

# Scottish Episcopal Palaces Project



## The Bishop's Palace Fetternear 2005-2006

An interim report on the work undertaken under the Heritage Lottery Fund

'Your Heritage Programme' entitled 'The Fetternear history project'

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# **The Bishop's Palace Fetternear**

**2005-2006**

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Figure 1. Aerial view of Fetternear, taken in 2000, showing the unexcavated area west of the drive. Photograph by courtesy of Moira Greig and Aberdeenshire Council



Figure 2. Map of Fetternear in 1900, showing the extent of the nineteenth-century excavation in front of the mansion. O.S. Second Edition (1900) 1:2500

# Contents

1. Background		7
2. Medieval moated sites in Scotland		8
3. Methodology		9
4. The 2005 and 2006 excavation seasons		11
5. 2005 volunteer team		13
6. 2006 volunteer team		13
7. Trench H	<i>William J. Lindsay</i>	13
8. West of the drive		14
9. Medieval pottery	<i>William J. Lindsay</i>	17
10. Animal bones	<i>Rose Davis</i>	19
11. Plant macrofossils	<i>Catherine Griffiths</i>	24
12. Environmental evidence: discussion	<i>Penelope Dransart</i>	26
13. Ferrous metal	<i>Penelope Dransart</i>	28
14. Non-ferrous metal	<i>Penelope Dransart</i>	35
15. Coins	<i>J. Donal Bateson</i>	41
16. Glass	<i>K. Robin Murdoch</i>	41
17. Clay tobacco pipes	<i>Colin Martin</i>	56
18. Worked stone	<i>Penelope Dransart</i>	59

19.	Prehistoric finds	<i>James Kenworthy and Jonathan Trigg</i>	60
20.	Dissemination		61
22.	Appendix: waterlogged wood	<i>Nigel Nayling</i>	63
23.	References cited		

### **Figures**

1	Aerial view of Fetternear by M. Greig		4
2	Map of Fetternear in 1900		4
3	Contour survey by W. Risk		9
4	Earth resistance survey by R. Kidd		9
5	Grid system at Fetternear by W. Risk		10
6	Kite photograph by S. Harbord		12
7	Kite photograph by S. Harbord		12
8	Stone berm and robber trenches		16
9	Terrace wall (C0774) and oven		16
10	Test firing of vessel made by W.J. Lindsay using Fetternear clay		17
11	Comparison between medieval cow ( <i>Bos</i> ) bones from Fetternear and Carew. Photograph by P. Davis		24
12	X-ray of knife (A4602a-c)		29
13	An unidentified object (A4573)		30
14	X-ray and photograph of arrowhead (A4594a-b)		35
15	Photograph and X-ray of key (A4587)		36
16	Representations of saints holding keys: St Sitha, photographed by S. Knott, and St Michael		37
17	Locations of some of the ferrous metal objects by W. Risk		38
18	Clay tobacco pipe bowls by C. Martin		56
19	Whetstone (A4832)		59
20	Excavation of palisade, grid square E4		61
21	Excavating layer C0805, grid squares E4 and F4		62

# The Bishop's Palace, Fetternear 2005 and 2006

## 1. Background

Fetternear is known from documentary sources to have been the summer palace of the medieval bishops of Aberdeen. Although the architectural history of the post-medieval ruined mansion received attention in an article published at the beginning of the 1970s (Slade 1971), the conjunction of the bishop's palace, post-medieval mansion and their landscape setting remained unstudied until the establishment of the Scottish Episcopal Palaces Project (SEPP) in 1995. This project brought together a team of archaeologists and volunteers in order to begin the task of investigating the cultural history of Fetternear (Dransart and Bogdan 1996; 2004). The receipt of a 'Your Heritage' award, combined with support from the University of Liverpool, the University of Wales, Lampeter and the Fetternear Trust, enabled us to develop our volunteer base for a two-year research programme. Our main objective was to investigate a new area west of the drive leading up to the ruined mansion which dominates the site (figure 1).

Ten seasons of previous fieldwork on other parts of the site provided the basis for forming the new venture reported here. Fetternear is the main focus of SEPP, the aim of which is to examine the material culture of the medieval bishops of Scotland. These bishops were responsible for constructing buildings which included cathedrals, churches, castles, manors and halls. In particular the project is designed to investigate the bishops' residences in a study which takes into account the architectural relationships between ecclesiastical and castellar architecture. It also considers physical and allegorical aspects of the landscape setting in which the palaces of the bishops were sited.

From our previous work at Fetternear, we have discovered that the medieval site was modified on various occasions by its post-Reformation occupants, the Leslies of Balquhain. This family was and is intensely proud of the medieval legacy provided by the bishop's palace and, in the nineteenth century, they conducted an archaeological excavation in front of the mansion. Evidence for their excavation is provided by an O.S. map of 1900 (figure 2; see also the discussion in Dransart and Bogdan (1996, 13-15)) and from our excavation. This post-medieval activity disturbed many of the medieval layers. Hence there was a need to initiate a new programme of work in order to investigate whether there were any medieval deposits that had not been reworked in more recent times. The 2005 and 2006 seasons produced excellent results in that we located part of the kitchen quarters of the bishop's palace and we also located a section of a timber palisade, a very rare survival indeed from a medieval site.

The contribution of volunteers, both local and non-local, and archaeology students has maintained the vitality of the project. By participating in active fieldwork, visitors from other parts of the U.K, the U.S., Ireland, the Netherlands and Belgium were able to meet and work with local people. The project gave our volunteers training in excavation, surveying and health and safety, as well as the opportunity to work in a team in different weather conditions, both good and bad. During the 2005 and 2006 seasons, we were blessed with favourable weather, which eased the task of recording our work. The team-work aspect of the project has provided local communities in Fetternear and Kemnay with increased opportunities for learning about their heritage through working collaboratively with different groups of people. Our work enables



the local community to care for and celebrate its heritage; this objective corresponds with one of the main purposes of the ‘Your Heritage’ programme.

In terms of other objectives of the ‘Your Heritage’ programme, the Fetternear-based project enhances knowledge concerning the diversity of our cultural history by investigating an under-researched area. More research effort in the published literature has been devoted to the study of medieval churches and monasteries rather than the residences of the bishops and their material culture. This project seeks to address the balance of that research effort and to disseminate its findings to the public through various means, including the publication of this report.

## **2. Medieval moated sites in Scotland**

Fetternear is an example of a moated site. Such sites are usually difficult to identify without a sustained programme of field survey and archaeological excavation. During the 1970s and 1980s in England, the Moated Sites Research Group (Le Patourel 1973; Aberg 1978; Aberg and Brown 1981) initiated a systematic study and, in the southern counties of Ireland, Terence Barry (1977; 1981) produced a detailed study of moated sites. The level of detail which characterises the work of these projects has not been attempted in Scotland. Only in south-east Perth (RCAHMS 1994) and Tayside and Fife (Coleman and Perry 1997) has initial recording been attempted in Scotland. Archaeologists have tended to give too much attention to mottes as Norman castles at the expense of other types of medieval site.

Moated sites are thought to be typologically complex; they are likely to have enclosed different types of structure ranging from homesteads to timber and masonry castles of high social standing, whether lay or ecclesiastical. Fetternear belonged to the bishops of Aberdeen from at least the twelfth century when the villa and church of Fetternear were listed in a papal bull issued by Adrian IV, dated 10 August 1157, which confirmed to Edward, Bishop of Aberdeen, possession of the lands and churches which had been granted to the Cathedral Church of Aberdeen by the kings of Scotland. It is of interest that the nineteenth-century occupants of Fetternear, the Leslies of Balquhain, knew that the bishop’s palace which preceded the mansion in which they lived had been a moated site as they recognised that it had been surrounded by what they called a fosse (Leslie 1869, 120). However, Fetternear has not been listed as a moated site on the RCAHMS database of archaeological sites (Canmore). The work of the Scottish Episcopal Palaces Project has investigated the archaeological and documentary evidence and has established the basis for recognising Fetternear as a moated site.



Figure 3. Contour survey conducted by William Risk in 2005

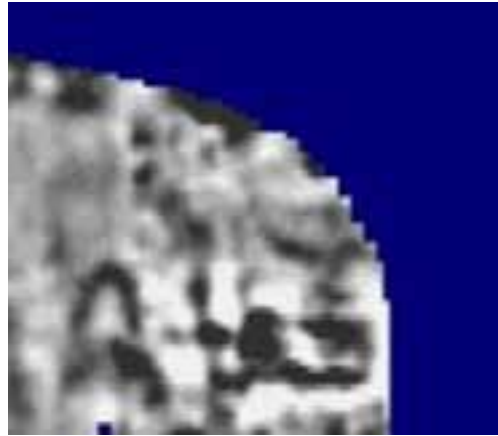


Figure 4. Plot of resistivity survey conducted by Ray Kidd in 2005

### 3. Methodology

Before the beginning of the July 2005 excavation season, a contour survey led by William Risk and an earth resistance survey conducted by Ray Kidd took place. These surveys form part of a larger programme of non-invasive research which began in 1995 with an earth resistance survey (or resistivity) conducted by Nicholas Bogdan, Penelope Dransart and Peter Bewers (Dransart, Bogdan and Bewers 1995). The equipment for these surveys was initially provided by the Department of Archaeology and Anthropology at University of Wales, Lampeter and the Department of Geography at the University of Aberdeen. Subsequently, Ray Kidd constructed his own earth resistance meter for use on various sites in Aberdeenshire, including Fetternear. Figures 3 and 4 present the surveys conducted in 2005 of the area west of the drive leading to the front door of the ruined mansion. They therefore form part of more extensive coverage which will be included in the final publication on the work of the Scottish Episcopal Palaces Project – Fetternear.

There are several reasons for producing a contour survey; it presents an accurate plan of the site, as well as having the potential to reveal features that have not previously been recognised and providing a record for the reinstatement of the site after excavation (Barker 1993, 60). The contour survey will also be useful in the future, perhaps for constructing a model in a museum display or for a web-based reconstruction of the landscape history of the site.

Earth resistance is one of a number of geophysical methods for surveying archaeological sites. The terminals of the meter are placed in the ground at intervals and measurements are taken of the differences in electrical resistance, enabling

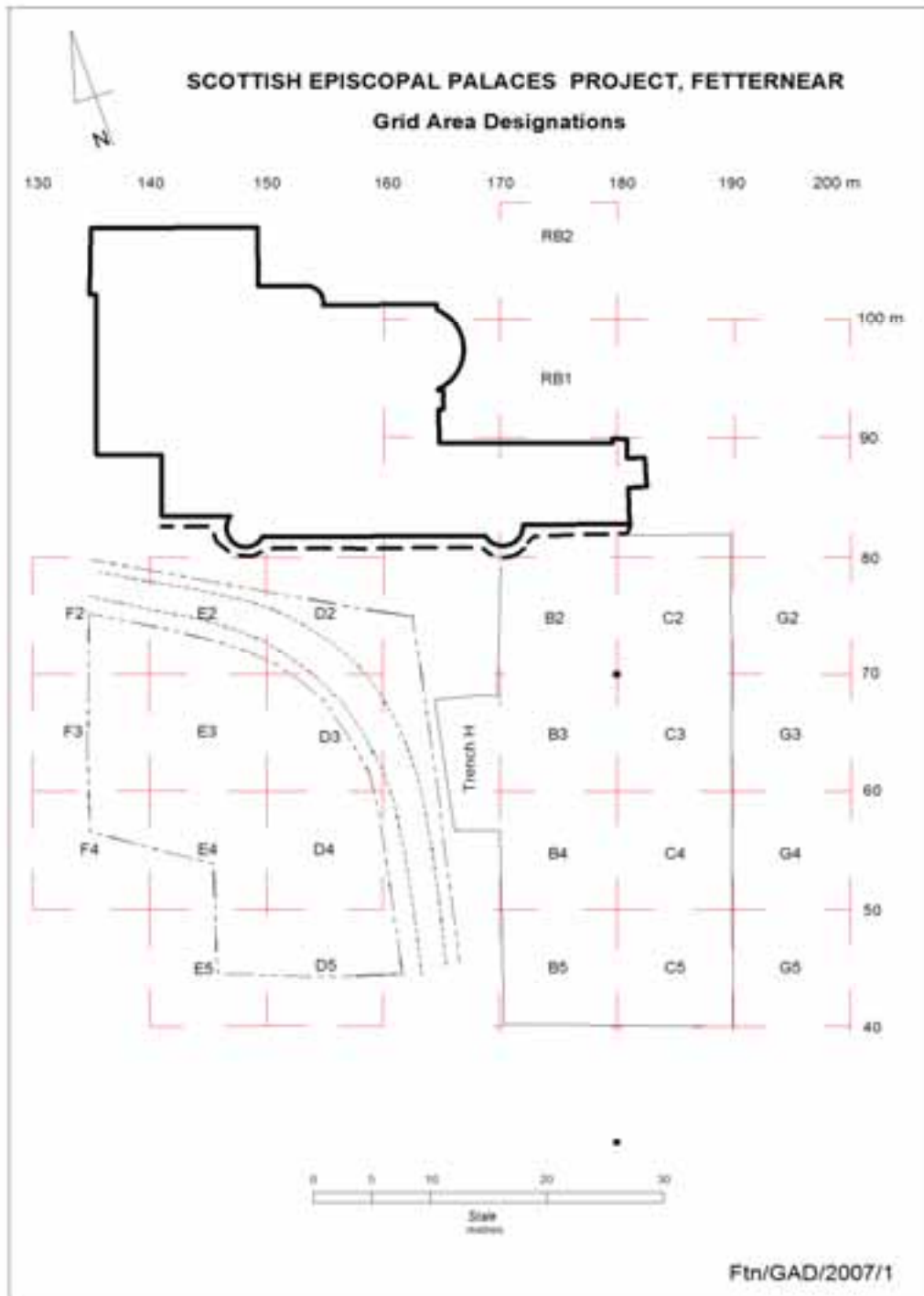


Figure 5. The grid system at Fetternear, surveyed by William Risk

archaeological anomalies to be detected (Barker 1993, 60-1). At Fetternear the earth resistance survey has been invaluable in detecting especially walls, dumps of demolished masonry and quarry features in an extensive area in the fields either side of the drive and behind the mansion. These features typically appear as areas of high resistance when the data are plotted. The various sections of moat are not so easily detected in the Fetternear survey because we are discovering that they were backfilled with masonry from demolished parts of the bishop's palace. Ditches, moats and gullies often register as areas of low resistance in surveys, but at Fetternear these sections of moat appear as alignments of high resistance when plotted. In order to investigate the moat we have to conduct the systematic excavation of deposits.

SEPP's first season of excavation was conducted in September 1995, when an open area excavation was laid out in front of the towerhouse on the east side of the drive. It was aligned to the grid system which was organised following the axis of the mansion (figure 5). Consequently, the north-south axis of the grid runs approximately northeast-southwest. In this report, references to the cardinal directions are, in reality, to grid north or grid south. Our previous experience of ten seasons at Fetternear has demonstrated that it is only possible to understand the archaeology of Fetternear by uncovering a large area. Plans of the excavated layers have been drawn at a scale of 1:20. They will be published in the final report.

The descriptions of the contexts presented here are taken from the context record sheets, which are written on site as the excavation progresses either by the supervisors, or by the volunteers under supervision. Arbitrary numbers are assigned to each context recognised during the excavation; these numbers consist of four digits preceded by the letter 'C'. Small finds have been given four digit numbers preceded by the letter 'A'; these numbers are used in the individual entries in the catalogues of the finds of metal, glass, clay tobacco pipe and worked stone below.

#### **4. The 2005 and 2006 excavation seasons**

A new area measuring approximately 30 m by 25 m west of the modern drive leading to the main door of the ruined mansion known historically as Fetternear House was selected for investigation under the terms of the 'Your Heritage' programme. Excavation took place during the month of July in each of the two years. A JCB was used to strip the topsoil on 1 July 2005 prior to the partial excavation of the open area by hand.

The excavation was supervised by Dr Penelope Dransart (University of Wales, Lampeter), William J. Lindsay (an independent archaeologist), Brian Milton (an independent archaeologist) and Jonathan R. Trigg (University of Liverpool). Our team included local and non-local volunteers recruited by word of mouth, through press coverage and also by listing on the Archaeological Institute of America and Current Archaeology web sites. In 2006, Fetternear featured on the cover of the Current Archaeology handbook of excavations. The teams of volunteers who contributed to the work of each season are listed below.



Figure 6 (top). Photograph taken from a kite by Simon Harbord, showing the excavation in 2006 of the northern part of the area west of the drive.

Figure 7 (bottom). Another kite photograph taken by Simon Harbord, showing the excavation in 2006 of the southern part of the area west of the drive.

## **5. 2005 volunteer team**

Peter Ananin, Sally Atkins, Jeanette Barclay, Pamela Casto, Alastair Dransart, Caitlin Dransart, Jonathan Dransart, Sheila Duthie, Mary-Kamal Eissa, Aaron Fettgather, John Ford, Jennifer Fordyce, Eilish Grant, Cody Gray, Angela Groat, Timothy Grundey, Megan Hatton, Monica Hatton, Toni Hatton, Dawn Howie, Rachel Howie, Ray Kidd, Peter Leslie, Kath Leyland, Samantha Little, Rachel Lochhead, Colin Miller, Peter Pratt, Camilla Priede, Kathy Reid, William Risk, Alan Simpson, Evan Smith, Ashara Taylor, Casseia Taylor, Graham Taylor, Louise Thomas, Carys Thorn, Marlene Weston, Alison Wilson, Michael Whyte, Philip Whyte, Emily Wood, Kerri Ann Wood.

## **6. 2006 volunteer team**

Jamie Matten Bailey, Tamara Bergsma, Roger Berl, Matthew Burnett, William Burns, Pamela Casto, Mike Cooper, Heather Ann Cunningham, Sheila Duthie, Mary-Kamal Eissa, Jennifer Fordyce, Tim Grundey, Ray Kidd, Micha Libert, Rachel Lochhead, Colin Miller, Peter Pratt, William Risk, Jelle Schokker, Hanne Sheeran, Alan Simpson, Michaela Strachan, Louise Thomas, Ashley Wagoner, Lauren Anne Walls, Amy Louise Willcocks.

## **7. Trench H**

*William J. Lindsay*

In 2005, the excavation of Trench H was continued in order to produce results which could be compared with those on the west of the drive. This trench was originally opened during the 2000 field season. Finds excavated from it in previous seasons included medieval pottery and metalwork. These finds will be reported in a future publication. Trench H is wedge-shaped as it runs alongside a fence bordering the drive; it is visible in the aerial photograph in figure 1.

Above the natural lay about 0.5 m of peat containing twigs and thicker fragments of wood. Plant stalks and fragments were also present, but no artefacts were found. Above this compacted wet horizon lay a similar, much finer-textured, deposit of black peaty silt, which is interpreted as having been derived from the decomposition of finer materials than those of the lower deposit. This is the type of deposit expected at the bottom of a pond or waterlogged ground. The full depth of the natural deposit probably has not survived, and clearly it had been contaminated by human activity, as a few small pieces of pottery and animal bones were recovered from it. The pottery has been provisionally dated to the fourteenth century. Together, the two wet peat layers could represent the sediment of a pond which may have dried out to become a marsh. Similar deposits were identified in other parts of the excavation.

In one narrow area, an east-west alignment of field-collected stones had been laid. The weight of the stones had allowed some of them to sink through the fine wet layer below. To the north of the east-west alignment, lay a nearly black sticky loam

containing fourteenth century pottery fragments, animal bone and pieces of roofing slates.

It is surmised that a similar, parallel, stone alignment may have existed to the north and that it mirrored the excavated feature. The stone alignments would have supported only relatively light superstructures, presumably wooden walling of some type, and possibly not even roofing. It is believed that there could have been some type of sluice gate arrangement to the west of Trench H which must have been opened from time-to-time to clean out what is believed to have been a latrine. A plentiful supply of water was obviously readily available. To judge by the spade-like impressions in this area, it may also have been dug out on occasion. Pottery finds indicate a fourteenth century date for the feature. If funding becomes available in the future, it will be possible to extend Trench H northwards to test this hypothesis.

The only other really significant layer at the north end of Trench H is a deposit approximately 0.38 m deep of orange-brown gravel and small angular stones which appeared to have been dumped to raise the level of the area. A similar, probably identical, layer was present in the southern part of the trench. Here it has been interpreted as being a deposit dating from *c.*1600 AD.

In the southern part of Trench H, a significant, approximately 15 cm deep, dark clayey loam extended over the whole length of the excavated area. It is of considerable interest as it contained a large number of roofing slate fragments which have been interpreted as trimmings from slate-working. It is impossible to say whether new or used slates were involved in this activity, although one piece did possess a peg hole, suggesting reuse. A number of small pieces of fourteenth century pottery were recovered from this horizon, as were animal bones. Although the pottery suggests a fourteenth century date for the roofing activity, the soil appears to have continued to exist until *c.*1600 AD.

Above this general layer there was a deposit with an average depth of about 0.4 m and consisting of orange-brown gravel and small angular stones, probably quarried from the field to the north of the standing building where such activity was found to have been undertaken. The material appears to have been dumped to raise and level the area, as was done to the northeast of the trench. By association, the deposit should be *c.*1600 AD in date. Cut into the layer was the foundation of a clay-luted wall which was aligned north-south. It can only be of *c.*1600 AD or more recent date.

## **8. West of the drive**

During 2005 and 2006 the excavation team opened up and partially excavated a new area in the field west of the drive within an arbitrarily fenced-off sector determined by Mr J. Whittall. It became evident that at least part of this sector had been investigated in the nineteenth century when the upper archaeological layers were systematically removed prior to levelling for planting as a lawn in front of the mansion (figures 6 and 7). Work east of the drive prior to 2005 also indicated evidence for intensive nineteenth-century activity.

In the northern part of the new excavation, cobbled surfaces and associated large, flat stones showing evidence of repeated heating and metal-working activity were located (figure 6). Quantities of what are likely to be clay moulds were recovered. Other finds in this sector provided no precise dating evidence.

At the south end of the new area, a section of moat was located running grid east-west. Unfortunately it extended southwards beyond the excavation area and its full width remains to be ascertained. A few pottery sherds were recovered from the fill, indicating that the moat had been in use during the fourteenth century. Similarly aligned, immediately north of the moat, were two robbed-out walls with a fragmentary stone berm surviving *in situ* against the southern edge of the more northerly of the two alignments (figure 8). This area is of significance for helping us to understand the southern end of the main area of excavation on the east side of the drive where a thick layer of clay sealed a soil horizon above the natural, which had been artificially levelled.

On the western side of the excavation area the excavation team detected medieval layers which were not affected by nineteenth-century robbing (figure 7). The most important find of the season was a section of well-preserved timber palisade (see Appendix on the waterlogged wood on p. 63). It was the second of at least three phases of palisaded enclosure, the most recent of which was observed as a beam slot, the fill of which contained a sherd of Scarborough Ware (see the pottery report below). There is a photograph of the palisade phases on the back cover of this report. The surviving section of palisade included reused timbers. The series of palisades was seen ultimately to have been replaced by a stone wall which is likely to equate with a wall previously detected on the east of the area east of the drive.

North of the east-west trending wall which replaced the palisade, medieval deposits contained substantial concentrations of pottery, dated to the first half of the fourteenth century (also discussed in the pottery report below), and animal bones. Metalwork and worked stone were also present. One of the significant layers here was numbered C0776 and the finds contained within it are discussed below in the specialist reports. Another layer, C0805, is of a black colour and it is thought to be related to the rake-out of an oven or hearth. This part of the site north of the wall replacing the palisade was occupied by the kitchen or service quarters of the medieval bishop's palace, to judge from a series of hearths and the remains of an oven (perhaps a bread oven) here. The analysis of the finds reported below supports this interpretation.

On its westernmost edge, this area was cut by a terrace wall, which trended diagonally from north-west to south-east. Its west face dropped into a ditch (figure 9). A deposit numbered C0811 constituted the lowermost ditch fill. It contained, amongst other items, animal bones and plant macrofossils, which are discussed in the relevant reports below. As with the section of moat we excavated on the south of the west of the drive in 2005 and 2006, we were unable to excavate the full width of the ditch as it extended beyond the area within which we had permission to work. This ditch is probably of a more recent date than the moat and perhaps served to drain water from the site. The work of the 2005 and 2006 seasons indicates that the unexcavated areas to the west and the south of the area in which the landowners gave us permission to excavate are archaeologically sensitive. It is highly likely that the medieval moat was provided by a source of water either from the Marshes Burn and/or a spring (figure 1), potentially being supplied from the west of the site.





Figure 8. View looking north of a fragmentary stone berm which would have rested against a now robbed-out wall behind it. A second robber trench is also visible, containing a plank of wood *in situ*, which rested on the bottom of the trench.

Photograph: SEPP



Figure 9. Terrace wall (C0774) seen from the west. Note the rain water in the ditch. Behind the wall are the remains of an oven, to the right of which is the black soil interpreted as the rake-out of the oven and/or hearths in the vicinity.

Photograph: SEPP



Figure 10. Test firing of a vessel made by W.J. Lindsay using Fetternear clay.  
Photograph: SEPP

## **9. Medieval Pottery**

*William J. Lindsay*

A considerable number of pottery sherds varying in date from prehistoric to relatively modern times were recovered during the 2005 and 2006 excavations at Fetternear. However, only the medieval and early post-medieval material has been considered here. The remainder of the assemblage together with the ceramic roof furniture and clay moulds will be published elsewhere at a later date.

Five hundred and seventy four sherds and fragments of medieval pottery along with 29 examples of late medieval or post-medieval date were recovered during the excavations carried out during 2005 and 2006. Four hundred and seventy pieces of medieval date were recovered from apparently uncontaminated archaeological contexts and 352 of these were obtained from just six horizons. It is of considerable interest that pieces of what may be single vessels were found in several different medieval contexts. Sherds from one particular vessel, a glazed jug of local manufacture, were recovered from eight different archaeological deposits. The significance of this must be considered elsewhere when the natures, relationships and importance of the horizons involved have been studied in greater detail.

Only four sherds of non-Scottish wares have been identified in the assemblage. Two of these derive from green glazed Scarborough Ware jugs while another, with applied pelleted decoration, is also likely to be of Yorkshire origin. The fourth sherd is the only example of a continental import. It is a small piece of a strap handle from a Siegburg stoneware vessel. It is not possible to be certain, but the handle appears to have been finer and more delicate than those normally associated with Siegburg jugs. Therefore, it could once have been part of a smaller and lighter type of vessel such as a costrel which the Siegburg potteries are known to have made during the medieval period. The above three English wares can be conservatively dated to the first half of the fourteenth century although the Siegburg example was obtained from a context believed to be of later date.

Most of the remainder of the pottery assemblage, 570 sherds and fragments, is of local manufacture and appears to date to the first half of the fourteenth century. In addition, the nature of the archaeological contexts from whence the sherds were recovered strongly suggests that a short time span for their deposition in the earlier 1300s is involved. The material consists of a number of variously gritted orange, red and brown wares but only two fragments of a white gritty ware are present. The latter is a general pottery type that has been commonly found on medieval sites in the north east and elsewhere in Scotland. The other 568 sherds appear to be of jugs rather than of cooking pots although, as always, it is impossible to be certain because the lower portions of jugs of this date were seldom glazed. Interestingly, some of the jugs appear to have been used as warming or cooking vessels because the external surfaces of some basal angle sherds show considerable evidence of having been heated. Because a large proportion of the total sherds, 117, derive from potentially only five jugs no detailed fabric analysis has been undertaken. It is striking that the fabric of each of these jugs is unique and visually significantly different to the others. The five fabrics vary from a soft, easily abraded, finely sanded, orange ware to a hard brown ware rich in large mica plates and other inclusions.

A typical locally-made Fetternear jug of this period appears to be up to 34 cms high with a width varying between 20 and 28 cms. Bases sag and are rounded while the basal angles are either completely or intermittently neatly finger pinched. Handles are either of rod or strap construction well thumbled onto the rims and bodies of vessels. The external surfaces of necks and shoulders of jugs are partially covered with green or brown lead glaze. Decoration consists of brown iron-rich slipped vertical lines, applied angled clay strips and of single scored or rouletted horizontal bands on the shoulders of vessels. There is also a single small sherd with a decorative impressed circular stamp such as might be found on some north of England wares.

All the basic materials required for pottery making – clays, sands and water – are present at Fetternear. Test firings of vessels made using these materials have proved that some of the pottery, designated above as being of local manufacture, could easily have been made at or near the site (figure 10). Unfortunately no kiln evidence for such an activity has been detected to date.

The pottery finds included in this report relate only to a brief period of time during the almost continuous utilisation of Fetternear from medieval times to the early twentieth century. The final pottery report dealing with the whole occupation of the site will be of considerable interest.

## **10. Animal Bones**

*Rose Davis*

### **Introduction**

This report presents a general summary of the data gathered so far from contexts C0768, C0776, C0793, C0796, C0805, C0811, C0819, C0842 and C0846. These contexts are located in Grid Areas E3, E4, F2, F3 and F4.

The bones were generally not in good condition. There was much evidence for pre-depositional taphonomy including weathering and abrasion as well as carnivore and human damage, such as gnawing, scoring, puncturing, trampling, butchery, and burning. The deposition of rapid overburden sediment crushing or breaking buried faunal remains is also a possibility. The majority of bones have some evidence of fracture with only 47, or 3%, present as complete bones. They range from larger identifiable fragments to small indeterminate fragments, with the greater proportion of burnt bone in the latter condition. All the elements, including those from cattle and horse, are gracile in nature (figure 11).

### **Methodology**

Bones were washed and air dried at room temperature, then sorted and identified by context. They were identified using a reference collection from the University of Wales, Lampeter, with further guidance from Dr Ros Coard (personal communication), Hillson (1992), Schmid (1972) and Cohen and Serjeantson (1996). Due to the absence of the diagnostic parts of some cattle and horse bones these were assigned to category cattle/horse – this applied particularly to fragments of cranium, vertebrae, scapula and ribs.

All 1463 individual bone specimens were examined, from which 1095 or 75% were identified to element and species, or the Number of Individual Species Present (NISP). Mainly due to the condition, or absence of the relevant bones, matching and pairing was considered impossible so the Minimum Number of Individuals (MNI) was calculated by observing whether individual bones could not demonstrably belong to the same animal, using long bones, scapula and mandibles – for example two left mandibles or a left and right that are significantly different in size or appearance. Calculations were made for the number of complete and fractured bones, domestic animal elements and other mammal elements. Also considered were primary and secondary waste evidence, animal husbandry, butchery and carnivore damage and the presence of burnt bone. Ageing was done through observation of the ossification centres and fusion evidence. Teeth were counted but were not used for ageing.

### **Observations**

All the bones in Contexts C0811, C0819, C0773 and C0793 in grid areas E3, F2, F3 and F4 are a dark brown/black colour and were covered by a wet, silty soil compacted around and inside the bones. They also show signs of weathering between stages 2 to 4 – from cracking and flaking of the bone surface to a coarse, fibrous texture (Behrensmeyer 1978, 151).

### **C0811 E3, F2, F3, F4**

This context is a grey silt-loam lower fill of a feature tentatively identified as a ditch that contains the greatest amount of bone specimens – 43.5% of the total count with

95% being species identifiable. It also reveals the greatest variety of species with an MNI of 10 sheep, 6 cattle, 1 horse, 2 cattle/horse, 1 pig, 1 domestic fowl, 1 mallard, 1 goose, 1 cat and 2 dogs. Complete elements account for 3.6% of bone from cattle, sheep and pig feet and heads.

Cattle and sheep dominate with primary slaughter (skull, vertebral column, ribs, scapula, pelvis and foot bones) of 40.5% and secondary slaughter (limbs) of 51.5%. Butchery is evident on 51% of all the represented elements, including teeth and sheep horn. Knife marks are also present on two dog tibia.

Carnivore damage is apparent on 8.4% of domestic animal limb and foot bones. Two dog long bones and two domestic fowl bones also show carnivore chewing and puncture marks.

One of the cattle is an adult while the remainder appear to have been culled at around 24 months. The sheep are juvenile at less than 30 months, with one adult present; the pig is a sub-adult. The horse is around three years old at time of death and there is one dog of around ten months and an older dog that is not yet an adult.

Burnt bone accounts for 6% of the context total with the majority identifiable to species. They are mainly of a brown/black colour, but there are two fragments of blue/grey and white bone present.

### **C0819 F3**

The fill of a possible drainage ditch, this context consists of a sandy, silt-loam. It had 12% of the total bone count with 96% species identifiable, with an MNI of 4 sheep, 4 cattle, 1 horse, 1 cattle/horse, 1 pig, 1 domestic fowl and 1 duck. Complete bone accounts for 4.5%.

Cattle and sheep also dominate this context with primary slaughter amounting to 41.6%, and secondary slaughter of 52%. Butchery marks occur on 81% of long bones, ribs and vertebrae.

Carnivore damage of 5.8% is evident on domestic animal bone (including horse) and on a duck tibio-tarsus.

The cattle all died as an adult as did the horse and pig, but the sheep was a juvenile. There are no burnt bones present in C0819.

### **C0773 F3, F4**

A dark grey sandy silt loam, C0773 lies above C0774 and is described as a destruction layer. All the bone is again weathered to stages 2-4.

It contains 8.7% of total bone specimens with 88.2% species identifiable. The MNI is 2 sheep, 3 cattle, 3 horse, 1 cattle/horse, 1 domestic fowl, 2 dogs and possibly one roe deer (as some of the relevant diagnostic indicators are absent it could be sheep). Complete elements account for 4.5% they are cattle and sheep foot bones with one dog metapodial.

Primary slaughter waste accounted for 42.9% and secondary waste of 39.35%, with butchery marks evident on 18% of these bones.

Carnivore damage on 6% is apparent on cattle and sheep, mainly long bones.

All the cattle were sub-adults; the horses were juveniles, as were the sheep. The dog was an eight to nine month old puppy at time of death.

Burnt bone accounted for 4.5% of the total and was composed of calcined fragments of rib and vertebrae.

#### **C0793 F4**

The context consists of a very dark grey layer of sandy silt loam. It is below C0774, which is a possible terrace wall that appears to cut through medieval layers. Weathering of the bone is to stage 1-2.

This context contains 16% of the bone total and 56% of identifiable species. The MNI is 4 sheep, 3 cattle, 1 horse, 1 cattle/horse, 1 domestic fowl and 1 dog with a complete bone count of 1.7%.

Primary slaughter waste accounts for 38.9% of the bones in this context, with 49.2% of these showing evidence of butchery marks. Secondary waste accounts for 53.4% of the bones. Carnivore damage is present on 4.6% of the sheep foot bones.

The cattle were adult and the horse a juvenile with one adult sheep; the dog was not possible to age.

44.5% was burnt bone consisting of mainly brown/black horse and cattle teeth. Indeterminate calcined bones were also present.

#### **C0776 E3, E4**

C0776 has been dated on pottery evidence to the first half of the fourteenth century. It is a layer of clay with evidence of burning. The bones here do not have the dark brown/black staining of the previous contexts, but weathering is again between stages 2-4. The context contains 14.5% of the total bone count with 25% of identifiable species present.

The MNI is 6 sheep, 4 cattle, 1 pig and 1 domestic fowl. Out of 212 bones, 145 are indeterminate fragments and therefore complete bones account for only 0.6% of the bone total for C0776.

The majority of identifiable bones are primary slaughter waste with butchery marks on 51% of sheep and cattle head, feet, ribs and vertebrae.

Carnivore damage amounting to 18.9% is apparent on sheep and cattle foot bones. The cattle are adult and the sheep juveniles.

C0776 has the widest variety of burnt bone, ranging from partial to calcined, predominately on teeth and foot elements. It also has the highest percentage (42.5%) of burnt bones. In comparison C0811, with the highest total of bones, only has 6% burnt bone.

#### **C0768 E4**

This context is a clay layer that runs up to and over wall C0745. Bone is weathered to stage 2. The context contains 0.9% of the total bone count, with 23% of identifiable species present. The MNI is 1 sheep and 1 cattle with no complete bones.

Primary slaughter is represented by 1 sheep tooth and secondary slaughter by 1 cattle tibia with knife marks on the distal end. There are no carnivore marks.

The one cattle bone present is an adult of around 24 months at time of death.

There is no burnt bone in the context.

#### **C0796 E4**

This layer of silt-loam runs up to but not over wall C0774. Weathering is not apparent as two fragments are calcined and the other is a partial tooth.

The context contains 0.1% of the total bone count, with 50% of identifiable species present. The MNI is 1 sheep, with no complete bone present.

Primary slaughter consists of 1 sheep tooth and there is no evidence for secondary slaughter.

There is no butchery or carnivore evidence present.

The bones cannot be aged as there is insufficient evidence.

Burning is evidenced by two indeterminate white calcined bone fragments - 67% of the bone total for the context.

#### **C0805 E4, F3**

The context is a soil layer possibly related to the rake out of an oven. Weathering is at stage 1 – mosaic cracking of the bone surface.

The percentage of the total bone count is 0.3%, with 50% species identifiable. The MNI is 1 sheep with no complete bone present.

One sheep tooth is indicative of primary slaughter, and one sheep tibia of secondary slaughter. There is no butchery or carnivore damage.

The sheep is a sub adult at around 30 months.

Burnt bone is 100% present in the form of one blue/grey sheep tooth and two calcined indeterminate fragments and one white calcined sheep tibia.

#### **C0842 E4**

The context is a dark grey fill incorporating 1.6% of the total bone count, with 12.5% of identifiable bone. Weathering is at stage 3 – patches of rough, homogeneously weathered compact bone of a fibrous texture. MNI is 1 sheep and 1 cattle with no complete bone present.

Primary slaughter waste includes 2 fragments of indeterminate scapula, 1 fragment of cattle metacarpal, 1 rib fragment and 1 sheep tooth. Butchery evidence is apparent on 100% of cattle head, feet and rib bones. Carnivore damage is not represented.

The cattle is a juvenile of around 30 months.

Burnt bones include 33% of the context total, consisting mainly of indeterminate species fragments with one cattle metacarpal fragment.

#### **C0846 E4**

The context is a silt loam including large slates and lying below C0768 and C0805. It contains 1.4% of the total bone count with 28.5% of identifiable species. Weathering is at stage 1 to 2. MNI is 1 sheep and 1 cattle with no complete bones.

Primary slaughter incorporates 1 cattle mandible and rib fragments, 1 sheep tooth and a metapodial fragment. Butchery evidence comprises chop marks on a cattle rib, mandible and metacarpal. Carnivore damage also occurs on these bones.

The cattle is a sub-adult around 24 months and the sheep is a juvenile of less than two years old.

Burning on 38% of bone consists mainly of indeterminate fragments of blue/grey and white calcined bone with one brown/black sheep tooth.

#### **Summary**

C0811, C0819, C0773 and C0793 contain the highest percentage of bone specimens, and the greatest variety of species and elements. Cattle and sheep dominate with a small amount of pig evident only in C0811 and C0819.

The majority of bones are fractured, with only 47 out of 1463 complete elements. C0776 contains the largest amount of indeterminate fragmented bone. This may be

due to its high percentage of burnt specimens. There are relatively few spiral fractures generally indicative of fresh, green breakage as most display stepped, longitudinal or flaked breaks indicating weathered/fossilised bones (Lyman 1994, 319-320).

Weathering occurs on the majority of bones, inferring fairly long exposure to the elements on open ground before burial. In the case of C0811 and C0819 consequent burial as trench fill may account for the higher percentage of preservation as a result of anaerobic conditions in silty, waterlogged soil. Preservation could also have been higher, depending on whether overburden sediment crushing took place or not.

Beef and lamb would have dominated the diet at Fetternear, with some older animals kept for traction, wool and milk. The absence of neonates could suggest a consumer site where animals are imported from elsewhere, but considering the amount of fracturing present in all contexts it could simply mean that the small delicate bones did not survive. It is likely that ducks, geese and chickens were bred on site. With the exception of one adult the horses were all less than 36 months old at time of death and combined with their gracile bone structure were more likely to have been used for riding rather than traction. Considering the geographic location of Fetternear it is surprising there is not more evidence for deer in the record.

Butchery marks on the limb, mandible and axial bones of domestic and water fowl, sheep, cattle, pig and horse are indicative of the disarticulation of carcasses, and are typical food waste (Rixson 1989). The vertebrae were not split lengthwise in two, as is practised today, but de-spined from the carcass with two parallel cuts, breaking the transverse processes, the usual butchery practice in the medieval period, especially on cattle and pigs (Rixson 1989; Audoin-Rouzeau 1987). There is also evidence for rough chop marks across the vertebrae to prepare them for the stock pot; ribs and foot bones have also been utilised for the same purpose (Audoin-Rouzeau 1987). Dog long bones from C0811 and C0773 display knife mark evidence for skinning and butchery. Similar evidence has been recovered from Scottish medieval urban sites in Perth, Aberdeen, Dundee and Elgin (Smith 1998, 877) and from medieval Carrickfergus, Northern Ireland. In the latter case this practice was usually associated with warfare and famine but the dogs might also have been economically exploited for their skins (Murphy 2001). The evidence from Fetternear so far is insufficient to infer any of these reasons, but merits further research if more examples are recovered.

Carnivore damage is apparent in C0811, C0819, C0773, C0793, C0776 and C0846 mainly on foot and axial bones including those of dog and bird, resulting from the exposure of the bones before burial.

Burnt bone is present in all the contexts except for C0819 and C0768, with the majority in C0776 which is a hard clay medieval layer with evidence for burning. It may have been used in the medieval for the disposal of primary waste material, as teeth and feet bone dominate. But they may just be better survivors as they are harder, more compact elements. Many of the fragments are of a blue/grey or white colour indicating exposure to high temperatures (>600°C) on fleshed or green bone (Lyman 1994, 387). Light brown/tan bone indicates calcined dry bone (Lyman 1994), possibly used as fuel. The bones in C0811 are from much more diverse elements including limbs, and are of a brown/black colour, so have not reached very high temperatures and could represent the regular removal of half burnt bones from a hearth area.

Further research needs to be undertaken on the faunal remains, especially on any additional dog butchery, the ageing of the animals from tooth evidence and the measuring and comparison of bones to establish size and form.



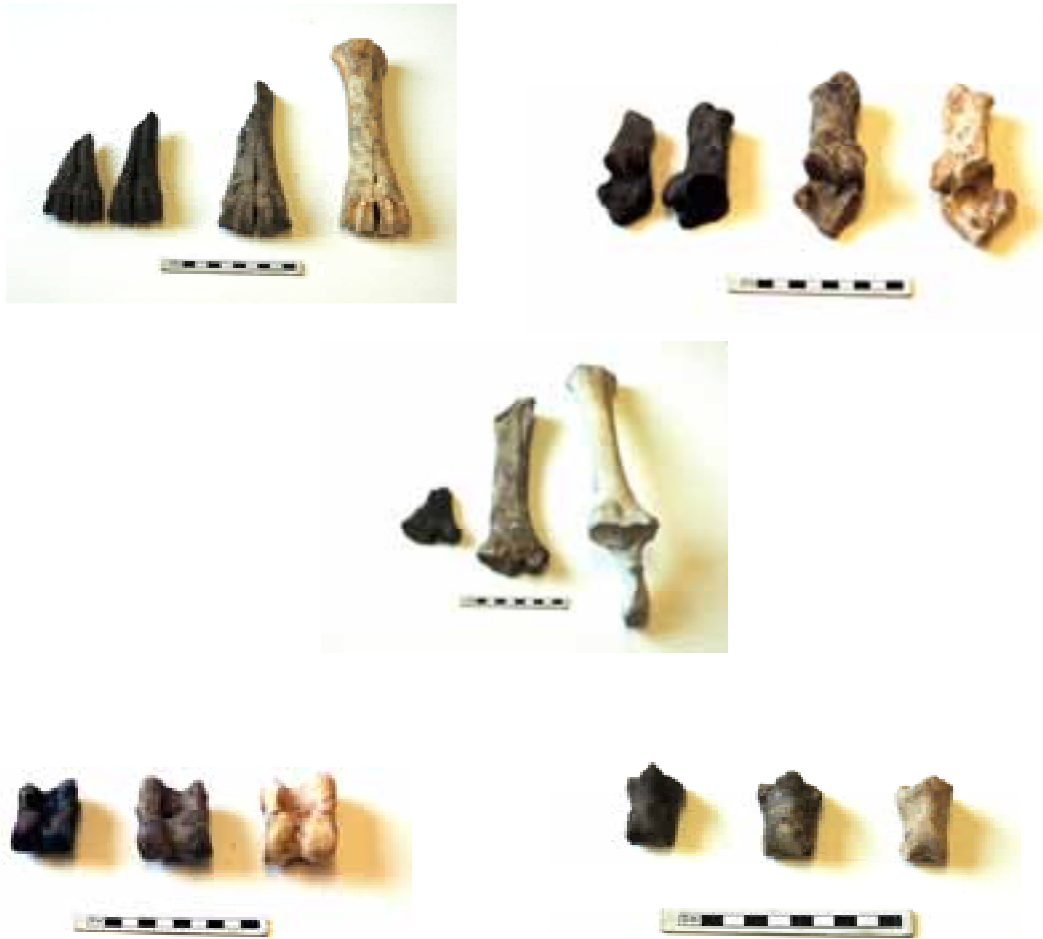


Figure 11. A comparison between medieval cow (*Bos*) bones from Fetternear and Carew, a castle site in Wales, to demonstrate the gracile nature of the Fetternear bones. Top left: metacarpals from Fetternear (the two on the left) and Carew (two on the right). Top right: calcanei from Fetternear (the two on the left) and Carew (two on the right). Centre: proximal end of radius from Fetternear (the one on the left) and Carew (two on the right). Bottom left: astragalus from Fetternear (the one on the left) and Carew (two on the right). Bottom right: phalanges from Fetternear (the bone on the left) and Carew (on the right). Photograph: Pete Davis

## 11. Plant macrofossils

*Catherine Griffiths*

The plant macrofossils recovered in the 2004 and 2006 excavation seasons were examined on 15 August 2006 and the identifications are presented in Table 1. A discussion on the archaeological significance of the hazelnuts is presented in the section below.

**Table 1: Plant macrofossil remains**

YEAR	CONTEXT NO:	AREA	TRENCH	CATEGORY:	DESCRIPTION:	CONDITION:	DATE EXCAVATED	COMMENTS
FTN04	C0639	B5	Trench B	Nuts	Hazelnuts. Presence of nettle and dock seeds also detected.	Compacted	17.07.04	Identified by C. Griffiths on 15.08.06
FTN06	C0832	E4		Nuts	Hazelnuts		28.07.06	Identified by C. Griffiths on 15.08.06
FTN06	C0811	F3		Nuts	Hazelnuts		22.07.06	Identified by C. Griffiths on 15.08.06
FTN06	C0811	F4		Nuts	Hazelnuts and cherry stones, with a possible rodent mark on one of the cherry stones		23.07.06	Identified by C. Griffiths on 15.08.06
FTN06	C0842	E4		Nuts	Hazelnuts	Desiccated	28.07.06	Identified by C. Griffiths on 15.08.06
FTN06	C0855	E4		Nuts	Two hazel nuts		July 06	

## 12. Environmental evidence: discussion

*Penelope Dransart*

This discussion focuses on two main issues. First there is a consideration of the macrofossil evidence for hazelnuts at Fetternear in the light of the published evidence concerning the occurrence of hazel (*Corylus avellana*) in northern Europe and the uses to which it was put in the past. Second, there is a discussion of other tree species and the likelihood of their presence in the archaeological deposits at Fetternear. This second issue presents an opportunity to review the historical evidence for the bishop's palace having served as a residence in a hunting reserve during the thirteenth century.

The hazelnut shells listed in Table 1 suggest that *Corylus avellana* grew at Fetternear in the past. At present the nearest occurring living specimen of hazel to the excavation area is located at the extreme southeast corner of the shrubbery east of the mansion. (It is listed as tree number 39 in the report dated 2004 commissioned from Derek Carter Associates by the Fetternear Trust entitled 'The bishop's palace and old ruins of Fetternear: historic landscape survey and conservation and management plan', where it is misidentified as common alder.) Hazel is of infrequent occurrence on the Fetternear estate today.

The species regenerates by seed or through coppicing and has a preference for woodland (Rackham 1996, 6). It has long been present in northern Europe; its spread from southerly refuges after the glacial period is evident in the rise of hazel pollen counts in studies by botanists. Tallantire (2002, 90) hypothesised that hazel established itself in northerly birch-pine forests, which tolerate colder winter temperatures than hazel. It then would have reproduced itself vegetatively (without producing nuts) before becoming a prolific pollen producer. Hazel is tolerant of the not very dense shade cast in birch-pine forests and, in Tallantire's hypothesis, hazel stands would have introduced a denser shade, their leaf fall creating a humic layer which would have suppressed pine seedlings. In Rackham's (1996, 29) characterization of five different wildwood types for Britain and Ireland, Fetternear belongs to the 'Birch Province' of north and northeast Scotland. South of the River Dee is an extensive 'Oak-Hazel Province', which must have consisted of a mosaic of oakwoods and hazelwoods, because the density of the oak canopy prevents the hazel from flowering (Rackham 1996, 28). Whittington's (1993, 32-3) analysis of pollen profiles from lacustrine muds in the Ochil Hills in north Fife – the site is in Rackham's 'Oak-Hazel Province' – presents a sharp rise in hazel pollen during the ninth millennium before present. Neolithic farm clearance contributed to a reduction of woodland, which later became more pronounced by about four thousand years ago.

Hazelnut shells have survived in the archaeological record from as early as the Mesolithic period in Europe, including sites from Scotland (Zvelebil 1994, 43). Buiston Crannog, initially constructed in the Iron Age and re-occupied in the 6th-7th centuries A.D., is an example of an early medieval site with waterlogged deposits from which were excavated many hazel-shells, especially from one large sample surrounding a hearth (Holden 1996, 958).

Trees do not fruit until beginning flowering from about the age of ten years; coppiced shoots grow more quickly but tree hazels might live for fifteen to twenty years before reaching their reproductive potential (Tallantire 2002: 82). In Europe, hazelnuts are harvested from late August to October, depending on latitude (Tallantire

2002: 83). Various small mammals, including voles, mice, dormice and red squirrels collect and eat the fruit (Tallantire 2002, 84). Possible rodent damage has been detected in the cherry stones identified in C0811, the fill of a ditch, at Fetternear. However, it is likely that the hazelnuts and cherry stones were discarded as a result of human activity, and that the rodent damage occurred subsequently. As discussed in the bone report, some of the animal bones in this context suffered carnivore damage. Since the context is damp and silty, the nuts, cherry stones and bones could have been briefly exposed before being sealed in the fill of the ditch. The context probably dates from post-medieval times, when the Leslies of Balquhain owned Fetternear.

In eighteenth-century Scotland, people collected hazelnuts to eat both in periods of famine and in normal years, whether raw or ground into meal (Drury 1984, 50, 57). Tallantire (2002, 84) commented ‘viable hazelnuts sink when fresh’ and to support his observation he cited a report which described how Norwegian children put freshly gathered hazelnuts in a container of water in order to discard the empty floaters.

The characteristics of hazelnuts also feature in a range of popular beliefs. At Halloween, girls in Sussex placed the nuts in a hearth and named each one after a potential suitor, saying:

If he loves me, pop and fly,  
If he hates me, lie and die (Higgins 1984, 104).

In Somerset the offering of a basket of hazelnuts to a bride on leaving the church was intended to enhance the couple’s fertility (Higgins 1984, 105-6).

In addition to all these uses of hazelnuts as reported in the literature, hazel wood has been attested on archaeological in the form of posts and rods in various constructions, including post and wattle houses and fish weirs (O’Sullivan 1994, 676-8). It has also commonly been used in divining for sources of water. That the shells have been excavated from some deposits at Fetternear indicates a level of preservation that merits further investigation. It is imperative to extend the study of Fetternear’s vegetational history through further macrofossil and also pollen analysis, which will provide evidence for other tree and plant species.

Our excavators have detected the presence of twigs and bark in the peat which underlies layers containing fourteenth-century pottery. The analysis of these remains is likely to provide useful information regarding the past environment at Fetternear. This potential evidence would be useful, given Rackham’s (1996, 88) observation that birch characteristically establishes itself in moorlands when animal grazing is reduced. He commented further that the resulting wildwood does not achieve an appearance of great antiquity since birches tend not to persist for long in the one place. An extension of the environmental study reported here would enable the identification of these twig and bark remains.

In medieval times various places in the valley of the Don were designated as forests, also known as hunting reserves. Such tracts of land did not have to contain woodland, but from the early medieval period Frankish kings imposed controls over both game and timber in royal reserves (Gilbert 1979, 10-11). In Scotland, according to Gilbert (1979, 12-13), the formalization of landholding rights with respect to hunting reserves started to occur during the twelfth century.

In a document which dates from between 1180 and 1184, Birse, in Deeside, is designated as a royal forest (Gilbert 1979, 338). A charter dated 1242 granted lands in

both Birse and Fetternear to Ralph, Bishop of Aberdeen, as free forests with a sanction clause restricting the use of timber (Gilbert 1979, 352). By 1358, the lands of Bennachie, neighbouring those of Fetternear, were a baronial forest held by Thomas, Earl of Mar, but no charter document has survived (Gilbert 1979, 347). A second charter exists for Birse. Dated 1489, the charter grants its lands to William Elphinstone, Bishop of Aberdeen as a free regality ‘cum libera foresta’ (Gilbert 1979, 349).

Although documentary evidence for Fetternear might have been lost, it seems that Fetternear did not retain the characteristics of a free forest for long. In the 2005 and 2006 seasons we did not detect evidence for early thirteenth-century occupation, when Fetternear may have, indeed, been a hunting lodge. However, the report presented by Rose Davis (above) indicates a surprising lack of evidence in the faunal record for deer bones and, conversely, the presence of farm species dominated by cattle and sheep. A single multi-purpose arrowhead discussed in the ferrous metalwork report (below) represents one of the few pieces of possible evidence that we have recognised to date which might attest hunting activities at Fetternear. This situation is surprising, given the geographical location of the estate and the assertion that medieval Scottish barons ‘probably spent most of their time, effort and thought on hunting than any other activity’ (Gilbert 1979, 1). The analysis of pollen from sediments obtained from the deposits at Fetternear will provide further evidence for the environmental history and will be published elsewhere.

### **13. Ferrous metal**

*Penelope Dransart*

The report on objects made of iron begins with a catalogue of finds, followed by a discussion. The catalogue consists of two groups: finds made in 2005 and those made in 2006. Entries are listed in small find number order, followed by the grid square and context number in which the item was found.

#### **2005**

##### **A4601a E4 C0739**

Metal plate with a curved profile. Length: 59 mm, 4-5 mm thick.

##### **A4601b E4 C0739**

A section of a shank, square in cross-section. Length: 34 mm.

##### **A4602a-c E4 C0751**

Three fragments of a knife. At least four rivets occur as circular features on the largest fragment in the X-ray of this item. Total length: c. 151 mm, width: 15-16 mm. (Figures 12 and 17.)

##### **A4603a-e E2 C0742**

A knife blade, two further pieces of blade and two conjoining pieces of knife tang. Length of the largest piece: 112 mm. (Figure 17.)



Figure 12. X-ray of three fragments of knife A4602a-c

**A4604 E4 C0744**

Fragmentary blade. Length: 84 mm. (Figure 17)

**A4605 C0735**

A flat headed, pointed object, rectangular in cross-section, possibly a nail. Length: 90 mm.

**A4606a D4 C0712**

A hook, measuring 45 mm in length.

**A4606b D4 C0712**

Knife blade. Length: 114 mm.

**2006**

**A4568 E4 C0805**

Unidentified object, in fragments. The largest piece is approximately the shape of an isosceles triangle, measuring 52 mm in length. There are numerous small flat pieces.

**A4569a E4 C0805**

Nail? with a shank rectangular in cross-section. Length: 48 mm.

**A4569b E4 C0805**

Nail? with curved shank. Length: 48 mm.

**A4570a-c D4 C0794**

A staple, in three pieces. Length: 78 mm.

**A4571 E4 C0776**

Rounded and domed head of a nail; the shank is missing. It measures 25 mm by 28 mm.

**A4572a-b E3 C0775**

Nail with a sub-rectangular head and a broken shank. Item b) appears to have broken off the shank. Length: 61 mm. Head measures 31 by 32 mm.

**A4572c E3 C0775**

Small, thin piece of forked iron. Length: 23 mm.

**A4573 F3 C0805**

Unidentified object of a narrow, tapering shape. Length: 101 mm. (Figure 13.)



Figure 13. An unidentified object (A4573)

**A4574a E4 C0776**

Nail, gently curved, possibly rectangular in cross-section. Length: 81 mm.

**A4574b E4 C0776**

Nail, gently curved, with head missing, square in cross-section. Length: 48 mm.

**A4574c E4 C0776**

Nail, gently curved, with domed head. Length: 46 mm.

**A4574d E4 C0776**

Nail?, with head missing. Length: 47 mm.

**A4574e E4 C0776**

Fragment of hook. Length: 38 mm.

**A4574f E4 C0776**

Nail, gently curved, with head missing. Length: 47 mm.

**A4574g E4 C0776**

Nail, gently curved, square in cross-section and with head missing. Length: 44 mm.

**A4574h E4 C0776**

Nail, gently curved, square in cross-section and with head missing. Length: 40 mm.

**A4574i E4 C0776**

Nail, square in cross-section and with head and point missing. Length: 26 mm.

**A4574j E4 C0776**

Point of nail, curved. Length: 28 mm.

**A4574k E4 C0776**

Fragment of nail, the shank of which is square in cross-section, in two pieces. Length: 37 mm.

**A4575a E3 C0845**

Possibly the point of a large nail, rectangular in cross section. Length: 71 mm.

**A4575b E3 C0845**

Nail? Length: 44 mm.

**A4575c E3 C0845**

Nail with rounded and domed head. The shank is possibly rectangular in cross-section. Length: 35 mm.

**A4576a F3 C0758**

Nail, with a domed head. The shank is square in cross-section, and it is slightly twisted. Length: 55 mm.

**A4576b F3 C0758**

Nail with a sub-rectangular, domed head. The shank is square in cross-section. Length: 45 mm.

**A4576c F3 C0758**

Fragment of blade. Length: 62 mm.

**A4577a E4 C0796**

Broken tip of a nail, rectangular in cross-section. Length: 41 mm.

**A4577b E4 C0796**

Fragment of a hook. Length: 37 mm.



**A4578a-d E4 C0805**

Three fragments of a knife with a whittle tang handle. The tang is 38 mm long and the blade is 116 mm long, but its point is missing. A point of another blade, measuring 67 mm in length (A4578d), was found corroded at an oblique angle to the blade. (Figure 17.)

**A4579a E3 C0705**

Nail with a flat head and a shank rectangular in cross-section. Length: 67 mm.

**A4579b E3 C0705**

Nail, ovate-rounded in cross-section, head missing. Length: 47 mm.

**A4580a E3 C0805**

Fitting with a square rivet hole. Length: 49 mm.

**A4580b E3 C0805**

Staple or nail bent double. Length: 27 mm.

**A4580c E3 C0805**

Broken nail, with a shank square in cross-section. Length: 30 mm.

**A4580e E3 C0805**

Nail with missing head. The shank is slightly curved and is square in cross-section. Length: 41 mm.

**A4580f E3 C0805**

Nail with domed head and a fragment of shaft, which is square in cross-section. Length: 39 mm.

**A4580g E3 C0805**

Nail, in two pieces, bent double. Shaft is square in cross-section. Length: 45 mm.

**A4580h E3 C0805**

Shaft of nail, rectangular in cross-section. Length: 48 mm.

**A4580i E3 C0805**

Unidentified object. Length: 36 mm.

**A4580k E3 C0805**

Fragment of nail shaft, square in cross-section. Length: 20 mm.

**A4581a E4 C0817**

Nail with a large, domed head. Length: 83 mm.

**A4581b E4 C0817**

Nail, shaft square in cross-section. Length: 60 mm.

**A4582a E3 C0821**

Nail, perhaps with a domed head, shaft square in cross-section. Length: 74 mm.

**A4582a E3 C0821**

Nail, rectangular in cross section. The rounded, domed head is large and symmetrical. Length: 74 mm.

**A4582b E3 C0821**

Unidentified, badly corroded object. Length: 61 mm.

**A4583a-b E4 C0776**

Nail in two pieces. The head is sub-rectangular and domed; the slightly curved shank is square in cross-section. Length: 105 mm.

**A4583d E4 C0776**

Unidentified fragmentary object, possibly hinged, with a shank which is rectangular in cross-section. Length: 37 mm.

**A4583e E4 C0776**

Flat-headed nail. The shank is square in cross-section. Length: 37 mm.

**A4583f E4 C0776**

Shank of a nail, square in cross-section. Length: 36 mm.

**A4583g E4 C0776**

Curved shank of a nail, rectangular in cross-section. Length: 37 mm.

**A4583h E4 C0776**

Flat-headed nail. The shank is square in cross-section. Length: 37 mm.

**A4583i E4 C0776**

Point of a blade or dagger. Length: 49 mm.

**A4584 D3 C0813.**

Heavily corroded item, possibly a fragment of a sickle blade. Length: 116 mm. (Figure 17.)

**A4585 D4 C0702.**

Knife with a rivet at the end of the handle, possibly for a riveted end cap. Length: 172 mm.

**A4586 E3 C0821**

Iron chisel or timber wedge *c.* 195mm long.

**A4587 D3 C0812**

Iron key with an octagonal stem. Type VIIB in London Medieval Catalogue. Length: 210mm (8 1/4 inches). (Figures 15 and 17.)

**A4588a E3 C0768**

Sub-rectangular and domed head of a nail, with a fragment of shank surviving, square in cross-section. Length: 18 mm.

**A4588b E3 C0768**

Heavily corroded nail with domed head and a shank which is rectangular in cross-section. Length: 27 mm.

**A4588c E3 C0768**

Nail with sub-rectangular and domed head. The shank is curved and is probably rectangular in cross-section. Length: 48 mm.

**A4588d E3 C0768**

Nail with sub-rectangular and domed head. The shank is rectangular in cross-section. Its point is broken. Length: 46 mm.

**A4591a F3 C0773**

Nail, square in cross-section, point broken. There is a possible washer next to the rounded head. Length: 62 mm.

**A4591b F3 C0773**

Nail, the shank of which is square in cross-section. Its point is broken. The flat head is ovate in shape. Length: 47 mm

**A4591c F3 C0773**

Unidentified object, rectangular in cross-section and with a curved profile. Length: 49 mm

**A4591d F3 C0773**

Unidentified tapering object, rounded in section. Length: 36 mm

**A4591e F3 C0773**

Nail, square in cross-section, point broken. The head is rounded. Length: 45 mm

**A4594a-b E4 C0701**

One barbed and socketed arrowhead in two pieces. Overall length: *c.* 73 mm. (Figures 14 and 17.)



Figure 14. X-ray and photograph of the arrowhead (A4594a-b)

### **Ferrous metal: discussion**

Many of the iron objects from Fetternear are in a heavily corroded condition, making identification hazardous. The items in the catalogue above were submitted to AOC Edinburgh for X-radiography, which has revealed several features that are of interest. Therefore the descriptions are based on visual inspection of the artefacts combined with an examination of the X-rays. Other ferrous items excavated in the 2005 and 2006 seasons will be included in the final report.

Nails and nail fragments occur frequently among the iron finds from various parts of the bishop's palace at Fetternear, the area west of the drive being no exception. An examination of nails from the sites of Kirk Close, South Methven Street and Canal Street II in the medieval burgh of Perth led to a proposed classification into different types. The medieval nails from Fetternear examined here correspond with types A and B of this classification. The former is described thus: '[c]ircular, oval, square or rectangular flat head, with square or rectangular cross-sectioned shank. Lengths 38-97 mm' and the latter: '[c]ircular, oval or subrectangular domed head, with square or rectangular cross-sectioned shank. Lengths 37-80 mm' (Ford and Walsh 1987, 138-9). However, many of the Fetternear nails are incomplete, a situation similar to that of the Ladyhill, the site of a castle in Elgin, where it was reported that of the 40-60 nails excavated only one was complete (Cox 1998, 766-7). It is likely that these nails were used in timber construction.

A4594a-b is an arrowhead recovered in two pieces (figure 14). It is of a type that served either for hunting or military usage. Since this artefact is one of the few pieces of evidence recognised in twelve seasons of excavation at Fetternear for possible medieval hunting activity, it is unfortunate that the find came from the topsoil rather than from a medieval context. By the fourteenth century, barbed arrowheads are thought to have been restricted to hunting rather than warfare, because changes in the use of armour necessitated a compact, heavy arrowhead capable of piercing the armour (Ward Perkins 1975, 66-7). In a study of iron objects from Clarendon Palace, a medieval English royal residence, Ian H. Goodall (1988, 222) characterised barbed arrowheads with long cutting edges as suitable for lacerating the hides of game such as deer and boar.



Figure 15. Photograph and X-ray of key A4587. Photograph: SEPP



Figure 16. Representations of keys. (Left) St Sitha or Zita was a housemaid from Lucca, Italy and she is depicted on this rood screen in a church in Barton Turf, Norfolk with keys in her right hand and a rosary in her left. Photograph by courtesy of Simon Knott (The Norfolk churches site: <http://www.norfolkchurches.co.uk/bartonturf/bartonturf.htm>)

(Below) Detail of a Flemish tapestry depicting St Michael holding a set of keys. Photograph: SEPP by courtesy of the Musées Royaux d' Art et d' Histoire, Brussels



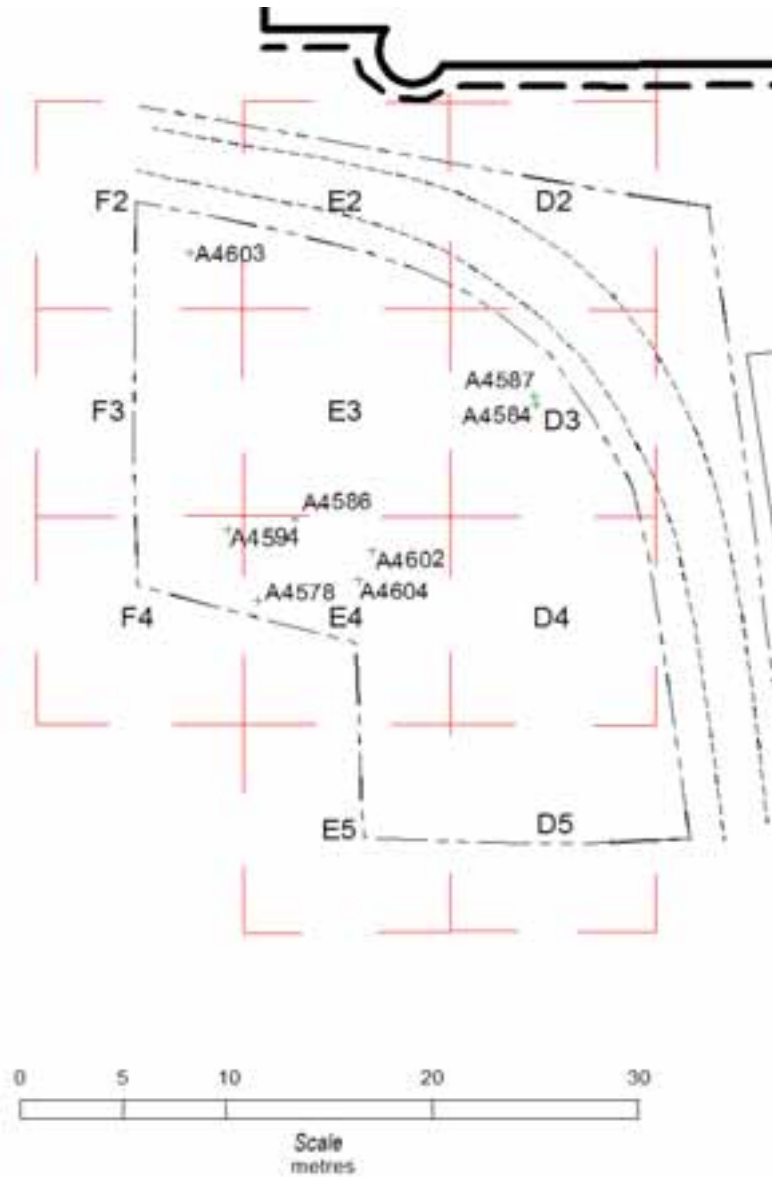


Figure 17. Locations of some of the ferrous metal objects, plotted by William Risk

Alan Borg (1991, 79) observed that the classification of arrowheads is complicated by their hand-made, therefore, variable characteristics. It should be noted that the Fetternear example is asymmetric. Nevertheless, an attempt has been made at classification (Jessop 1996, 195-7), and it is possible to include the Fetternear arrowhead in the ‘multi-purpose’ category.

It is interesting to note that a large number of arrowheads were found at Urquhart Castle, located on a promontory on the northern shore of Loch Ness. They included a corroded mass of approximately 140 arrowheads, which Ross Samson (1982, 466 and figure 2) identified as type 13, following the *London Museum medieval catalogue* (Ward Perkins 1975, 66; see also catalogue no. 13 in Samson (1982, 466)). This type is somewhat similar to the Fetternear example. The paucity of arrowheads from Fetternear is noteworthy because the pottery evidence reported above indicates a likely date of the first half of the fourteenth century for the medieval layers in grid squares D4, E4 and F4, a period which encompassed the end of the bishopric of Henry Cheyne (or le Chen) and also that of Alexander de Kininmund I. The connections between Fetternear and Urquhart through the person of Bishop Henry, who was ordered by the English monarch Edward I to proceed with Gartney, Earl of Mar to refortify Urquhart Castle, have been considered by Dransart (forthcoming). The abundance of arms at Urquhart and their relative absence at Fetternear raises the possibility that the bishops used the latter site as a safe refuge from the military troubles which occurred when English soldiers marched through the Garioch in 1296.

In contrast, knives are noted by their frequent presence from the 2005 and 2006 seasons (figure 12). Medieval examples have been classified on the basis of the attachment of the handle, either whittle-tang or scale-tang. In the former the maker pushes the pointed tang into the material used for the handle. A study of the knives from medieval sites in London demonstrated that whittle-tang knives were used from the early medieval period and throughout the middle ages (Cowgill 1987, 25). Both types of knife are present in the Fetternear assemblage. Item A4578a-c is an example of a whittle-tang.

Item A4602a-c is likely to be a knife with a flat tang known as a scale tang, to which the two plates or scales of the handle, often of wood or bone, would have been attached by a series of rivets. The rivets were probably of a different metallic composition than the iron used for the main part of the knife. At least four of them are visible in the X-ray (figure 12). Nine scale-tang knives were excavated on the Meal Vennel site in Perth (Cox 1996, 775-6) and two more examples are present in the finds from the moat at Caerlaverock Castle (Laing 1999, 215-7). A scale-tang knife with a handle similar in width to the Fetternear piece was excavated on the Canal Street II site in Perth (Ford 1987, 131-2). In a study of knives from medieval sites in London, scale-tang knives dated from the mid fourteenth century onwards (Cowgill 1987, 26). The long, triangular blades of the more complete Fetternear examples are in keeping with culinary use. Because many of the knives are corroded and incomplete, they are suitable for future metallographic examination.

A4587 is a key with a solid octagonal stem, the tip of which extends beyond the bit. It has a kidney-shaped bow. The arrangement of the bit is of a symmetrical disposition, with the wards surrounding a central void. On the basis of this characteristic, the key belongs to type VIIB of the *London Museum medieval catalogue* and a fifteenth-century date can be assigned to it on account of the shape of the bow (Ward Perkins 1975, 135, 141). A similar key, with a less complex bit and a



bow which is only slightly kidney-shaped, was excavated from an excavation in the medieval burgh of Elgin (W.J. Lindsay, personal communication). Type VIIB keys occur on several other medieval Scottish sites, including Tantallon Castle (Caldwell 1991, 341-2) and Caerlaverock Castle (Laing 1999, 222-3). The Fetternear key is larger than these examples, and only two of the keys listed in the *London Museum medieval catalogue* equal it in length. They both come from Chelsea; one belongs to Type VIIB and the other is categorised as ‘miscellaneous’ (Ward Perkins 1975, 143-4).

#### **14. Non-ferrous metal**

##### *Penelope Dransart*

##### **A4590 E3 C0788**

Lead or lead alloy object of punch-like shape, tapering, square in cross-section, with tip broken. Length: 25 mm. Flat head measures 12 mm by 13 mm.

##### **A4592 D4 C0776**

Sub-rectangular plaque of lead or lead alloy, 37 mm by 34 mm, 4-5 mm thick.

##### **A4593 E4 C0776**

Irregularly shaped lead or lead alloy. Length: 58 mm.

##### **A4822 E3 C0701**

Curved piece of molten lead or lead alloy. Length: 29 mm.

##### **A4823 E3 C0701**

Curved piece of molten lead or lead alloy, similar to, but larger than, A4822. Length: 34 mm.

##### **A4824 E3 C0701**

Irregular length of cast lead or lead alloy, one end folded. Length: 42 mm.

##### **A4825 E2 C0701**

Irregular length of cast lead or lead alloy, one end folded. Length: 67 mm.

##### **A4826 E3 C0701**

Fragment of copper alloy vessel, 44 mm by 34 mm.

##### **A4827 F3 C0700**

Unidentified object of copper alloy with a long, narrow tapering shank, which is round in cross-section. One end is rectangular in cross-section. Length: 88 mm.

##### **A4828 E3 C0701**

Complete copper alloy nail with large, flat, sub-rectangular head. The shank is square in cross-section. Length: 29 mm.

**A4829 E3 C0727**

Copper alloy tongue of a buckle, rectangular in cross-section. Length: 50 mm.

**A4830 D4 C0701**

Fragment of sheet copper alloy with curved edge, 41 mm by 26 mm.

**A4831 D4 C0701**

Silvered disc mount with one surface enamelled black. Diameter: 10 mm.

## **15. Coins**

*J. Donal Bateson*

**A4836 D3 C0820**

Scotland, Charles I (1625-49), copper turner [twopence Scots] second issue 1632-39, slightly worn – probably lost before 1640.

**A4837 F4 C0701**

Great Britain, George II (1727-60), copper halfpenny, 173-?, worn.

**A4838 E4 C0700**

Norway, Haakon VII (1905-57), bronze 5 ore, 1911, fairly worn.

All three coins came from re-deposited contexts and were excavated in 2006.

## **16. Glass**

*K. Robin Murdoch*

This report begins with a catalogue of glass finds and it is followed by a discussion. The catalogue is also in two parts; it starts with finds made in 2005, followed by those made in 2006. Entries are listed in small find number order, followed by grid square and context number.

Abbreviations used in the glass report:

WB = Wine bottle, WG = Window glass, BR = Base ring

### **2005**

**A4612a-d E3 C0701**

Four shards WG pale dull green tinge 1.3-1.8 mm, probably late 18th century, group 3.

**A4613 D4 C0701**

Shard plate glass, 4.7 mm thick, late 19th/20th century, group 4.

**A4614a-c E3 C0749**

Three shards WG, pale dull green tinge, probably 18th century, group 3.

**A4615a-b F3 C0701**

Shard WG, pale dull green tinge, 2 mm thick, probably late 18th century, group 3.  
Shard WG, pale blue green tinge, 1.2-1.3 mm, probably late 18th/early 19th century, group 3.

**A4616a-d E3 C0701**

Three shards WG, pale dull green tinge, 1.6-1.7 mm, probably late 18th century, group 3. Clear dimpled shard, same as A4628, group 4.

**A4617a-d F2 C0755**

Four shards crown glass WG pale dull green tinge, late 18th century, group 3.

**A4618a-c E3/4 C0701**

Three shards crown WG pale dull green tinge, late 18th century, group 3.

**A4619a-d F3 C0748**

Four small shards WG pale dull green tinge, 1.2-1.8 mm thick, probably late 18th century, group 3.

**A4620a-b F3 C0748**

Shard bottle, olive green.  
Shard probable vessel, clear.

**A4621a-b E2 C0701**

Two shards WG, pale dull green tinge, probably late 18th/early 19th century, group 3.

**A4622 D3 C0701**

Shard possible vessel glass.

**A4623a-i F2 C0749**

Nine shards WG, pale blue green to pale dull green tinge, 1.4-1.8 mm, late 18th to early 19th century, group 3.

**A4624a-b E3 C0701**

Small shard bottle  
Shard WG, looks like sheet, later 19th century, group 4.

**A4625a-f D4 C0702**

Seven small shards WG, pale blue green tinge, average 1.2 mm thick, late 18th /early 19th century, group 3.

**A4626a-c E3/F3 C0701**

Shard crown edge in dull green, possibly mid 18th century, group 3.  
Two shards paler, probably later, group 3.

**A4627a-h E2 C0701**

Nine small shards WG, very pale greenish tinge, rather bright, probably later 19th century sheet glass, group 4.

**A4628a-g F3 C0701**

Five shards probable crown WG, probably late 18th century, group 3.

Shard paler, probably later, group 3.

Two shards clear with dimpled surface one side, probably rolled sheet, late 19th/20th century, group 4.

**A4629 E3 C0701**

Clear WG shard, probably 20th century, group 4.

**A4630a-b F3 C0701**

Shard WG, 1.5-1.8mm thick, dull green tinge, dulled surfaces, possible came shadow and one grozed edge, 17th or very early 18th century, probably group 2.

**A4631a-c F2? C0700**

Three shards clear WG, dimpled, see A4628, group 4.

**A4632a-b E3 C0701**

Two small shards WG, thin, 1.2 and 1.7 mm, pale dull green tinge, surface blemishes, probably 18th century, group 3.

**A4633a-c F4 C0701**

Shard crown WG, pale dull green tinge, 1.5-1.6 mm, probably late 18th century, group 3.

Two further, paler, possibly later, group 3.

**A4634 E3 C0701**

Small shard WG.

**A4635a-g E3 C0701**

Six shards WG, pale dull green tinge, probably mid to late 18th century, group 3

Tiny shard probable potash fluxed glass, secondary surfaces, no later than 17th century, group 2.

**A4636a-c E3 C0749**

Three shards WG, pale dull green tinge, bright surfaces, late 18th/19th century, group 3.

**A4637a-az F3 C0701**

Forty-seven mainly very small WG shards in pale dull green, mid to later 18th century, group 3.

Three shards WG much darker tint, could be slightly earlier, group 3.

Two shards WG bluish tinge, late 18th century, group 3.

**A4638a-b E4 C0701**

Two curved shards in clear possibly from drinking vessel bowl.

**A4639a-f F3 C0701**

Six shards including rim in very clear thin glass, possible lamp glass, 19th century, group 3/4.

**A4640 F3 C0701**

Small shard WG, pale dull green tinge.

**A4641a-b D3 C0701**

Two small shards vessel/bottle in clear glass, appears to be deliberately frosted, probably 19th century, group 4.

**A4642 F2 C0749**

Shard vessel/bottle in cobalt blue, most likely 19th century, group 3/4.

**A4643a-g F3 C0701**

Six shards WG, pale dull green tinge, thin <2 mm, late 18th/early 19th century, group 3.

Shard much darker, some surface denaturing, probably earlier 18th century, group 3.

**A4644 D4 C0702**

Shard curved vessel in clear glass.

**A4645a-f E3 C0701**

Three shards WG, firebright, probably 20th century, group 4.

Three further shards with darker tinges, one with some denaturing, probably early 18th century, group 3.

**A4646a-i E3 C0701**

Nine small bottle shards in greyish olive, probably 19th century, group 4.

**A4647 E3 C0749**

Base of heavy drinking tumbler in clear, outward splay to sides, diameter at least 70 mm, unfinished pontil scar 24-28 mm across, probably mid 18th century, group 3.

**A4648 F3 C0700**

Very thin WG shard, pale green tinge, secondary surfaces some corrosion products adhering. Not later than first half 17th century possibly earlier, group 2.

**A4649 E1 C0701**

Very small shard clear, vessel or possibly hexagonal section bottle.

**A4650 E2 C0701**

Slightly curved greyish shard, surface badly abraded.

**A4651 E4 C0701**

Shard frosted WG, probably late 19th century, group 4.

**A4652 D3 C0701**

Shard vessel glass clear, slightly dulled.

**A4653 D3 C0709**

Probable WB shard, pale green with heavy denaturing, early 18th, possibly late 17th century, group 3.

**A4654a-f F3 C0701**

Six shards WG, pale dull green tinge, one with curving striations but also surface blemishes, glazing score, late 18th/early 19th century, group 3.

**A4655a-d F3 C0701**

Four very small WG shards, two with secondary surfaces, may be 17th century, group 2.

**A4656a-d F3 C0701**

Two very small vessel shards, clear, one rim, two very small bottle shards.

**A4657a-b E3 C0701**

Two shards WG pale dull green tinge, probably late 18th century, group 3.

**A4658a-d E4 C0701**

Four shards WG, 20th century, group 4.

**A4659 F3 C0700**

Small shard WG, secondary surfaces, possibly 17th century, group 2.

**A4660a-b F3 C0700**

Shard WG probably 20th century, group 4.

**A4661a-g E3 C0700**

Mixed bag 7 shards WG, late 18th to 20th century, group 3/4.

**A4662 E4 C0701**

Small shard WG, possibly crown.

**A4663a-f E3 C0701**

Six tiny shards WG.

**A4664a-b F3 C0700**

Two shards WG, one crown with bluish tinge, one pale dull green with blemishes, probably late 18th century, group 3.

**A4665a-c F2 C0701**

Three tiny shards WG.

**A4666 F3 C0700**

Tiny shard WG.

**A4667a-b E3 C0701**

Two shards WB, one olive and one rich dark green, both with secondary surfaces, early 18th/possibly late 17th century, group 3.

**A4668a-b F3 C0701**

Two small shards WG, frosted?, group 4?

**A4669 E3 C0749**

Part WB neck and lip, firebright darkish green, enhanced lip, flat section string ring nipping in neck, irregular aperture 15.5-18 mm. Probably first quarter 19th century, group 3.

**A4670a-d D4 C0735**

Four shards dark brownish bottle, probably 19th century, group 3/4.

**A4671a-d E3 C0749**

Five shards WB, mid dull green, probably second half 18th century, group 3.

**A4672a-ar F3 C0701**

Mixed bag of WB shards, 3 shards appear to be earlier 18th century, two enhanced lips of later 18th century, heavy and crudely made neck and lip of early 19th century plus other 19th century shards, group 3.

Shard from square section (possibly case) bottle, early 18th to mid 19th century, group 3.

Total 44 shards.

**A4673a-e E2 C0701**

Five shards WB.

**A4674a-c E3 C0701**

Three shards WB, 18th century, group 3.

**A4675a-d D3 C0709**

Four shards WB with belling, diameter *c.* 100 mm, some secondary surfaces, probably mid 18th century, group 3.

**A4676a-c D3 C0709**

Three WB shards including neck and lip, very slight splay, triangular string ring, 16.5-17.5 mm aperture, probably 2nd quarter 18th century, group 3.

**A4677a-e F3 C0701**

Base shard from WB, rich green, abraded possibly secondary surfaces, gentle to moderate BR curve, early 18th century, group 3.

Four further WB shards.

**A4678a-b E3 C0702**

Two bottle shards dark olive, thin, slight orange peel, mid to late 19th century, group 3/4.

**A4679a-j F3 C0701**

Mixed bag of 10 WB shards, various shades of green, part base with secondary surfaces could be early 18th century, body shard with orange peel could be mid 19th century, group 3/4.

**A4680a-c D5 C0701**

Three shards WB, secondary surfaces, base shard with moderate BR curve, belling, probably second quarter 18th century, group 3.

**A4681 E3 C0741**

Shard WB, 18th century, group 3.

**A4682a-s F3 C0701**

Nineteen very small shards WB.

**A4683a-e F4 C0701**

Mixed bag of five WB shards, one could be early 18th century, others later, group 3.

**A4684a-d F3 C0701**

Four shards bottle, fairly small diameter cylindrical section, probably mid 19th century, group 3/4.

**A4685a-m F3 C0701**

Mixed bag of 13 WB shards including complete base and part sidewall, 90 mm diameter, belling, BR wear, 32 mm kick, late 18th/early 19th century, group 3.

Eight other base and sidewall shards similar, group 3.

Four shards dulled surfaces including base with gentle to moderate BR curve, first half 18th century, group 3.

**A4686a-c E3 C0701**

Seventy percent base shard WB in rich green, c. 95 mm diameter, tight BR curve, BR wear, belling, 30 mm pontil, late 18th century, group 3.

Two further shards.

**A4687 E3/4 C0701**

WB lower neck shard, probably mid 18th century, group 3.



**A4688a-c E3 C0701**

Three shards bottle, two probably 18th century, other 19th, group 3.

**A4689a-c E3 C0749**

Three shards WB including lip fragment in pale green, nicely tooled string ring 5 mm below slightly out-turned lip, late 17th or possibly very early 18th century, group 3.

**A4690 E3 C0701**

WB shard light dull green, secondary surfaces, first half 18th century, group 3.

**A4691 D3 C0701**

Small WB shard, secondary surfaces, probably early 18th century, group 3.

**A4692 D4 C0702**

Small WB shard.

**A4693a-g E3 C0701**

Part base WB mid green, *c.* 95 mm diameter, sharp BR curve, BR wear, probably late 18th century.

Shard from octagonal bottle/decanter, first half 18th century, group 3

Five small WB shards.

**A4694a-c E3 C0701**

Three shards WB, probably mid 18th century group 3.

**A4695a-b F3 C0748**

Two shards WB including dark base, probably 19th century, group 3.

**A4697a-b D3 C0701**

Two small shards WB.

**A4698a-c E3 C0701**

Three shards WB including one lip, triangular string ring and splaying neck, early 18th century, group 3.

**A4699a-y F3 C0701**

Seven shards WB, dark olive, including 2 conjoining base shards *c.* 90 mm diameter, tight BR curve and belling, part neck nipped in. First quarter 19th century, group 3.

Eighteen further green WB shards again probably 19th century, group 3/4.

**A4700a-u E3 C0701**

Twenty-one WB shards, some very small, mid to later 18th century, group 3.

**A4701a-f E2 C0742**

Six shards WB glass, probably mid to late 18th century, group 3.

**A4702a-l F2 C0755**

Twelve shards WB including neck and lip in firebright dull olive, enhanced lip over broad down turned string ring, aperture 17-18 mm, late 18th century, group 3  
Unenhanced lip shard WB probably mid 18th century, group 3.

**A4703a-e E2 C0701**

Five shards WB including one body shard dark green, late 18th century, group 3.

**A4704a-c F3 C0700**

Three shards bottle glass, mid 19th century, group 3/4.

**A4705a-f E3 C0700**

Mixed bag of WB shards, early 18th to possibly mid 19th century, group 3/4.

**A4706 E1 C0701**

WB neck shard.

**A4707 E3 C0701**

Bottle shard probably 19th century, group 3/4.

**A4708a-b F3 C0701**

Two shards WB.

**A4709 E3C0727**

WB shard, probably mid 18th century, group 3.

**A4710 E3 C0701**

Small WB shard.

**A4711a-b E3 C0701**

Two shards WB probably 18th century, group 3.

**A4712a-f F2 C0749**

Six shards WB, one probably first half 18th century, others later, group 3.

**A4713a-b E3 C0701**

Two shards WB light dull green, probably mid 18th century, group 3.

**A4714a-b F2 C0755**

Two shards bottle, probably 19th century, group 3/4.

**A4715a-c E3 C0701**

Three small bottle shards.

**A4716 F5 C0701**

WB shard.

**A4717a-d F3 C0700**

Four small shards WB.

**A4808 F3 C0701**

Small facet cut shard in dark glass, purpose and date unknown.

**2006**

**A4696 D3 C0701**

WB shard mid 18th century, group 3.

**A4718a-k F4 C0701**

Mixed bag, complete neck and lip in dull green, neck height 96 mm, slight splay, enhanced lip over square section string ring, 17 mm aperture, late 18th century, group 3.

Base shard rich green, moderate BR curve, probably early 18th century, group 3.

Nine WB shards of which 5 look to be early 19th century, one may be even later, group 3.

**A4719a-d F3 C0701**

Shard WB base rich green, secondary surfaces, gentle BR curve, early 18th possibly late 17th century, group 3.

Base shard moderate BR curve, looks to have been >130 mm diameter, possibly rounded mallet of c. 1730, group 3.

Lower body shard with belling, tight BR curve, later 18th century, group 3.

Neck and shoulder shard, gentle angle of entry, first half 18th century, group 3.

**A4720a-l F4 C0701**

Part base WB in dull green, c. 96 mm diameter, belling, 36 mm kick, late 18th century, group 3.

Eleven further bottle shards, including one amber, late 19th century, group 4.

**A4721a-g F4 C0773**

Seven shards WB shoulder and lower neck and base shard, first half 18th century, group 3.

Three other smaller shards similar.

Two shards possibly later.

**A4722a-k F3 C0701**

Part neck and lip WB in dull olive, firebright, neck height 88 mm, slight bulged splay, enhanced lip over square section string ring, 15-17 mm aperture, late 18th possibly early 19th century, group 3.

Lip shard similar colour and condition, probably late 18th century, group 3.

Seven various WB shards.

Tiny shard vessel bowl.

Tiny shatter shard, looks 20th c, group 4.

**A4723a-d E4 C0701**

Virtually complete neck and lip WB in dull green, dulled surfaces. Neck height 88 mm, slight splay, enhanced lip over down turned triangular string ring, aperture 18 mm.

Probably third quarter 18th century, group 3.

Four WB shards including one with secondary surfaces.

**A4724a-d F4 C0701**

Mixed bag, complete base and lower body WB in mid dull green, diameter 90 mm, bellling, tight BR curve, BR wear, 29 mm kick, late 18th century, group 3.

Lower body shard WB in dull green, abraded/secondary outer surface, profile indicates mallet shape of c. 1730, group 3.

Base shard WB in rich green, secondary surfaces form large diameter bottle >140 mm, gentle to moderate BR curve, probably first quarter 18th century, group 3.

Very small bottle shard firebright, probably 19th century, group 3/4.

**A4725a-e F4 C0733**

Five shards WB, probably first half 18th century, group 3.

**A4726a-e F4 C0701**

Mixed bag of four shards dark bottle glass, one with vertical mould mark, later 19th century, group 4.

One shard paler, probably 18th century, group 3.

**A4727a-g F4 C0700**

Seven shards WB in various shades of green, one may be early 18th century, the rest later 18th century, group 3.

**A4728a-j E3 C0701**

Part base WB in dark dull green, diameter 95 mm, tight BR curve, bellling, late 18th century, group 3.

Smaller shard similar.

Eight small shards WB.

**A4729a-i F3 C0701**

Nine bottle shards, late 18th-19th century, group 3.

**A4730 F3 C0701**

Four shards bottle, 18th-19th century, group 3.

**A4731a-d F3 C0733**

Three WB shards probably mid 18th century, one neck shard probably later, group 3.

**A4732 E4 C0700**

Bottle shard 19th century, group 3/4.

**A4733a-b F3 C0701**

Part base plus one shard in dark rich green, probably late 18th century, group 3.

**A4734a-b E4 C0701**

Two small shards WB, one with crisselling, probably not annealed properly, probably 18th century, group 3.

**A4735 E4 C0701**

Small shard WG originally 3.1mm thick but now 1-1.6 mm through surface loss of very dark corrosion products. Heart glass blue green tinge, remnants of grozed edges. No later than 16th century, possibly earlier, group 1?

**A4736a-d F3 C0733**

Four shards WG, late 18th to early 19th century, group 3.

**A4737a-j F3 C0701**

Nine shards WG, pale dull green to pale blue green, one with secondary surfaces and two grozed edges at 120 degrees, faint came shadow on one, not later than 17th century, group 2.

The other shards look to be later, 18th or early 19th century, group 3.

One small bottle shard probably 19th century, group 3/4.

**A4738a-b E4 C0701**

Two shards WG pale dull green, dulled surfaces, probably 18th century, group 3.

**A4739a-f F4 C0701**

Six small shards WG pale dull green tinge, one pale blue green, 18th century, group 3.

**A4740a-d E4 C0701**

Four small thin WG shards, pale dull green, one has surface blemishes and a grozed edge, possibly earlier 18th century, group 3.

**A4741a-b E4 C0701**

Two small thin WG shards, surface denaturing, probably earlier 18th century, group 3.

**A4742a-f E4 C0701**

Six shards WG 4 with pale dull green tinge thin 1-1.3 mm, dulled surfaces, probably mid 18th century, group 3.

Two with secondary surfaces, probably late 17th century, group 2/3.

**A4743a-d C0773**

Small shard crown WG in pale blue green, slight curving striations, late 18th century, group 3.

Three small pale dull green WG shards, possibly earlier.

**A4744a-e F4 C0701**

Five small thin WG shards, 18th to 19th century, group 3.

**A4745a-b C0768**

Two small thin WG shards quite strongly coloured, probably mid 18th century, group 3.

**A4747 F4 C0701**

Small shard from probable medicine bottle, pale aqua, late 18th century, group 3.

**A 4766 C0700**

Shard in clear from drinking vessel bowl, probably 18th century, group 3.

**A4806 F3 C0701**

Black glass bead, spherical with flattened ends, three equispaced grooves around its circumference (one double). 9 mm x 7.5 mm, 1.5 mm bore.

**A4807a-b E4 C0846**

Two shards of possible glass, totally denatured to orange buff colour, rather sandy texture but with possible delamination, 3.9 mm thick. If this is window glass it must have lain in a very damp alkaline environment and be medieval in date, group 1?

## **The glass: discussion**

The assemblage of glass from the 2005-2006 excavation seasons at Fetternear yielded 139 bags from 14 contexts. Since a good number of the glass-bearing contexts were surface or near-surface it is not surprising that these were mixed.

For simplicity the assemblage has been sub-divided into four date groupings:  
group 1 pre-Reformation (pre-1560);  
group 2 1560 – c. 1680;  
group 3 c. 1680 – c.1850 and  
group 4 post c. 1850.

The date parameters for each group were chosen for the following reasons:

- Group 1, pre-Reformation (pre-1560): This group represents the earliest likely usage of glass on the site. Glass was a very rare commodity in Scotland in the late and immediate post-medieval periods. This was further complicated by the fact that most of the glass of the time was potash-fluxed and much would have deteriorated to the extent that it would no longer be recognisable or has disappeared altogether. Being a religious site it is virtually certain that glazed windows would have been present.
- Group 2, 1560 – c. 1680: Glass continued to be relatively rare and generally restricted to the ecclesiastics or wealthy. The glass wine bottle, introduced around 1630 in England, is a rare find on Scottish sites before the last quarter of the seventeenth century. Window glass tended to be broad or cylinder and still a relative rarity up to the late seventeenth century.

- Group 3, *c.* 1680 – *c.* 1850: coincides with the rapid increase in the use of the wine bottle and in its evolution towards the introduction of completely moulded items (apart from neck and lip) in the second quarter of the nineteenth century. Window glass changed from being predominantly broad to crown but remained generally very thin.
- Group 4, *c.* 1850 onwards: covers the modern period with the use of glass for an increasing range of products. Window glass preference changed yet again around 1850 with a move away from crown (spun disc) to improved sheet glass (made by the cylinder method) now finished by an inexpensive polishing process.

Group 1 is represented by probably only three shards. The two putative totally denatured window shards A4807a-b from context C0846 may be paralleled by similar material recovered from a well at the Greyfriars Friary, Shuttle Street, Glasgow, dating to the late fifteenth century (Murdoch forthcoming). The single shard (A4735) from context C0701 may also be pre-Reformation, its very poor condition and reasonable original thickness would suggest a date of no later than early fifteenth century.

Group 2 consisted of about 20 small shards, all window and thin to very thin, probably sixteenth to seventeenth century. All of these shards were corroded to some extent and had the typical dark-coloured corrosion products indicative of potash fluxing.

Group 3 shards consisted of mainly ‘wine’ bottle and window shards. The term ‘wine’ bottle has been used here as a general term for the cheap potash fluxed containers which were made to hold beer or ale as well. The differences between them are so slight as to render positive identification almost impossible. Because these bottles evolved radically, particularly in shape, over the period from the second quarter of the seventeenth century to the early nineteenth it is possible to date their manufacture reasonably accurately. The down side is that they were re-used, sometimes repeatedly, and their date of demise/deposition cannot be quite so accurately assessed. Many show substantial wear on their base rings from repeated use.

1850 is a reasonable choice for the start of group 4; the mid-nineteenth century saw a rapid and more varied increase in the use of glass, much of it prompted by improvements in technology. From the early 1820s complete semi-automatic bottle moulding (apart from the neck and lip which were still hand applied until the turn of the century) was gradually introduced and would have been virtually universal by 1850.

Similarly, the production of window glass moved away from the crown (spun) technique to improved sheet, cylinder glass with a new inexpensive polishing process.

Excise duty had been levied on glass as early as 1695 and from 1745 consistently so until 1845. Window tax, also introduced in 1695 to finance William III’s wars, remained in place until 1851. The removal of both these imposts brought window glass within the reach of a much larger percentage of the population.

**Table 2: Context contents by group.**

\*: definite

?: possible

Context	Group 1	Group 2	Group 3	Group 4
700		*	*	*
701	?	*	*	*
702			*	*
709			*	
727			*	
733			*	
735				*
741			*	
742			*	
748			*	
749			*	
755			*	*
773			*	
846	?			

The relative scarcity of group 4 material will no doubt be in part due the burning of the main house in 1919 and the cessation of occupation.

There were eleven very small shards of what appeared to be vessel glass in the assemblage but none retained any manufacturing detail. However, given the clarity and colourless nature of them they are likely to be no earlier than eighteenth century. Most vessel glass up to the end of the seventeenth century had some slight colour tinge.

Two items in the assemblage appear to derive from jewellery and were recovered from surface context C0701. A small facet-cut shard in black glass (A4808) and a small black glass bead (A4806). No comment is offered on either other than that glass beads were known to have been made at Morison’s Haven, East Lothian, in the 1630s (Turnbull 2001, 56). They were often available at agricultural fairs and markets especially in the nineteenth century. However, beads were also imported in considerable quantities from Europe. A jewellery specialist might be able to throw more light on these particular finds.



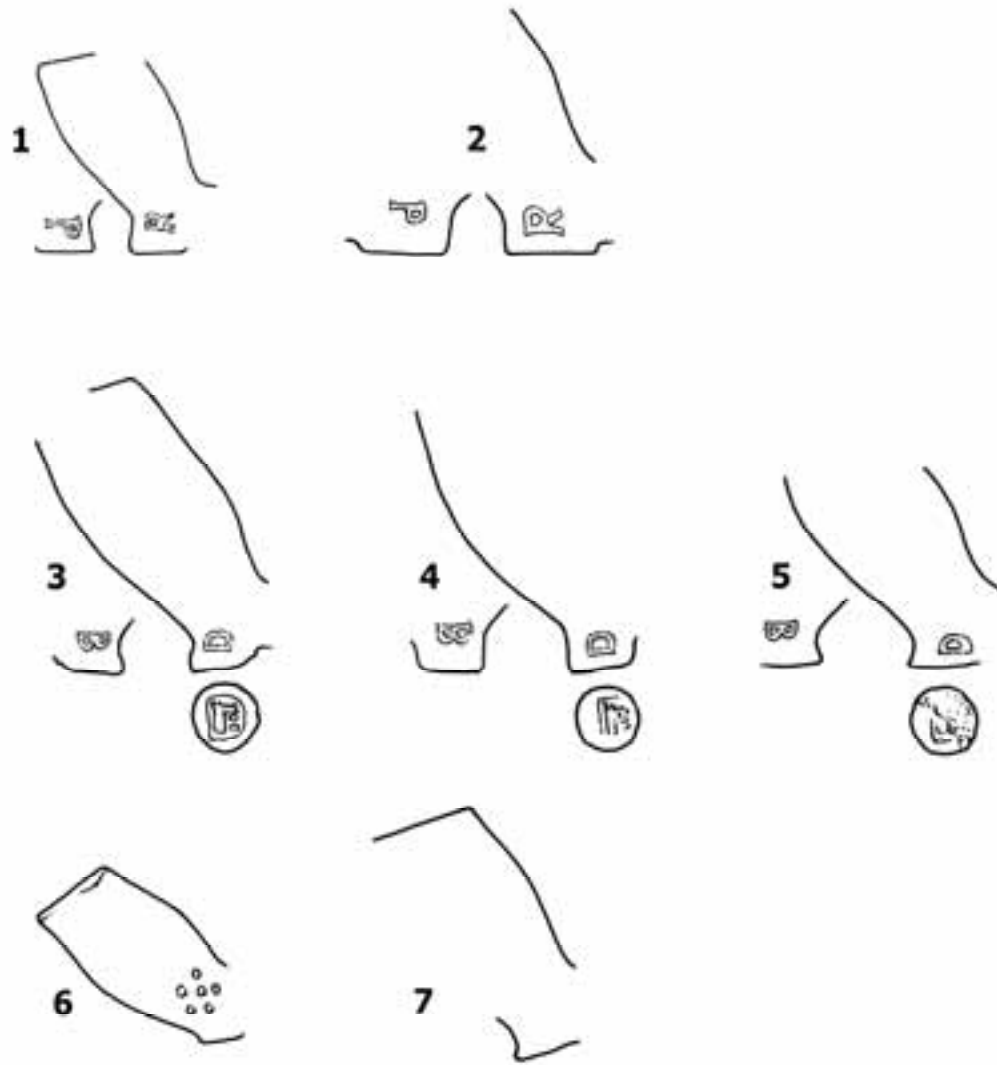


Figure 18. Clay tobacco pipe bowls, drawn by Colin Martin

## **17. Clay tobacco pipes**

*Colin Martin*

This summary catalogue, which should be read in conjunction with the report already submitted (Martin, n.d.), includes material from the 2000-2007 seasons.

### **FTN00**

#### **A3376**

10 cm length of stem with rouletted decoration (*cf.* no. 11 in main report). Probably Dutch.

### **FTN01**

#### **A3514; A3515; A4811**

Three stem fragments.

### **FTN02**

#### **A4597a-i; A4598; A4599; A4600a-f**

Fifteen stem fragments including one mouth-end and one example of rouletted decoration (probably Dutch). Four bowl fragments. Five complete or partially-complete bowls as follows (numbered as in figure 18):

1. Flat-heeled bowl in off-white fabric with no basal mark. Raised letters RP on either side of heel. Bottered and trimmed. Form similar to no. 27 in main report (Martin n.d.).
2. Flat-heeled bowl in off-white fabric with no basal mark. Raised letters RP on either side of bowl. Similar form to 1 .
3. Flat-heeled bowl in off-white fabric with raised letters DB on either side. Distinctive ‘lop-sided’ castle heelmark evidently from the same die as those identified on DB-marked pipes in the main report. Bottered, trimmed, and burnished. Form similar to no. 38 in main report (Martin n.d.).
4. Similar to above, heavily burnished. ‘Lop-sided’ castle heelmark.
5. Similar to 3 and 4, heavily burnished. Vestige of heelmark.

### **FTN03**

#### **A4180**

Stem fragment, pink fabric.

## **FTN05**

### **A4514; A4516; A4809**

Bowl with six-pelleted rosettes on either side, Dutch, no. 6 in figure 18. Bowl fragment with mark in circular border reading ..SSE (top) and ..ME (bottom). This mark is characteristic of the London-based Balme family. Another bowl fragment with a vestige of a similar but unidentifiable mark.

## **FTN06**

### **A4820**

Bowl fragment with vestige of 6-dot rose. Dutch.

## **FTN07**

### **A4810-4819**

Six stem fragments. Four bowl fragments. One plain flat-heeled bowl in off-white fabric, without marks (no.7 in Figure 18).

## **Clay tobacco pipes: discussion**

This small group of pipes broadly confirms the conclusions reached in the main report (Martin n.d.). Though nothing in it can be assigned to as early a date as the oldest pipe so far found on the site – a bowl of Scottish origin, the form of which accommodates a range of c. 1630-1650 (no. 14 in the main report (Martin n.d.)), the Dutch bowl in the present group (6 in Figure 1) probably dates to around 1650, its form being closely paralleled by finds from the Dutch East Indiaman *Vergulde Draeck*, lost off the coast of Western Australia in 1656 (Green 1977, especially GT 1018 on p. 153). Fragments of another rosette-decorated bowl and decorated stem fragments indicate that Dutch products were relatively common on the site.

It can be noted that the largest group of bowls (nos 1-5 in Figure 18) in the present group was found during the 2002 season, and closely reflects the make-up of the main collection. It includes two RP-marked bowls, without heelmarks, which have been identified as the products of the Edinburgh pipe-marker Robert Paterson. Also present are three DB-marked pipes which can be assigned to David Banks, also of Edinburgh. The Banks pipes, as in the original group, are exceptionally well finished, indicative of a product intended for a high-status market, and all bear the distinctive ‘lop-sided’ castle heel-mark which work on the original group suggests may derive from the same stamp, indicative of this product arriving at Fetternear as a discrete batch. The unmarked bowl (no. 7 in Figure 18), though it does not closely match any of the forms recorded in the original group, is likewise distinctively Scottish.

In summary, the material under discussion confirms the conclusion drawn from the original group, namely that clay pipes were rare at Fetternear until about the middle of the seventeenth century, and that, before 1700, Dutch forms predominated to the exclusion of Scottish products, initialled pipes of earlier members of the prolific Banks family (William, Thomas, and John) being notably absent. The main suppliers of Fetternear, David Banks and Robert Paterson, both of Edinburgh, do not appear to

have become active much before 1700, after which they continued into the 1720s. Thereafter smoking evidently declined at Fetternear as it did throughout the rest of Scotland, apparently because of the increasing popularity of snuff, though a later revival, noted in the original Fetternear group, is confirmed in the present collection by two fragmentary bowl-marks, one of which probably derives from the London-based Balme family which was active throughout much of the nineteenth century (Oswald 1973, 131-3).

## 18. Worked stone

*Penelope Dransart*



Figure 19. Whetstone (A4832). Photograph: SEPP

### **A4832 E4 C0805**

Incomplete whetstone, perforated for suspension. Length: 46 mm, width: 13 mm, depth: 7 mm. (Figure 19)

### **A4833 E4 C0846**

Possible whetstone with one smoothed surface. Length: 122 mm, width: 27 mm; depth: 25 mm.

### **A4834 E3 C0731**

Slate disc, a possible game piece, measuring 31 mm by 29 mm, 8-9 mm deep.

### **A4835 F3 C0701**

Fragment of slate pencil. Length: 22 mm, diameter: 4-5 mm.

## **19. Prehistoric finds**

*James Kenworthy and Jonathan Trigg*

During the 2005 and 2006 excavations a small number of finds were recovered, which were of a prehistoric nature, including flints, hammer-stones and ceramics. The pottery assemblage is too small about which to make generalisations and consequently will be reported upon as part of the analysis of prehistoric artefacts from across the site. The aim of this short note, therefore, is to report on the general character of the stone objects from these two seasons. A fuller, more in-depth, coverage will be produced in a forthcoming publication.

All the prehistoric finds were obviously from derived contexts, as were other such finds recovered from in front of the mansion in previous years.

### **Hammer-stones**

Two presumably prehistoric hammer-stones were recovered. They are not closely dateable, and were not necessarily used in flint-working. They require no further comment.

### **Prehistoric flints**

Though the amount of worked flint was small, the collection presents several points of interest.

In considering its composition, it should be remembered that the excavation was not geared to the recovery of prehistoric lithics – inevitably the smaller components will have been missed and, even of the larger pieces, it is likely that only a part was recovered. This, however, should not bias comparison with the material recovered from earlier excavation seasons to the east of the drive, since recovery conditions were comparable. The contexts from which the two groups were recovered are also broadly comparable: the material from both seems to be topsoil brought in as ‘make-up’ (presumably from nearby, given the availability of good soil in the vicinity). In the case of the flints from the earlier seasons, the soil seems to have been brought in mainly during the formation of formal gardens during the eighteenth century and later. While the current group results from a similar operation, it cannot at present be assumed that this was part of the same operation, or that the soil derived from exactly the same source. This may explain the disparity between the two groups of finds, even allowing for the small number of finds from 2005 and 2006.

In both groups, finds of a Mesolithic bladelet-production based technology predominate, with a few pieces which are clearly of a later, possibly Early Bronze Age, date. These latter are broadly comparable with the worked flint from previous seasons’ work in the field to the north of the mansion. Both show a medium degree of surface patination but no cortication, as is normal for such material in this area, and while a few pieces show a noticeable degree of wear, the majority are only slightly worn.

## 20. Dissemination

During the July 2005 and 2006 excavation seasons public access was given to visitors to the site who were welcome to see the work in progress. The project director also gave on site lectures to different groups of people, including the Garioch Ramblers (on 24 June 2006) and the St Combs Rambling Group (on 16 April 2007). An article on the two seasons' work appeared in the *Leopard*, a magazine for north-eastern Scotland (Dransart 2007), and another in the journal of the Castle Studies Group (Dransart and Lindsay 2006-07). The local press took great interest in our field seasons. Reports on our work featured in the *Press and Journal*, *Inverurie Herald* and *Inverurie and District Advertiser*.

This report will be added to the web site of the Scottish Episcopal Palaces Project (<http://www.lamp.ac.uk/archanth/staff/dransart/FETTERNEAR.HTM>).



Figure 20. Excavation of the palisade in grid square E4, from the west, looking east.  
Photograph: SEPP



Figure 21. Excavating layer C0805 in grid squares E4 and F4. Photograph: SEPP

## 21. Concluding remarks

*Penelope Dransart*

This report has presented the interim findings of the archaeological work undertaken at Fetternear in 2005 and 2006 and of the analysis of different finds categories. These results are significant as they provide us with important information which will help us to refine our research strategies and to understand the stratigraphy of the site, the study of which will be published at a later date along with the site plans.

Periods of activity in the past detected during the excavation include the cobbled surfaces in the northern part of the area west of the drive, which were associated with metal-working. We also uncovered further evidence for the Leslie family's nineteenth-century excavation of the lawn in front of their house. From our work east of the drive, we know that their excavation was followed by extensive reconstruction of the remains. It is probable that an oven, partially excavated during the 2005 and 2006 seasons, was also rebuilt by the Leslies. One of the clay tobacco pipe bowls listed above (A4514) was a mid-seventeenth-century find found in the lower fill of a robber trench, the extension of which is visible in figure 8. This robber trench seems to have been dug in the course of the nineteenth-century excavation. The coin and glass reports also provide evidence for the disturbance of seventeenth- and eighteenth-

century materials. The new data resulting from the work reported here will enable us to re-evaluate our findings from previous seasons on the east of the drive. The nineteenth-century excavation and archaeological reconstruction of an earthwork site is remarkable for being an early example of such an endeavour. Our interpretation of it will contribute to a greater understanding of the history of the development of archaeology in Scotland.

Fortunately, the nineteenth-century excavation did not encroach on all of the medieval deposits. Perhaps the most significant findings of the work conducted in 2005 and 2006 concerned the uncovering of these deposits in the western part of grid square D4, in E4 and part of F4. In the course of excavating them we encountered the remains of an oven and a series of hearths (figure 21). The analysis of the finds supports the interpretation that this part of the site served as the kitchen quarters of the medieval bishop's palace. Culinary activities are attested by the use of ceramic jugs and vessels, which were heated, probably for cooking or warming food, and by the high percentages of burnt animal bones. The frequent presence of knives is also in keeping with the preparation of food. Given the occurrence of these knives, it is probably significant that one of the whetstones (A4832) came from a soil layer interpreted as the rake out from the oven or from the hearths in the vicinity.

At Fetternear the kitchens were located immediately inside the timber palisade, later replaced by a stone wall, at the south-western corner of the site. This arrangement is typical of medieval domestic planning. Kitchens were usually situated in an outer corner in order to minimise the risk of fire hazards represented by the ovens and hearths. However, relatively easy access to the hall was also necessary to allow staff to serve the bishop and his retinue with the cooked food. The work of the 2005 and 2006 seasons has provided a wealth of material to cast light on the daily activities of the household members of the medieval bishops of Aberdeen.

## **22. Appendix: waterlogged wood assemblage assessment**

*Nigel Nayling*

The table overleaf summarises the potential for analysis of the recovered waterlogged wood from the site, along with brief descriptions of the contents of each bag of material. Some table headings, such as conservation, are speculative and will need discussion between a number of interested parties to resolve.

Abbreviations used in the wood assemblage report:

RS = wood record sheets, Wood ID = microscopic wood species identification, Dendro = dendrochronological analysis and rw = round wood



Scottish Episcopal Palaces Project – Fetternear 2005 and 2006

**Table 3: waterlogged wood assemblage assessment**

Sitecode	Trench	Area	Context	Excavator	Excavation Date	Description	Record Req	Wood ID Req	Dend. Req	Photo Req	Illustrate	Conserve
FTN04		C2 ext	C0645	B Milton	19/07/2004	'Specimen wood'. 1 radial oak	1	0	0	0	0	
FTN04		C4	C0662	J Trigg	27/07/2004	c. 6 small wood fragments	6	6	0	0	0	
FTN04	AA		C0609	B Milton	06/07/2004	185.164E, 79.54N, 82.501OD Radial oak. Good preservation on one face, other heavily eroded. One (possibly 2) peg holes	1	0	1	1	1	*
FTN04	AA	C2	C0609			Not unwrapped. Split oak stake	1	0	1	1	0	
FTN04	AA	C2	C0609	B Milton	07/07/2004	184.81E, 79.437N, 82.327OD 'Wooden Ball'	1	1	0	1	1	
FTN04	AA	C2	C0609		07/07/2004	Oak offcut with peghole	1	0	0	1	0	
FTN04	AA	C2	C0609	B Milton	06/07/2004	Oak offcut	1	0	0	0	0	
FTN04	B	B5	C0639		18/07/2004	Oak fragment	1	0	0	0	0	
FTN04	B	B5	C0639		17/07/2004	Tangential oak offcut	1	0	0	1	0	
FTN04	B	B5	C0639		17/07/2004	1 charred oak fragment, 1 radial oak splinter	2	0	0	0	0	
FTN04	Y	C2	C0645	B Milton	19/07/2004	1 radial oak splinter, 1 tangential oak offcut	2	0	0	0	0	
FTN05		D3	C0722		15/07/2005	Sawn? Tangential offcut (now in freezer for dend.), 1 oak splinter, 2 fragments round wood	4	2	1	0	0	

Scottish Episcopal Palaces Project – Fetternear 2005 and 2006

FTN05		D3/D4	C0732	B Milton	20/07/2005	2 sawn oak offcuts, one with possible small pegholes (RS, P), 7 split? Oak offcuts/chips (RS, 1 x dend?), 1 rw stake with facets + 2 fragments + 1 small rw stake (P, ID x 4, draw x 1), 3 x rw (3 x ID, RS)	15	7	1	3	1	
FTN06		E4	C0832			'Palisade wood part 12 + 13'. Radial oak split with uneven (lower?) end. One peg <i>in situ</i> . Dend? Thin radial oak split with complete? Sapwood + 2 adjoining fragments. Draft photo taken	2	1	2	2	0	
FTN06		E4	C0832			'Wood part 6'. Fragments of non-oak, round wood peg? Draft photo taken	1	1	0	0	0	
FTN06		E4	C0832			'Palisade wood part 5'. Radial oak with rebate and 4 pegholes. Gritty sediment on end indicates base? Rebate damaged. Draft photo taken	1	0	1	1	1	*
FTN06		E4	C0832			'Palisade wood part 10'. Radial oak with rebate. 5.5 peg holes of differing sizes. One with <i>in situ</i> peg (wedged?) + small fragments. Draft photo taken	1	1	1	1	1	*
FTN06		E4	C0832			'Palisade wood part 11'. Label unclear. Plain radial split oak. Draft photo taken	1	0	0	0	0	
FTN06		E4	C0832			'Palisade wood part 8 + 9'. Wedge shaped radial split with feather edge and opposing bark edge – potential for annual resolution of dendro. Also oak radial with possible part of peghole on one edge. Draft photo taken	2	0	1	2	1	*
FTN06		E4	C0832			Boxed heart oak post with opposing rebates. Need to check rings but unlikely to have sufficient for dendro.	1	0	0	1	1	
FTN06		E4	C0832		30/07/2006	'Wood parts 15, 16, 17, 18' 2 oak wood chips + 1 non-oak round wood chip/offcut	3	1	0	0	0	

Scottish Episcopal Palaces Project – Fetternear 2005 and 2006

FTN06		E4	C0832		30/07/2006	'Wood part 7 (contains dowel)'. Radial oak with one complete and one incomplete peg hole (former containing remains of non-oak round wood peg). Draft photo taken	1	1	1	1	1	*
FTN06		E4	C0832		30/07/2006	'Sample of wood (natural?)'. 2 pieces of small round wood, 1 damaged	2	2	0	0	0	
FTN06		E4	C0832		20/07/2006	'Wood part 14' Small round wood with longitudinal, fine (knife?) facets	1	1	1	0	0	
FTN06		E4	C0832			Oak plank with peg holes and rebate. Insufficient rings for dendro.	1	0	0	1	0	*
FTN06		E4	C0832		28/07/2006	Radially split oak fragment, heavily compressed. Slow grown sapwood. Draft photo taken and RS started. Two small pieces with knife marks - draft photos taken and details on previous RS. 2 unidentified fragments	2	4	0	0	0	
FTN06		E4	C0832		28/07/2006	Bark	1	0	0	0	0	
FTN06		E4	C0832		28/07/2006	Label unclear. Tangential oak woodchip + radial oak woodchip	2	0	0	0	0	
FTN06		E4	C0835	W Lindsay	26/07/2006	Radial oak offcut. Good dendro. potential. Draft photo taken	1	0	1	0	0	
FTN06		E4	C0842		28/07/2006	3 oak wood chips	3	0	0	0	0	
FTN06		E4	C0842		28/07/2006	Small oakwood chip	1	0	0	0	0	
FTN06		F3	C0773		19/07/2006	2 non-oak round wood fragments, 1 charred, split and cut	2	1	0	0	0	
FTN06		F3	C0811	C Miller	22/07/2006	Half split non-oak round wood	1	1	0	0	0	
FTN06		F3	C0811		21/07/2006	Radial oak offcut	1	0	0	0	0	
FTN06		F3	C0811	A Simpson	22/07/2006	1 very worn oak offcut, 1 curved oak? Offcut	2	1	0	0	0	
FTN06		F3	C0811	A Simpson	22/07/2006	3 oak wood chips	3	0	0	0	0	
FTN06		F3	C0811	C Miller	23/07/2006	'Wood Object' Possible round wood handle in two non-joining pieces. Draft photo taken	1	2	0	0	0	

Scottish Episcopal Palaces Project – Fetternear 2005 and 2006

FTN06		F3	C0819	A Simpson	23/07/2006	Compressed and fragmented non-oak	1	1	0	0	0	
FTN06		F3	C0819	A Simpson	23/07/2006	One chamfered oak piece with nail holes + 4 assorted offcuts/fragments (all oak?). Draft photo taken	5	0	0	1	0	*
FTN06		F3	C0819		24/07/2006	5 adjoining oak lath fragments	1	0	0	0	0	
FTN06		F4	C0773			Not unwrapped. Large oak plank?	1	0	1	1	0	*
FTN06		F4	C0773	M Burnett		Oak radial stake?	1	0	1	0	0	
FTN06		F4	C0793	T Bergsma	22/07/2006	Small round wood with chisel cut (possibly modern)	1	1	0	0	0	
FTN06		F4	C0793	A Simpson	21/07/2006	1 oak offcut with some tool marks. 1 small non-oak round wood fragment	2	1	0	0	0	
FTN06		F4	C0811	T Bergsma	24/07/2006	Rebated oak fragment. Draft photo taken	1	0	0	1	0	
FTN06		F3	C0811	C Miller	27/07/2006	Oak fragment 312 x 28 x 10. Rec discard	1	0	0	0	0	
							88	36	14	20	8	

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