

No. 13 CWMORTHIN TERRACE, BLAENAU FFESTINIOG:
A FAUNAL ANALYSIS OF TWO ASSEMBLAGES

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NON-TECHNICAL SUMMARY

The following report presents the results of faunal analysis from two assemblages recovered from a nineteenth century terrace known as No. 13 Cwmorthin Terrace, Blaenau Ffestiniog. The results reveal faunal material that is well preserved with evidence of gnawing and butchery, but almost no indication of burnt material. Whilst the identification of species is limited, some evidence on consumption patterns have been revealed and also the reason why the assemblages were located under the hearth floor or behind the fireplace.

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1. INTRODUCTION

1.1. Background information to the assemblage

The following report presents the results of analyses of faunal assemblages from a mid-nineteenth century terrace (no. 13) in Blaenau Ffestiniog, known as Cwmorthin. Excavations took place during 2014 and the faunal material presented in this report were recovered from the back of the fireplace and also from under the hearth floor. This report includes the results of the two assemblages:

- Material from the back of the fireplace.
- Material from under the hearth floor.

1.2. Aims and objectives

The author of this report was requested to analyse the recovered faunal assemblage and use this to address the following:

- Identify taphonomic factors including degree of preservation and identify evidence for butchery, burning and gnawing.
- Identify which species are present within the assemblages and also the body parts represented.
- Explore the reasons why the faunal assemblages were deposited at the back of the fireplace and also under the hearth floor.

2. MATERIALS AND METHODS

Faunal remains from both assemblages were analysed and recorded on to a Microsoft Access database. This included recording the degree of preservation, the identified species and element present and also whether evidence of butchery, burning or gnawing were present. Fragments where neither species nor element could be identified were not recorded as these provided no useful information. In addition, fragments which could be identified to element but not to

species type, where either recorded to group of probable species or to more generic animal size group. Due to the size of the assemblages, ageing and biometric analyses were not possible. Once complete, the recorded material was then transferred into Microsoft Excel to be analysed, the results of which are presented in section 3 of this report.

3. ANALYSIS AND RESULTS

In total, 413 bone fragments were recorded and analysed, including 53 fragments from under the hearth floor and 260 from the back of the fireplace.

3.1. Taphonomic factors

Taphonomy refers to the processes that affect the preservation of biological remains following deposition and also during recovery (Lyman 2001). The following section presents the results of bone preservation and also evidence of gnawing, butchery and burning for the assemblages.

3.1.1. Preservation

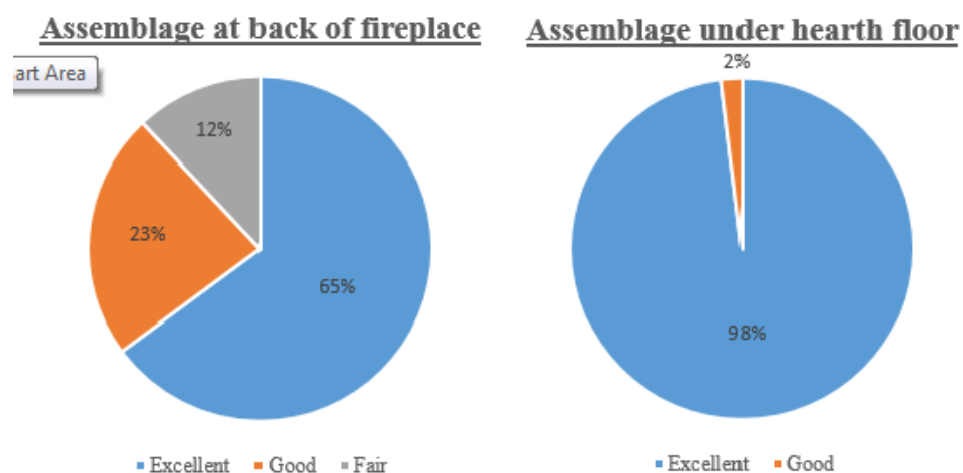


Figure 1: Chart showing degree of preservation for the bone fragments analysed.

Figure 1 presents the results of preservation analysis of the bone fragments recorded from both assemblages. It indicates that in the case of both assemblages, the preservation conditions have been favourable with the greatest proportion in both cases having a preservation grade of excellent. The fact that the bones are in favourable conditions might suggest that the

excavations have recovered all of the bones that were ever deposited. As such, the assemblages might represent a full faunal record.

3.1.2. Gnawing

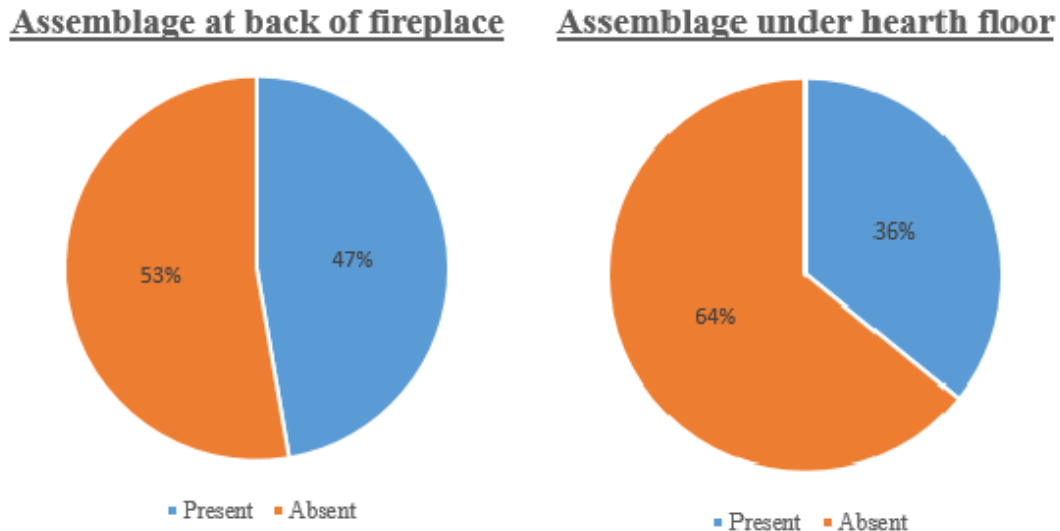


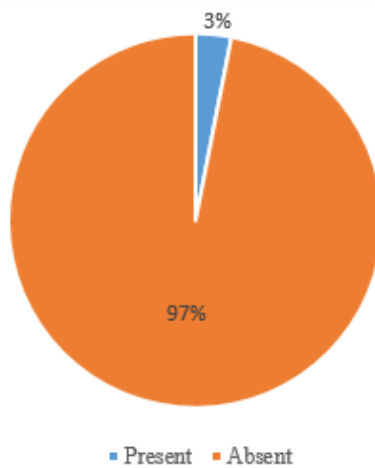
Figure 2: Chart showing proportion of recorded bones exhibiting evidence of gnawing.

Figure 2 shows the results of gnawing analysis of the bone fragments recorded from both assemblages. In both cases, the proportion of bones exhibiting evidence of gnawing is significant, 47 percent for the assemblage recovered from the back of the fireplace and 36 percent for the assemblage from under the hearth floor. A study of the marks reveals that these are consistent with marks from rodents and dogs. The high proportion of gnawed material in both cases suggests that the bone material has been accessible to rodents and dogs before becoming inaccessible.

3.1.3. Burning

Figure 3 presents the results of burning analysis of the bone fragments recorded for both assemblages. The results indicate that none of the bones from under the hearth floor have been burnt or exposed to fire. In the case of the assemblage from the back of the fireplace, only a limited number of fragments showed evidence of burning. This suggests that the bones were not directly exposed to heat from any potential cooking process that took place or used as a source of fuel, except perhaps in the case of a limited number of fragments.

Assemblage at back of fireplace



Assemblage under hearth floor

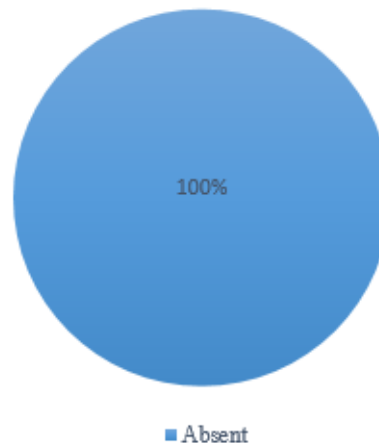
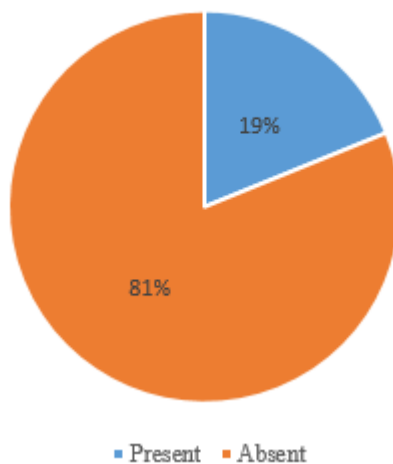


Figure 3: Chart showing the proportion of recorded bones showing evidence of burning.

3.1.4. Butchery

Assemblage at back of fireplace



Assemblage under hearth floor

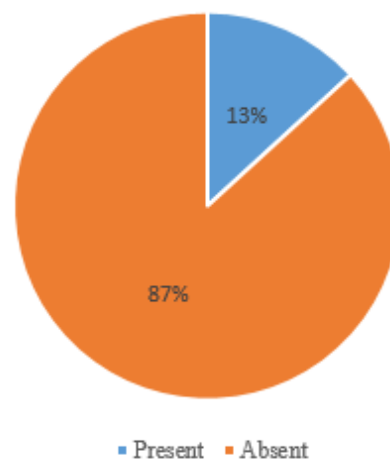


Figure 4: Chart showing the proportion of recorded bones exhibiting evidence of butchery.

Figure 4 presents the results of butchery analysis of the bone fragments recorded for both assemblages. In both cases, the results indicate that the greatest proportion of recorded bones show no clear evidence of butchery marks. Despite this, a proportion of the recorded material shows evidence of butchery, 19 percent of the assemblage from the back of the fireplace and 13 percent of the material from under the hearth floor. A study of the marks revealed that this included a mixture of butchery techniques that reflect the location of butchery on the bone and also the reason for the butchery. This included bone that was cut, chopped and sawn. The fact that a high proportion of the recorded bones exhibit no butchery evidence will partly be due to

the fact that some of the bone fragments recorded do not normally suffer butchery marks due to their anatomical location. As such, the proportion of recorded material that is directly or indirectly the result of butchery is probably higher than is indicated by butchery marks alone.

3.2. Species diversity and frequency

| Species | Under hearth floor | % | Back of fireplace | % |
|----------------------|--------------------|------------|-------------------|------------|
| Cattle | 0 | 0 | 3 | 1 |
| Sheep/goat | 3 | 6 | 33 | 13 |
| Sheep | 1 | 2 | 13 | 5 |
| Sheep/goat/roe deer | 2 | 4 | 8 | 3 |
| Large mammals | 3 | 6 | 7 | 3 |
| Large/medium mammals | 4 | 8 | 3 | 1 |
| Medium mammals | 33 | 62 | 187 | 72 |
| Medium/small mammals | 0 | 0 | 1 | 0 |
| Small mammals | 0 | 0 | 1 | 0 |
| Small mammals/birds | 0 | 0 | 1 | 0 |
| Unknown | 7 | 13 | 3 | 1 |
| TOTAL | 53 | 100 | 260 | 100 |

Table 1: Table showing identified species and proportion of each.

Table 1 presents the results of species that were identified from the recorded fragments of bones for both assemblages and also the proportion that each species represents of the total. In most cases, the bones could only be safely identified to animal size or group of probable species. In the case of the material from under the hearth floor only one species was safely identified, sheep. It is likely that most of the material identified to sheep/goat, sheep/goat/roe deer and medium mammals probably relate to sheep also, but this could not be verified. In the case of material identified to large mammal size, this probably relates to cattle, once again this could not be verified.

Two species could be identified for material from the back of the fireplace, sheep and cattle. Again, it is likely that sheep/goat, sheep/goat/roe deer and medium mammals relate to sheep, but this could not be verified. In the case of the large mammal material, this probably relates

to cattle, but could not be verified. One fragment was identified as either representing a small mammal or bird species, a suitable reference collection was not available to the author to verify this. In both cases, unknown related to fragments that were identified to element but identification to species or animal size level was not possible. In terms of proportion, both assemblages largely represent medium size mammals which are likely to represent sheep. Due to the fact that only a small number of fragments could be verified to species and also due to the limited number of species that were identified, the minimum number of individuals has not been calculated.

3.3. Body part representation

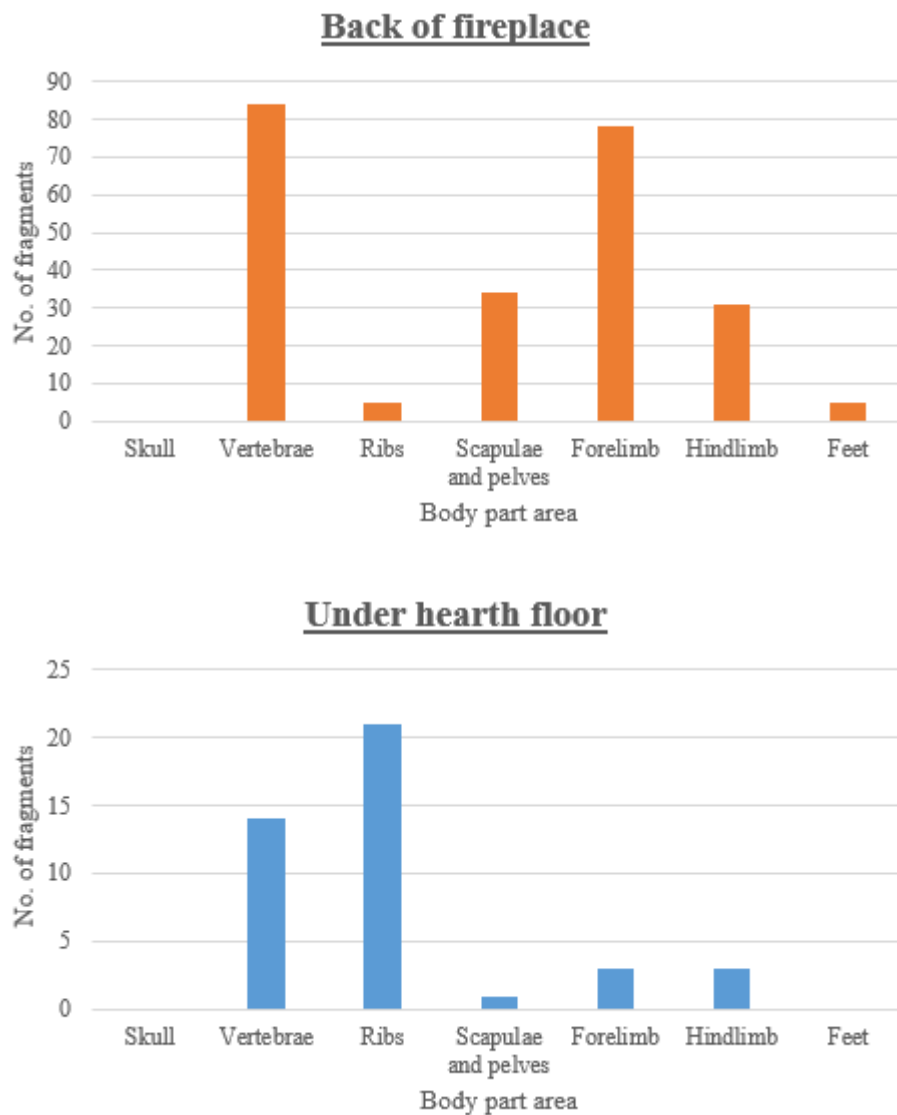


Figure 5: Bar charts showing the number of fragments identified for each body part area.

Figure 5 presents the results of body part representation for recorded fragments of bone for both assemblages. Due to the small number of identified species, the total number of recorded fragments for each assemblage respectively were aggregated. The results in both cases indicate that the body part areas which have the least value in terms of meat consumption or calorific value are absent or presented in low numbers. This indicates that the recovered material probably does not represent the primary location of butchery, rather it is likely to be the location where material was deposited following consumption.

4. DISCUSSION AND SUMMARY

The report has presented the results of analysis on two faunal assemblages from no. 13 Cwmorthin Terrace in Blaenau Ffestiniog. The results have revealed that both assemblages were well preserved which indicates that the material has been deposited under favourable conditions and also the material deposited is likely to represent all that was ever deposited in the localities. The high proportion of gnawed material indicates that rodents and dogs had access to the bones initially following deposition, but later become inaccessible. This suggests that the bones were initially exposed before being blocked up behind the fireplace or under the hearth floor. The limited evidence of burning suggests that these bones are unlikely to have been used in the heating stages of the cooking process or as a source of fuel, except perhaps in limited cases.

In terms of species identified, this has proved inconclusive in the case of most fragments, however the presence of sheep and similarly sized fragments indicates that a high proportion of medium sized mammals is likely to have been consumed at the site. In addition, cattle was another mammal that was consumed. This finding is strengthened further by the fact that a significant proportion of butchery is found in both assemblages and the body part representation is conducive with consumption rather than representing the location where animals were initially slaughtered.

Taken together, the evidence suggests that the deposited material represents the waste material of consumption which was initially left exposed and accessible to rodents and dogs, but was later sealed under the hearth floor or at the back of the fire place.

REFERENCES

Lyman, R.L. 2001. *Cambridge Manuals in Archaeology: Vertebrate Taphonomy*. Cambridge: Cambridge University Press.