurred with the early Post-medieval date suggested by the radiocarbon determination.

Locock concluded that the skeletons were a series of Post-medieval burials, most likely used as an 'unofficial' burial ground by the parishioners of Monknash between 1542-1607. It is possible that following the granting of a license for burial at St. Mary's, Monknash in 1607, the Cwm Nash burial place continued to be preferred by recusants due to its association with the well and grange, while more Puritan individuals used the churchyard of St. Mary's. Another possible explanation for the presence of human remains at the location is the burial of shipwreck victims.

## 2 Methodology

The exposed skeletal remains were fully exposed and excavated by hand. The archaeological works were carried out to the professional standards laid out in the Institute for Archaeologists' *Standard and Guidance for Archaeological Excavation* (1995, revised 2001 and 2008).

A written and photographic record was made of all archaeological features and deposits in accordance with the GGAT *Manual of Excavation Recording Techniques*. Contexts were recorded using a continuous numbering system, and are summarised in Appendix I. All significant contexts were photographed using a digital camera (with a minimum resolution of 8mp). All context depths were measured from the present ground surface.

All classes of finds were retained, cleaned, and catalogued and remain in temporary store until arrangements for final deposition are agreed, in line with the requirements of the Institute for Archaeologists' *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials* (2001).

The coroner was informed when the remains were first identified. Special circumstances dictated the need to remove some of the remains as they were thought to be vulnerable to further erosion and eventual loss. The remains were archaeologically recorded and removed under conditions that comply with all current legislation. This included reporting to the relevant authorities, the obtaining of proper licences, and the provision for eventual reburial following appropriate analysis. All human remains were excavated by hand in accordance with the Institute for Archaeologists' *Excavation and Post-Excavation Treatment of Cremated and Inhumed Human Remains: Technical Paper Number 13* (1993).

The project archive will be deposited with an appropriate receiving organisation, in accordance with ICON and IfA Guidelines. A copy of the archive index will be deposited with the National Monuments Record, Royal Commission on the Archaeological and Historical Monuments of Wales (RCAHMW), Aberystwyth.

### 3 Results

During the exposure and excavation of the skeletal remains, the following stratigraphy was observed. The basal deposit was a yellow-white tufa natural (1005), and whilst it was not excavated, previous work suggests it has a minimum depth of 5m (Plate 2). This was overlain by a light brown sandy silt (1002), containing occasional sub-angular stones (less than 0.2m in diameter) and frequent limpet shell. The uppermost deposit was a dark grey sandy silt loam topsoil (1001), containing isolated angular stones (less than 0.04m in diameter), isolated marine shell, extremely heavy bioturbation (roots) and two Post-medieval beer bottles. A single grave cut (1003) had been excavated through deposits 1002 and 1005 (Plate 3). The cut was flat-bottomed with a relatively shallow break of slope. The length of the grave could not be determined, although it had a minimum width of 0.36m and a maximum depth of 0.4m. The fill (1004) of the grave was composed of a yellow-brown sandy silt, containing isolated angular stones (less than 0.05m in diameter), isolated marine shell (including limpet) and isolated upcast tufa fragments. The grave was aligned east west. No artefacts were recovered from the grave fill.



Cwm Nash, Monknash, Vale of Glamorgan: archaeological excavation



Location of excavation  
(see Figure 2 for profile)

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(100017916).

Figure 1. Location plan



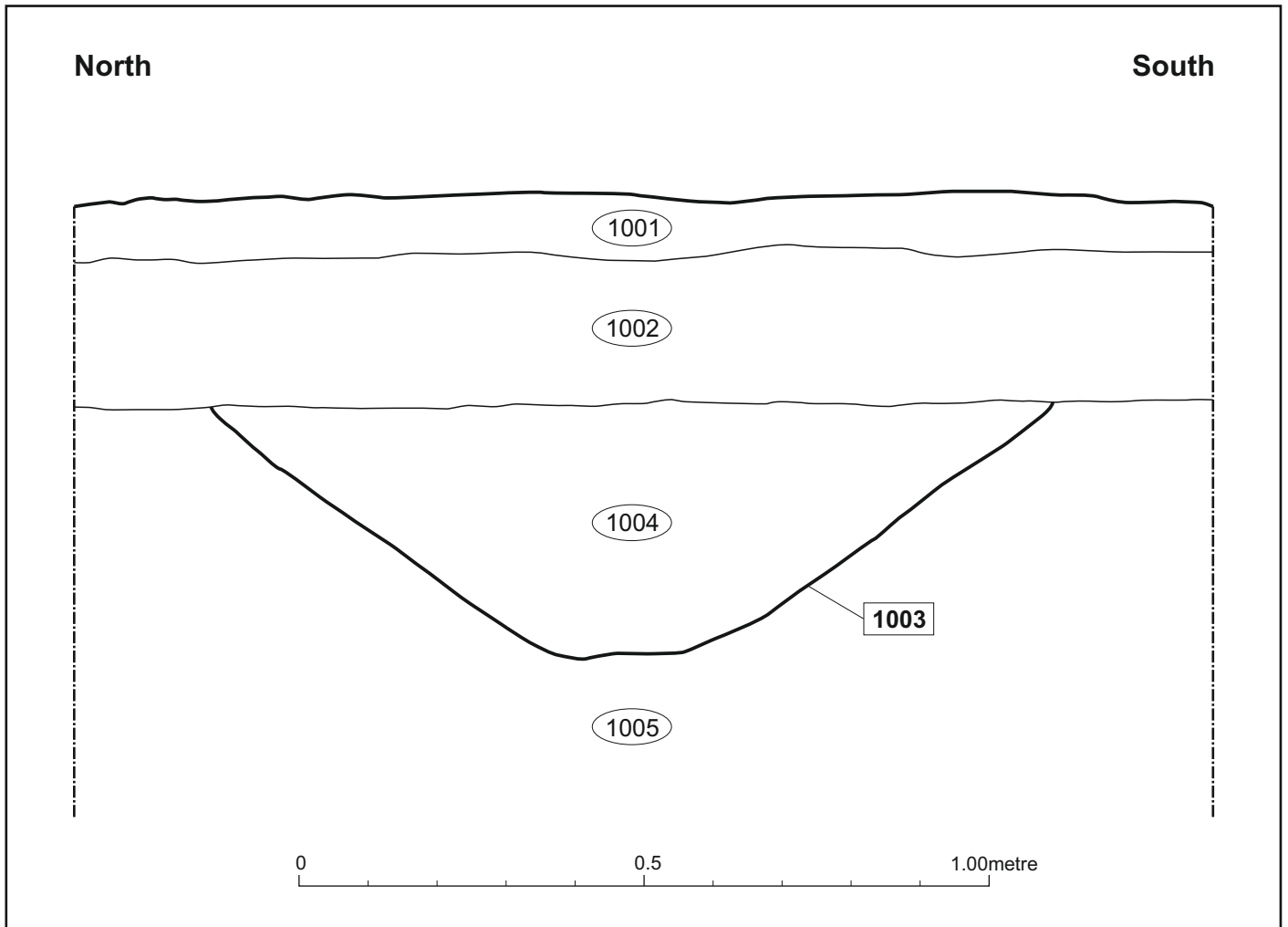


Figure 2. Profile drawing of grave cut

## 4 Human remains report

*Kirsten Egging Dinwiddy; January 2012*

### **Introduction**

Human bone from a single context (1004) was subject to analysis. The remains are those of an extended, supine inhumation burial found protruding from a southwest facing cliff face at Cwm Nash. Several similar findspots and an excavation have indicated the presence of an early Post-medieval cemetery within the immediate vicinity (Locock 1993). The remains from context 1004 are considered to be of commensurate date.

### **Methods**

The degree of bone erosion was recorded using the system of grading devised by McKinley (2004, fig. 6.1-7). Age was assessed from the stage of skeletal development and the patterns and degree of age-related changes to the bone (Scheuer and Black 2000; Buikstra and Ubelaker 1994). Sex was ascertained from the sexually dimorphic traits of the skeleton (Bass 1987; Buikstra and Ubelaker 1994). Measurements were taken and skeletal indices calculated where possible (Bass 1987; Brothwell and Zakrzewski 2004; Trotter and Gleser 1952, 1958). Non-metric traits were recorded in accordance with Finnegan (1978).

### **Results**

The base of the grave was approximately 0.36m below the current ground surface, and it cut through a sandy silt subsoil (1002), into a loose 'tufa' deposit (1005). Approximately half of the grave and burial remains had been lost to erosion, leaving the only lower limbs and a few fingers in situ (Plates 4 and 5). The right proximal femur and a few hand bones were exposed, projecting from the vertical cliff face. The circumstances of the discovery and extreme nature of the site severely restricted access and hampered the excavation process.

The bone is in moderate condition (grade 2-3) with some surface root etching and localised erosion. A few breaks are present, some are relatively recent and all were made to dry bone. Skeletal recovery is low (c. 35%, hand and lower limb bones only), the majority of the remains having been eroded out of the cliff and lost prior to excavation.

The remains are those of an adult male >35 years of age at death. At 1.69m (5' 6½") the estimated stature is close to the 1.71m (5' 7") average calculated by Roberts and Cox (2003, 308) from their sample of post-medieval assemblages. The platymeric index (demonstrating the degree of anterior-posterior flattening of the proximal femur) of the left femur is eurymeric (medium; 86.8); the platycnemic index (illustrating the degree of meso-lateral flattening of the tibiae) for both tibiae is eurycnemic (broad; left 78.1; right 87.5). The difference between the tibiae suggests differential biomechanical stresses, possibly related to activity, or perhaps to morphological variation or pathological changes not apparent in the recovered material. Small lateral squatting facets (indicative of repeated hyperflexion of the ankle joint as occurs in habitually adopting the squatting position) were present on both tibiae.

### **Pathological lesions**

The majority of observed pathological changes appear to be age and activity related.

Changes consistent with advanced osteoarthritis (osteophytes and glassy polish/eburnation; Rodgers and Waldron 1995, 43-44) were evident in the distal joints of a minimum of three unisided fingers. Lone osteophytes (bony lipping of the articular surface margins) in the hand

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joints, knees and ankles indicate some joint degeneration, and as such may be interpreted as the early stages of osteoarthritis.

Enthesophytes (bony protrusions located at the entheses i.e. muscle and ligament attachment sites) can form as a result of the aging process, and also through micro-injuries caused by biomechanical stress from repeated activities and movements. These activities may also be responsible for 'plastic' changes to the shape of the bone (see platycnemia above). The lower limb bones are all relatively robust, with common slight enthesophytes, though a larger example is evident on the proximal right fibula. The shape of the femur shafts suggest strong stresses on the muscles of the back of the thighs, whilst the left tibia had more distinctly marked entheses and a slightly 'twisted' shaft in comparison to the right.

Consultation of local historical records, and comparison with the other three sets of remains from nearby might provide some insight into the lifestyles of the local population during the 17th century. Such information may also allow inferences to be made about the activities which this/these individual(s) may have participated in.



**Plate 1.** View of excavation area, looking west



**Plate 2.** View of grave cut at cliff top (right of scale), looking northeast





**Plate 3.** View of grave cut and skeletal remains, looking northeast



**Plate 4.** Lower limb remains recovered from the excavation, with 50cm scale



**Plate 5.** Finger bones recovered from the excavation, with 20cm scale

## 5 Conclusions

The excavation recovered the lower limb and some finger bones of an adult male. The burial ground was used as an 'unofficial' burial ground by the Parishioners of Monknash between 1542 and 1607. It is possible that following the granting of a licence for burial at St Mary's Monknash in 1607, the Cwm Nash burial-place continued to be preferred by the recusants because of its association with the holy well and grange (Williams 1984, 235-6), while more Puritan individuals used the churchyard of St Mary Monknash. It is less likely that the burials are those of Nonconformists for the same reason, although their use of a separate burial ground would have been legal (Gittings 1984, 56 and Locock 1993).

It is possible that the burial recovered from this excavation and those previously recovered are the result of continued use of a late medieval burial ground in the Post-medieval period (Locock 1993). Another possible explanation for the presence of human remains at the location is the burial of shipwreck victims, as there are a large number of shipwrecks recorded off this section of coastline by the RCAHMW.

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## Appendix I

### Inventory of contexts

Context	Type	Depth (m)	Description	Period
1001	D	0-0.07/0.1m	Dark grey sandy silt loam topsoil, containing isolated angular stones (less than 0.04m in diameter), isolated marine shell, extremely heavy bioturbation (roots) and two Post-medieval beer bottles	Post-medieval
1002	D	0.07/0.1-0.3m	This was overlain by a light brown sandy silt, containing occasional sub-angular stones (less than 0.2m in diameter) and frequent limpet shell	Post-medieval
1003	C	0.3-0.65m	Single grave cut excavated through deposits <b>1002</b> and <b>1005</b> . The cut was flat-bottomed with a relatively shallow break of slope. The length of the grave could not be determined, although it had a minimum width of 0.36m and a maximum depth of 0.4m	Post-medieval
1004	D	0.3-0.65m	The fill of the grave was composed of yellow-brown sandy silt, containing isolated angular stones (less than 0.05m in diameter), isolated marine shell (including limpet) and isolated upcast tufa fragments. No artefacts were recovered from the grave fill	Post-medieval
1005	D	0.3-5m n b	Yellow-white tufa natural, and whilst it was not excavated, previous work suggests it has a minimum depth of 5m	-

Note:

D = Deposit

C = Cut

n b = context not bottomed.

## Appendix II

### Human bone archive report

*Kirsten Egging Dinwiddy; January 2012*

See Skeleton Record Sheets for skeletal elements available in analysis and Dental Record Sheets for tooth wear & lesion location. Inventories of spinal and extra-spinal joints, dental inventory, and metric record & non-metric traits are recorded on pro forma sheets. In the following text, age assessment follows Buikstra and Ubelaker (1994) and Scheuer and Black (2000); sexual dimorphic scores are in accordance with Buikstra and Ubelaker (1994), and condition scores follow McKinley 2004.

On the non-metric traits sheet, the absence of an entry means the trait could not be observed (skeletal element missing); three traits were removed from the list due to difficulty in making observation or limit to number of times observation could be taken negating the validity of taking it (inc. foramina ovale, spinosum).

#### Context 1004

Within grave 1003 – flat based, shallow base of slope; yellow brown sandy silt, eroding out of vertical coastal cliff; Grave cuts natural ‘tufa’; 1001 is topsoil & turf; 1002 is light brown sandy silt subsoil with frequent limpet shells. Further info would have been virtually impossible to gather. Photo shows proximal femur & some MtCs protruding from the sandy cliff face.

**AGE: adult <35 yrs.**

**SEX: ?male**

UPPER LIMB: slight marginal ops on most finger joints;

proximal IP joints – slight lipping on all four;

distal IP joints – distal intermediate phalanges (2-5) depressed oval patch in centre, c. ¾ of surface – not clear if pathologically eroded here, or actually a rim of op formation.

Eburnation on medial & lateral edges of surface, on ‘raised’ area, largest phalanx (2<sup>nd</sup> or 3<sup>rd</sup>) least affected, with 5<sup>th</sup> & 3<sup>rd</sup> or 4<sup>th</sup> moderately affected - osteoarthritis. Slight lipping of proximal surface of distal phalanx

LOWER LIMB: fairly robust and angular;

Femora – distal – slight marginal lipping most; patella – marginal lipping – slight all around; marked linea aspera along midshaft – enlarged, crested eminence here, rather than ruggedness;

Tibiae – distal - slight marginal lipping; proximal – slight spicules – central tubercle & central anterior margin; marked soleal line on left, left also slightly more ‘twisted’ than right

Fibula – right – enthesophyte on proximal, posterior, moderate;

CONDITION: surface 2-3; slight to moderate root etching, localised patches slightly heavier; some breaks, all in dry bone, some old, some new.

COMMENT: 2 pieces of animal bone – probable sheep/medium mammal vertebral spinous process & small unid eroded piece – bagged separately & in box.