EXCAVATIONS AT THE BISHOP'S MANOR, OLD RAYNE, ABERDEENSHIRE IN 1990 AND 2008

H K Murray and J C Murray

with contributions by

T B Ballin, R Cerón-Carrasco, D Masson, C Smith and S Timpany

Published by the Society of Antiquaries of Scotland, www.socantscot.org.uk

with Historic Scotland, www.historic-scotland.gov.uk

and the Archaeology Data Service, www.archaeologydataservice.ac.uk

Editor Helen Bleck

Produced by Archetype Informatique SARL, www.archetype-it.com

DOI: 10.9750/issn.1773-3808.2012.52

Requests for permission to reproduce material from a *SAIR* report should be sent to the Director of the Society of Antiquaries of Scotland, as well as to the author, illustrator, photographer or other copyright holder.

Copyright in any of the *Scottish Archaeological Internet Reports* series rests with the SAIR Consortium and the individual authors.

The maps are reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright 2001. Any unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Historic Scotland Licence No. GD 03032G, 2002.

The consent does not extend to copying for general distribution, advertising or promotional purposes, the creation of new collective works or resale.

CONTENTS

Lis	st of Illustrations	7
Lis	st of Tables	7
1	Abstract	L
2	Introduction	2
3	The site	3
4	Historical background	5
5	The excavation	3
	5.1 The ditch and possible palisade	3
	5.2 The interior of the manor site. Phase 1: prehistoric activity	
	5.3 The interior of the manor site. Phase 2: 13th century?	
	5.4 The interior of the manor site. Phase 3: late 13th/early 14th century	
	5.5 The interior of the manor site. Phase 4: 14th century	
	5.6 The interior of the manor site. Phase 5: late 14th/possibly 15th century	
	5.7 The interior of the manor site: Phase 6: late 16th/early17th–18th centuries	
	210 110 1100 1101 01 1110 1110 1110 11 11	•
6	The prehistoric finds	3
	6.1 Prehistoric pottery	3
	6.2 The lithic assemblage, by Torben Bjarke Ballin	
7	The medieval finds	•
	7.1 Small finds	9
	7.2 Non-ceramic building materials	9
	7.3 The pottery	
	7.4 Ceramic roof furniture	
8	The environmental evidence	5
	8.1 The animal bone, by C Smith	5
	8.2 The fish remains, by R Cerón-Carrasco	
	8.3 The plant remains, by S Timpany and D Masson	
9	Discussion)
10	Acknowledgements	2
		_
11	References 3	ł

LIST OF ILLUSTRATIONS

1	Location plan showing evaluation trenches (T1-T6), 1990 excavation and
	2008 excavation areas 1 and 2
2	Sections of manor ditch with key plan to show location of sections
3	View of ditch section A
4	Sections of pits 28, 29 and 1990
5	Plan of Phase 1 and Phase 2
6	Plan of Phase 3
7	Plan and section of phase 3 cistern and outflow pipe
8	South section of cistern showing traces of rotted timber lining
9	Cistern looking north with outlet pipe trench running below wall
10	Plan of Phase 4
11	Ovens 51 and 60 inside Building 16, looking west
12	Stone basin/bowl (No. 10) (illustration by Jan Dunbar)
13	Roofing slates
14	Dressed red sandstone fragment from Old Rayne, now in private ownership in
	Elgin
15	A: Details and reconstruction of decorative ceramic ridge tile and finial imported from
	Yorkshire. B: Locally produced Redware ceramic ridge tile (illustration by Jan Dunbar) 23
16	View looking west across Building 16 (foreground) and building 10 (background)
	towards the village street

LIST OF TABLES

1	List of lithic artefacts
2	Pottery by Phase
3	Fragment count (n), weight of fragments (g), % food-forming mammals based on
	fragment count and % food-forming mammals based on weight
4	Fragment count (n), weight of fragments (g), minimum numbers of animals (MNI) and
	% food-forming mammals in Phase 5 midden
5	Phase 5 midden: age categories of cattle and sheep/goats at death, based on epiphyseal
	fusion of long bones
6	Phase 5 fish species representation by NISP

1 ABSTRACT

This report on the excavations at the Bishop of Aberdeen's manor at Old Rayne, Aberdeenshire, undertaken in 1990 and 2008, examines the morphology of the site and details the evidence for high-status buildings and an intricate water-system there in the late 13th/early 14th century. The envir-

onmental analyses give a glimpse into the economy of the manor and there is some discussion of the extent to which this episcopal site compares to the small number of secular manors excavated to date in north-east Scotland.

2 INTRODUCTION

Proposals for a housing development at Cromwell-side Farm, Old Rayne, were subject to a planning condition requiring an archaeological evaluation and limited excavation to be carried out, as the site incorporated part of the enclosure of the Old Rayne manor of the medieval bishops of Aberdeen. In May and June 2008 Murray Archaeological Services Ltd was commissioned by Hamish McIntosh of Cromwellside Farm to undertake the work, which comprised the evaluation of an area outwith a

proposed protected zone around the remains of the manor ditch and the full excavation of a corridor for a new mains sewer, which had to be routed across the manor site (Murray & Murray 2008).

This report also incorporates the results of an earlier excavation of a small area of the interior of the mound and a section of the ditch undertaken in 1990 by Moira Greig and Alexandra Shepherd when the house Kyninmund was built to the north of the manor (Greig & Shepherd 1990).

3 THE SITE



Illus 1 Location plan showing evaluation trenches (T1–T6), 1990 excavation and 2008 excavation areas 1 and 2

Old Rayne lies in Rayne parish on the east side of the River Urie, to the east of the A96 road between Inverurie and Huntly, approximately 40km from Aberdeen (illus 1). The site of the bishop's manor (NGR: NJ 6758 2851) can be seen on the east side of the village as a prominent mound on part of which are built the village school and schoolhouse. The line of the ditch surrounding the manor is visible as a distinct dip in the ground on the north and east sides.

The site (NMRS No.: NJ62NE 2) is variously named as Bishop of Aberdeen's House, Bishop's Palace, Bishop's Manse and described as the 'bishop's manor', 'moated homestead' or an 'earthwork castle' (Shepherd 2006, 105). In this report the term 'episcopal manor' will be used, following the definition in the RCAHMS survey of Donside (RCAHMS 2007, 161–3) and, indeed, using the term 'manor' that was used in the medieval period for this residence.

The centralisation, by the 15th century if not before,

of the administration of the bishop's Clatt and Tullynessle lands with those of Rayne and Daviot (Innes 1845, i, 217–8) is logical in relation to early roadways as the road through the village - the St Lawrence Road – is possibly a medieval route associated with the Lourin Fair and described (NMRS No.: NJ62NE110 and NJ72NW 33) as the old road between Aberdeen and the north-west; a distance of some 40km (25 miles) – a day's journey on foot, roughly 3–5 hours on a horse. Assuming that the roads shown on Roy's map of 1747/55 were generally established medieval routes, a journey from Old Rayne to the bishop's lands in Clatt (c 5km, 12 miles) could follow a route shown parallel to the Gaudie burn from a point on the Lawrence road just a few miles south-east of Old Rayne. From Clatt to the lands at Tullynessle (c 2km, 5 miles) Roy's map shows a route through the hills at Suie. From Old Rayne, the management of the Clatt and Tullynessle lands was within far more practical distances than from Aberdeen.

4 HISTORICAL BACKGROUND

The lands of Rayne were granted to the bishops of Aberdeen in 1137. Construction of the bishop's residence there was thought by Boece in *Historia Gentis Scotorum* (1527) to have been begun by Alexander Kinninmund (Kinninmonth, Kyninmund), bishop between 1329 and 1344, and the evidence from the 2008 excavation suggests that there were already high-status buildings on the site at least by the early 14th century.

Boece also records that Bishop Kinninmund regularly spent the winter at Mortlach, summer and autumn between Fetternear and Old Rayne and spring in Aberdeen (RCAHMS 2007, 162). This confirms that there were buildings on the site suitable for Kinninmund to occupy and that his own building works, if ever completed, should be regarded more as rebuilding or additions rather than as the earliest buildings on the site.

In May 1349 the bishop's court was held at the Old Rayne stone circle ('apud stantes lapides de Rane en le Garuiach' ('among the standing stones of Rayne in the Garioch') Innes 1845, i, 80). It could be argued that this indicates that there was at that time no suitable meeting place at the manor. By the late 14th century there was a chapel on the manor site, as it is mentioned in 1383 as 'capella dicti domini manerio suo de Rane' ('the chapel of his aforesaid manor of Rayne') (Innes 1845, i, 164).

The bishops of Aberdeen had widespread land-holdings; by the 15th century and possibly before, the administration of the lands in Clatt and Tullynessle was centralised at Old Rayne (Innes 1845, i, 217–8).

The position of the site beside the road perhaps suggests that the rather odd straight edge of the manor enclosure as shown on the 1st edition Ordnance Survey map (OS 1870), may in fact be the original boundary line on this side, following the line of the road.

Old Rayne became a burgh of barony in January 1492/3 (Pryde 1965, 54) and there are elements of a later planned village layout with a 17th-century market cross in a small square at the junction of the St Lawrence Road and the road to the bridge to Pitmachie on the other side of the River Urie (Shepherd 2006,105–6). Old Rayne was part of the lands of the bishops of Aberdeen annexed after the

Reformation under the Act of Annexation of 1587. It is not clear if any of the buildings on the manor site were in use in the late 16th century or in the 17th century. The lack of clay tobacco pipe fragments and of post-medieval pottery suggests that the excavated buildings on the north side of the manor were not in use at this period and may have been demolished. This does not preclude the possibility that buildings survived elsewhere on the property at that time.

Roy's military map of 1747-55 shows the village of Old Rayne as a cluster of eight buildings gathered to the south of a larger building with an enclosure. It is tempting to interpret this as the bishop's manor site with its enclosing ditch, although all the buildings may have been dismantled by the mid 18th century. Building foundations were visible on the site in the 18th century, but it has been under cultivation since the late 18th or early 19th century. The New Statistical Account of Scotland (NSA 1845, 12, 424) mentions the bishop's manor and notes that, 'the residence referred to, the foundation of which was discernible in the last century, but has since been effaced, and the ground brought under tillage'. The 1st edition Ordnance Survey 6" map of 1867 (published in 1870) shows the 'Site of the Bishop of Aberdeen's house' as a truncated oval, in the angle between the road through the village and the road up to Cromwellside Farm. No ruins are shown, but the ditch is depicted. The primary school and schoolhouse were built on the south-west part of the mound in 1880. According to Groome's Ordnance Gazetteer of Scotland, first published in 1882, 'traces of former buildings and certain remains were found' during the excavation of foundations for the school (Groome 1896, 239).

There is no record of foundations which may have been discovered when the school extension was built c 1960. Information from local inhabitants, particularly Geordie Cameron, indicated that, in the past, the whole site, including the mound, had been ploughed. In the course of cultivation (in the 1960s?), Mr Cameron remembers ploughing up a number of red sandstone blocks and some bone from the top of the mound, directly behind the school. Many of the blocks have been re-used in the village as dyke stones, and one shaped block from an arch has subsequently been traced in Elgin and recorded.

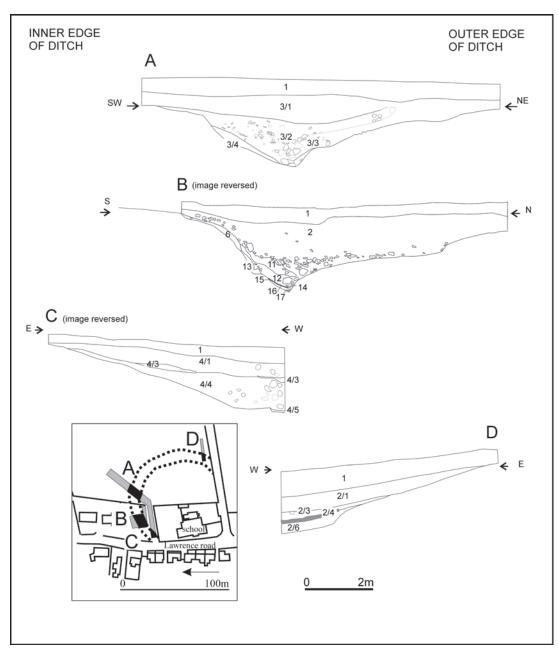
5 THE EXCAVATION

5.1 The ditch and possible palisade (illus 2, 3)

The ditch around the manor has been sectioned at four points, three during the 2008 excavations and one in the1990 excavation (Greig & Shepherd 1990). One of the 2008 sections (illus 2: D) only cut through the outer half of the ditch as it was simply intended to locate the outer limit of the south-east line of the ditch so it could be avoided by the development. The section at the north-west (illus 2: C) has only exposed the inner half of the ditch at a slightly oblique angle,

as the outer half is under the pavement; this may be recorded when the main sewer for the development is cut through to the mains in the street.

The ditched area shown on the 1st edition Ordnance Survey map of 1867 (published in 1870) is almost D-shaped, with a flat side alongside the street. The excavated plan of the ditch shows that section C, which appears to be at a fairly sharp bend in the ditch, aligns with the north corner of the straight edge shown on the 1st edition Ordnance Survey map. It is possible therefore that the original ditched site



Illus 2 *Sections of manor ditch with key plan to show location of sections*



Illus 3 View of ditch section A

may indeed have had an irregular shape, aligned alongside the old Lawrence Road from Aberdeen to the north-west (NMRS No.: NJ62NE 110). Based on the excavated sections, the area enclosed by the ditch was c 75–80m in diameter.

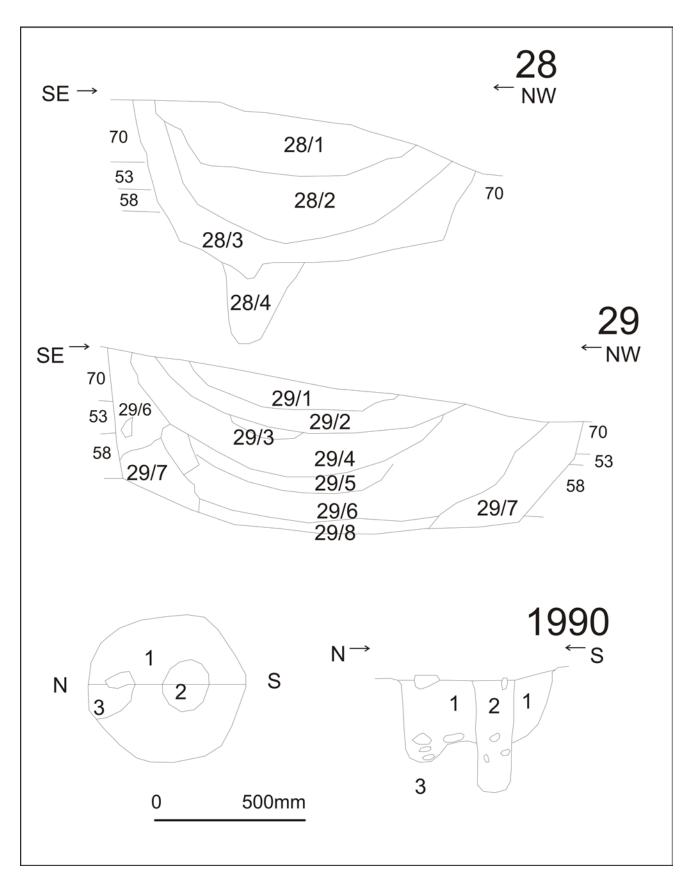
The ditch was probably dug in Phase 2, although erosion of the edges has obscured its real relationship with internal layers. It was between 7.8 and 8m wide and at least 2.0 to 2.2m deep from the contemporary ground level. It was V-shaped in section and cut partly into the underlying rock. All sections showed a small amount of natural erosion of the sides. There is no evidence that it was water-filled and environmental samples from basal fills (illus 2, contexts D: 2/4 and A: 3/3, 3/4) showed no evidence of waterlogging (Timpany & Masson below). On the inner side of section A there appeared to have been at least two stabilisation/turf layers developed on this slippage (3/4). Small quantities of degraded burnt grains from samples of 3/4 suggest fairly insignificant amounts of domestic debris slipping or getting washed into the ditch. In general, however, all sections of the ditch appear to have remained very clean and empty throughout much of the use of the manor. This may be the result of the access to the ditch from the inside of the manor enclosure having been blocked from a relatively early stage by the walls of buildings around the outer edge of the mound, thus preventing the dumping of rubbish in the ditch.

When the buildings on the north side of the manor

were demolished, the large rubble spreads on the north side of the mound surface extended down into the ditch (A: 3/2, 3/3, C: 4/4 and in section B (1990) the base of layer 2), either incidentally or as deliberate infill and levelling (Phase 6). The rubble was most extensive in the two sections nearest to Buildings 16 and 10, with rather less in section C. This gives some support to the argument that this rubble derived from these specific buildings. The partial section (D) on the south-east side of the ditch yielded very little rubble, tentatively suggesting that there may have been fewer buildings in the south-east part of the mound.

The discovery of four post-pits raised the possibility that there had once been a palisade, but the detailed evidence suggests that they are more likely to have been related to internal features. Two of the post-pits were excavated in 2008, another was visible in section in 2008 and one had been excavated in 1990, all relating to the north-east part of the mound. No comparable post-pits were found in the area inside the ditch section at the north-west side (section C) although, as this area had been severely scarped by modern levelling with only a thin skim of topsoil over natural, this is not conclusive.

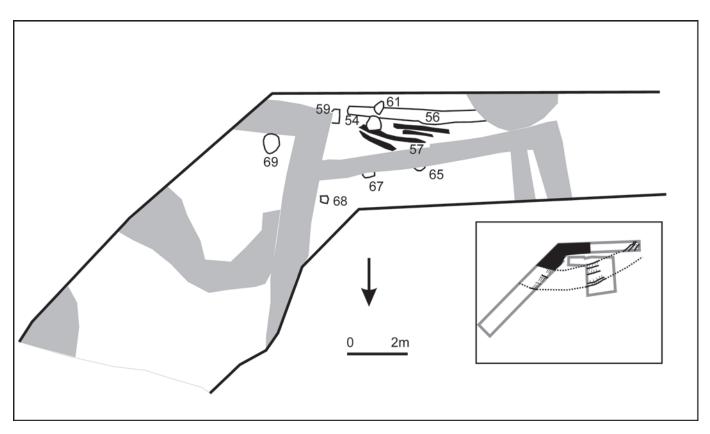
Post-pits 28 and 29 (illus 4) had been cut through the redeposited natural (70) thrown up over the original subsoil (58) and topsoil (53) when the ditch was dug. Each appeared to have been made to insert a post and then later recut on almost the



Illus 4 Sections of pits 28, 29 and 1990

same line to remove the posts. In post-pit 29 this is demonstrated by redeposited natural (29/7) which seems to be a remnant of the original post-packing.

Truncated post-holes, 0.21–0.24m in diameter, remained extending 0.25m into the natural through the base of the post-pits. Posts of this size are too



Illus 5 Plan of Phase 1 (black) and Phase 2. Grey shading denotes later features. Key plan shows location.

large to be hammered in so would have necessitated post-pits for insertion; the rather large size of the removal pits reflects the difficulty of extracting firmly bedded posts of this size and depth. After the removal of the posts, the pits had initially filled with humic or gritty soils with small amounts of charcoal. However, the upper fills of both pits were of heavily burnt material which may derive from the burning associated with the hearths/ovens of Phase 4. Both 28 and 29 were within Building 16, and it is possible that they had held internal fittings or structural posts associated with the building or its construction, rather than palisade posts.

Another post-pit with a smaller post, 0.12–0.15m in diameter and 0.36m deep, was found to the west in the 1990 excavation; its section suggests a recut with a removed post at one side. Although the distance from the ditch edge is similar to that of 28 and 29, this is also unlikely to have formed part of a palisade. A larger post pit (72) which extended into the section, and which was not fully exposed, was cut by 28 and was clearly earlier.

5.2 The interior of the manor site. Phase 1: prehistoric activity (Illus 5)

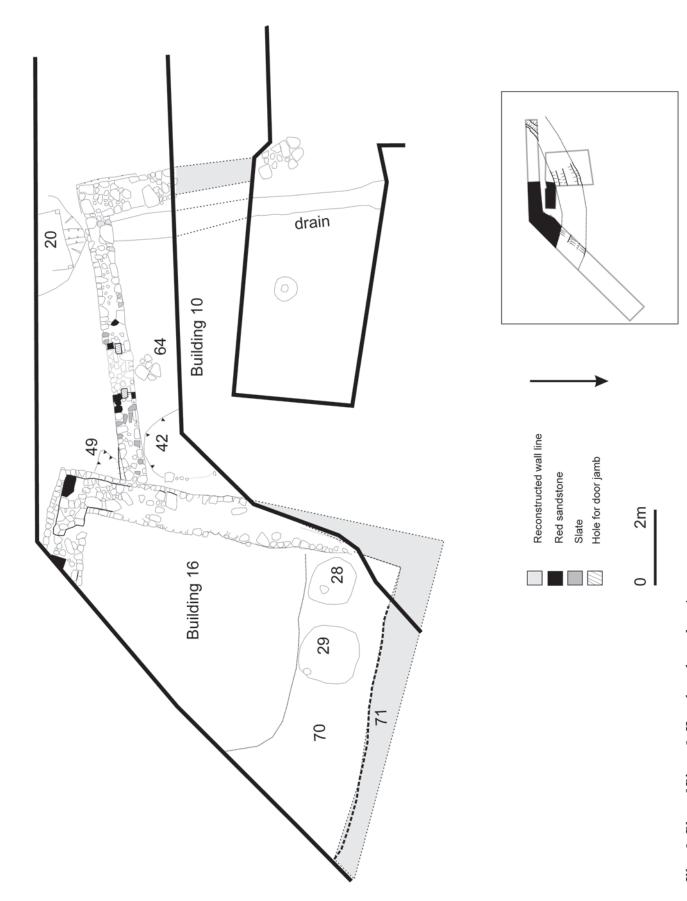
It appears probable that there had been some limited prehistoric activity on the site. The original subsoil (58) survived above natural on some areas. Four ard/plough marks (57) 0.11–0.12m wide were originally thought to have been prehistoric and there is

a small scatter of prehistoric artefacts in this area. However, it is also possible that the ard/plough marks may be evidence of medieval clearance of the site prior to building. A small number of other features were recorded cut into the subsoil. These may be the remnant of features cut from higher levels which had been truncated by later activity on the site; they are considered in Phase 2.

Apart from one flint scraper (Ballin, below) and one small undiagnostic sherd of prehistoric pottery from the subsoil (below), there were three other prehistoric sherds (contexts 20/4, 45 and 1990) and two flints (contexts 43, 51) from secondary contexts in the area near the ard marks. Another tiny flint flake was found in ditch section D (context 2/6) and two others in topsoil in the field to the east of the manor. A further prehistoric sherd was found in topsoil.

5.3 The interior of the manor site. Phase 2: 13th century? (Illus 5)

Ashallow east/west slot (56) 0.4m wide and a number of truncated post-pits (54, 59, 61, 65, 69, possibly 67, 68) cut through the subsoil and preceded the construction of the stone buildings. They could relate to earlier timber structures or to temporary constructions such as scaffolding. Several of these features appear to have been burnt as they had charcoal in the fill or overlying them, or had evidence of burning on the top of the subsoil at the edge of the feature. A rim of a stone basin or mortar (catalogue no. 10)



Illus 6 Plan of Phase 3. Key plan shows location.

came from the fill of post-pit 54 and pre-dated the stone buildings 10 and 16.

5.4 The interior of the manor site. Phase 3: late 13th /early 14th century (Illus 6)

Parts of two stone-walled buildings (Buildings 16, 10) were found on the north side of the mound. Both were aligned along the inner edge of the ditch and would have formed part of the perimeter of the manor enclosure. During this period Building 16 would appear to have been a building of some status, although a lack of floor levels and associated finds makes it impossible to determine its function. An elaborate cistern in the yard between the buildings may have been for domestic water for washing or other requirements or may have been related to food preparation. Building 10, which was built after Building 16, and was structurally inferior, appears to have been used as a kitchen throughout its existence. The construction of this kitchen may reflect a beginning of a change of function of this area of the manor.

5.4.1 Building 16

The south-west corner, the west wall and the line of part of the robbed-out north wall of Building 16 were within the excavated area. It had been a substantial structure c 7m in internal width. The walls, of rubble stone with smaller stones in the core and clay bonding, were 0.75–0.8m wide over foundations c 1.06–1.12m wide and 0.4m deep with only a shallow trace of a foundation-cut visible in the subsoil (53). The north end of the west wall only survived as foundations and the clay-bonded core of the upper part, the more useful facing stones having been removed. The north wall had been dismantled and only the south side of its foundation/robbing trench remained, 0.18–0.28m deep, coinciding with the north end of the west wall.

A dressed block of red sandstone at the southwest corner suggests that sandstone was used for the quoins and for detailing at doors and windows. Several unassociated pieces of dressed red sandstone from later rubble may also have originated in this building. There was no evidence of any openings in the west wall but another red sandstone block in the south wall may indicate a doorway. However, as the stone extended beyond the excavation, this is uncertain. The internal floor levels of the building largely appear to have been dug out during the construction of ovens in Phase 4 with only c 0.1m of subsoil 53 remaining. At the north side of the building, a layer of redeposited gravel (70), probably from the excavation of the ditch, was cut by the ovens and may be part of the original floor make-up. Gravel 70 was also cut by post-pits 28 and 29 which may relate to the building or to its construction.

If, as appears probable, the Phase 6 rubble around the building and in the ditch alongside derived from this structure, some additional details are indicated. There was a considerable quantity of stone roof slate ranging in size from 115×70 mm to 425×265 mm (illus 13), suggesting a roof with the slates decreasing in size towards the ridge. Two slates with opposed notches would have been from a slated valley, indicating that the building had an L- or T-shaped plan or similar to create the need for valley drainage (Coyne 2000, fig. 6). Fragments of glazed ceramic ridge-tiles, one a highly elaborate tile of Yorkshire Ware with deep green glaze (illus 15) were found, suggesting that the ridge-line was decoratively tiled. If the ridge-tile is part of its original roof, the structure was probably completed in the late 13th/early 14th century. A single fragment (catalogue no. 4) of a lead window came (the framework which held the glass) would indicate the use of window glass. The evidence suggests a building of some pretension, the strength of the foundations implying that it stood to at least two storeys. Due to the lack of primary floor levels or deposits there is no indication of its original function.

5.4.2 Building 10

Building 10 was secondary, with its south wall abutting and bonded to the west wall of Building 16. Only the south and west walls survived, with the wall of Building 16 used as the east side, forming a trapezoidal plan splaying internally from 7m to 8m from south to north. The width was at least 5m but could not have been more than 7m. No evidence survived of any north wall, which would have been near the edge of the ditch within the area excavated in 1990. The walls were of rubble stone with smaller stones in the core and traces of sandy clay bonding. The west wall was 0.8-0.9m wide, but the south wall was only 0.6-0.66m wide and survived to a maximum height of 0.32m above footings 0.7m wide. The east end of the south wall was at a slight angle to the footings and the upper part may have been rebuilt at some point or may simply have been built

There was a doorway, 0.93m wide, off centre in the south wall, flanked on the outside by small red sandstone blocks and internally by stone settings for door jambs $(0.27 \times 0.15 \mathrm{m})$ which extended through the wall footings and appeared to have been part of the primary structure. The wall footings continued across the doorway; with a small patch of flat stones (64) continuing this surface as paving just inside the building.

An oven (42: illus 6) had been dug through the original subsoil (58) in the south-east corner of Building 10. It was roughly oval, $1.75 \times 1.8 \text{m}$ and 0.3m deep, with a few small stones at one edge and very intense burning, apparently representing repeated firings. Fragments of fired clay may have been from a superstructure. Analysis of environmental samples suggests that oven 42 was used for both cooking meat and for drying grain or baking with burnt grains of oats and rare grains of barley,

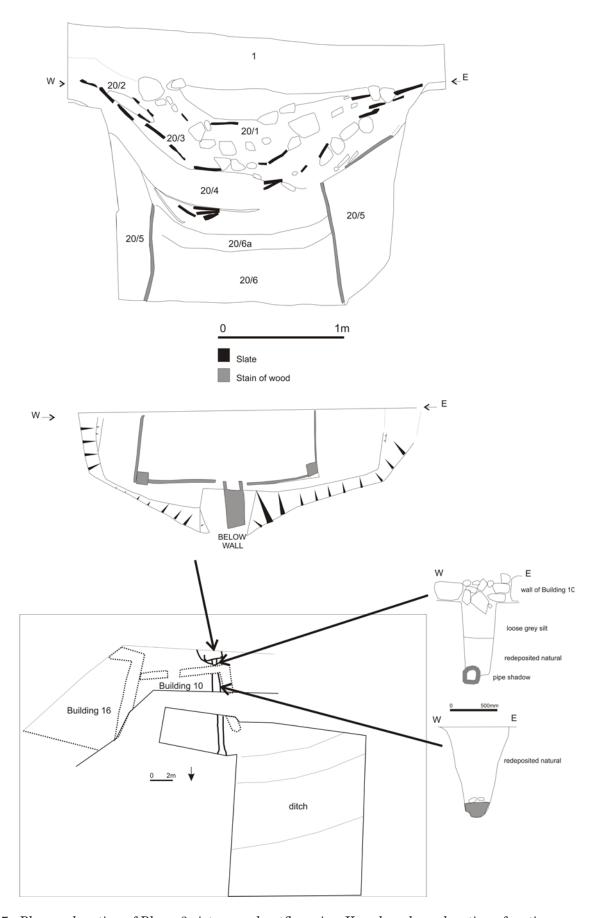
rye and club/bread wheat (Timpany & Masson below). A flooring of clean gravel (46) was spread over this phase of the use of oven 42 and throughout the interior of the building, also extending through the doorway to the yard outside. Other layers in the external yard included patches of clay (47) and stony silt (48), both possibly attempts to level and dry the yard, which may have got waterlogged from the cistern beside the outside of the south wall of Building 10.

5.4.3 Cistern

A cistern (20: illus 7–9) with a timber lining had been dug through the original subsoil, with an outflow pipe running from the cistern to the manor ditch, deep below the wall of Building 10 and below the gravel floor (46) of the building. The pipe trench was backfilled with clean, redeposited gravel with no mix of occupation material, suggesting that the whole water system had been installed at an early stage in the use of the manor. Most of the pipe trench did not seem to have been disturbed after the gravel floor had been laid but the section of the south wall of the building that lay directly over the line of the pipe had been disturbed and at this point the upper 0.4m of the fill of the pipe trench below the wall stones was of loose grey silt with some charcoal fragments, although the lower 0.4m was clean and apparently undisturbed redeposited gravel. It is possible that this section of wall may have been removed and rebuilt after subsidence as the pipe below rotted.

The cistern pit (20) extended into the south section and only the northern half could be excavated, the north side was c 2.6m wide at the top, tapering slightly to 2.2m at the base. The almost vertical sides were cut from the subsoil through natural sand to a depth of 1.4-1.6m. The base was cut into very hard clean boulder clay. A patchy, very thin, layer (20/7) of 2mm of softer clay/silt is likely to be the result of water action on the basal clay. The bottom 0.5-0.7m of the pit had been filled in with clean sand and gravel (20/6). When all the later fill layers were removed it became clear that the pit had had an inner timber lining set into it and held in position with redeposited sand (20/5) backfilled between the lining and the pit sides. Although the timber had totally rotted, the inner sand fill and the outer sand backfilling had preserved a discoloured sand-casting of the timbers. By removal of the inner sand considerable detail of the structure could be recorded. No vestiges of wood survived for species identification. The lining was 1.4m wide and square or rectangular with squared corner posts c 0.12 \times 0.12-0.14m set c 0.1m below the base of the pit at the excavated north-east and north-west corners. At the base of the pit on the east and west sides, horizontal rails 0.5-0.6m wide had either abutted or been jointed to the outer edges of the vertical posts. Horizontal planks *c* 20mm thick had been set behind both the rails and the corner posts, held in position against the posts by the backfilled sand behind them. Where sand from the outer backfilling had pressed between timbers, the width of the planks appeared to have been 0.23-0.25m. In the south section the planks could be seen to have survived vertically to almost 1m on the west side, with another 0.5m or so collapsed back against the pit side. On the north side, horizontal planks, possibly 0.3m thick, were either jointed into the corner posts or set behind them. The north planks survived to 0.6m height to just above the level of the outlet drain. The south end of the trench for the drain, which splayed from 0.16m at the base to 30mm wide at the top, ran from the edge of the cistern pit, directly below the wall of Building 10 where it was cut 0.85m deep into the natural, below the foundation of the wall. At this point the base of the drain cut was 0.55m above the base of the cistern and the soft light-grey stain of rotted timber c 10mm thick enclosed an oval 0.14×0.13 m, which is interpreted as the end of a hollow wooden pipe that projected to just above the surviving planks of the cistern wall, where it was supported by small stones. This timber shadow was traced back c 0.35m below the wall and was also noted in a cross-section 2.5m to the north where the trench was 0.18m wide at the base and 0.58m at the top, with a depth of 1.03m below the top of natural. The north end of the same drain trench was excavated in 1990, where it was 0.32m wide and 0.65m deep, terminating 8m north of the cistern pit with an outflow into the top edge of the ditch.

This appears to have been a freshwater cistern rather than a cesspit or latrine, as there was no evidence of any organic fill, with no staining or damage of the base, which would be expected if it had been cleaned out. The lower fill of clean sand and gravel appears to have been a single deliberate filling of the pit either during use as a filter or to fill the hole after the cistern fell out of use. At the time of excavation there was no ground water entering the pit; while this may be the result of considerable changes in the surrounding drainage it seems improbable that this pit reached the water table as the considerably deeper manor ditch showed no evidence of having held water. It is a possibility that roof water may have been used to fill the cistern or that there was an inflow pipe in the unexcavated southern half of the cistern. The odd position of the outlet pipe halfway down the cistern suggests that there may have been some sort of shutter mechanism to block the outlet, possibly by the ditch, and only opened to drain the cistern. Regardless of the function, this was a fairly sophisticated system which had involved a considerable effort to construct. Very similar timber linings of wells dating between the late 12th and 14th centuries have been excavated in Elgin (Murray, Murray & Lindsay 2009) but none of these had a comparable outlet system. The cistern appears to have remained open and presumably in use throughout Phases 3 and 4 and not totally filled until the destruction of the buildings in Phase 6.



Illus 7 Plan and section of Phase 3 cistern and outflow pipe. Key plan shows location of sections.



Illus 8 South section of cistern showing traces of rotted timber lining



Illus 9 Cistern looking north with outlet pipe trench running below wall. Traces of timber lining visible against sandy backfill (20/5)

Illus 10 Plan of Phase 4. Key plan shows location



Illus 11 Ovens 51 and 60 inside Building 16, looking west

5.5 The interior of the manor site. Phase 4: 14th century (Illus 10)

During this phase a concentration of four hearths or ovens and general spreads of burning trodden out around them suggest that at this period the northern end of the manorial site was utilised for cooking, with Building 16 now also in use as a kitchen and cooking/food preparation continuing within Building 10. Towards the end of this period there was an intense fire which destroyed Building 10, and Building 16 may have become derelict.

Building 16

After the primary use of Building 16, its interior appears to have been partly dug out to construct a succession of three ovens or hearths (illus 11). Burning from this activity extended over most of the central and northern part of the building, extending over Phase 3 features such as the redeposited gravel 70 and sealing post-pits 28 and 29. A particularly intense linear band of burnt clay (25) was suggestive of there having been a partition at some point to the north side of oven 51. No slate was observed in the oven constructions and it is suggested that this was a secondary use of the building while it remained roofed.

The earliest oven (51) was cut into the old topsoil and built abutting the wall footings of the west wall of Building 16; it was c 3m in internal diameter, enclosed by a single-coursed arc of stones set in clay 0.6-0.9m wide. There were spreads of burnt clay, ash and charcoal both within and spreading north over the enclosing kerb. Access to the oven would appear to have been from the south or east. A secondary oven (60) was built within the east end of this oven and partly destroyed its eastern end. This later oven was keyhole-shaped, with an opening to the west. It had an internal diameter of 0.9m with a clay base and clay and stone walls c 0.2m thick. Burnt and unburnt clay and stones may derive from a collapsed, possibly domed superstructure. Samples from the burnt material in the base of the oven suggest that it had been used for the cooking (or possibly smoking) of meat and fish (Timpany & Masson below).

To the north of these two main ovens there was the base of a third possible oven or hearth (63), just inside the line of the robbed out north wall; it consisted of an ovoid area 1.1×1.2 m baked red and black in a hollow 0.2m deep cut into original soil (53) and into redeposited gravel (70). Stones over this may be part of a collapsed oven surround or superstructure, or possibly just rubble infill of the hollow.

Building 10

After the new floor (46) had been laid in Building 10, short sections of wall (12, 27) were built parallel to and alongside the inner faces of the south wall of the building, but not bonded to it. They were 0.6-0.65m wide and 0.23-0.28m high, built of rubble stones with a top course of slates forming a flat upper surface. They may have been benches or 'shelves'. After these benches had been built, a new episode of intense and repeated burning took place on the site of oven/hearth 42, with burnt material extending further north and west and possibly related to burnt material in the south-east corner of the 1990 excavation. Outside the building in the yard area there was a build-up of a grey, slightly humic soil with frequent charcoal flecks (31, 45) which extended slightly through the doorway into the building. The cistern still appears to have been functional or at least open.

Later there appears to have been a fairly extensive fire with thick deposits of ash and charcoal (13, 15) extending over both the yard and the interior of Building 10, and burning and heat-cracking of some of the stones at the top of the wall. Ash and charcoal extended down into the cistern (20/4). Just outside the corner of Building 16 this burnt horizon was mixed with bone from the Phase 5 midden, suggesting that this began to develop soon after the fire.

5.6 The interior of the manor site. Phase 5: late 14th/possibly 15th century

Soon after the fire which destroyed Building 10, the south end of Building 16 appears to have been used as a midden.

Building 16

After the ovens fell out of use in Building 16, the southern end of the area within its walls was used as a midden, with a deposit mainly comprising animal and fish bone (22, 37, 38) with some charcoal in a greasy matrix. The restriction of this dumping within the walls of Building 16 suggests they were still standing, although possibly derelict, at this stage. Some bone in the upper midden layers which were mixed with some rubble (18, 21) did extend on either side of the south wall of Building 16, either through a doorway or after the wall was destroyed; it is, however, possible that this spread was caused by disturbance at the time of the levelling of the building remains or during subsequent cultivation. The midden did not extend into Building 10. The bone report (Smith below) identified burnt and unburnt bones with butchery marks indicating that they were domestic food debris. Food species identified were cattle, sheep/goat, pig, horse, roe deer, domestic fowl, domestic/greylag goose - all quite usual in a medieval context. Dog, fox and amphibian (frog or toad) remains may be incidental. There were abundant fish bones but only two species, cod and haddock, both probably from North Sea fisheries (Cerón-Carrasco below) were identified. There were also small fragments of ovster and mussel shell. Environmental samples from the midden yielded only rare charred grains of oat and barley. The very small amount of pottery from this fairly extensive midden suggests that the dumping was to some extent selective, being almost exclusively food waste with little addition of more general domestic rubbish. This may perhaps suggest that it was specifically kitchen waste and may indicate that the manor kitchens were still on the north side of the enclosure. The build-up of the midden in an apparently abandoned building suggests that by this stage at least some parts of the manor were in decline. The small pottery assemblage from these layers is of abraded and probably residual sherds with some ploughed-in modern material and cannot be used to date the midden. The general lack of 15th- and 16th-century pottery suggests little activity on this part of the site at that period.

5.7 The interior of the manor site: Phase 6: late 16th/early17th–18th centuries

The demolition and decay of the manor buildings was almost certainly a gradual process, from the late 16th/early 17th century until at least the 18th century, with the site being used as a quarry for useful stone for other buildings and garden walls. At some point the north wall of Building 16 was systematically demolished. The lower rubble from the walls was mixed with a large number of stone slates and the remains of several ceramic roof ridge tiles crushed among them; the number of complete stone slates suggests they had less re-use value, possibly being too heavy for many roofs. The remaining rubble consisted of large quantities of fairly small field stones likely to have derived from the core of the wall. There were fewer large stones that would have been useful for other structures and few, generally fragmentary, pieces of the red sandstone used for detailing at doors, windows and corners. Layers 8, 37, 40 were all part of the demolition debris, with rubble dipping down into the partially infilled cistern (20/1, 20/2, 20/3) and filling in the ditch (illus 2: D: 2/1, 2/2, 2/3, A:3/2, 3/3, 4/1, 4/4 and 1990 layer 2). Until this time the ditch appears to have remained open and empty apart from a little erosion of the sides.

The documentary and oral evidence suggests that the buildings had been totally dismantled by the 18th century and possibly earlier. The site was cultivated through most of the 19th and 20th centuries, with the exception of the areas built over by the school and school house. Cultivation continued to unearth some of the rubble as late as the 1960s, including sandstone blocks that were reused in the village.

6 THE PREHISTORIC FINDS

There was a very small assemblage of prehistoric pottery and flints, much of it residual but some from Phase 1 contexts.

6.1 The prehistoric pottery

One small undiagnostic sherd of prehistoric pottery was found in the subsoil (58) and another from the top of natural in the 1990 excavation. Two undiagnostic body sherds and a small rim sherd were residual in later contexts (contexts 1, 20/4, 45).

6.2 The Lithic Assemblage, by Torben Bjarke Ballin

Six prehistoric lithic artefacts were found. Five were residual in medieval contexts or topsoil. One, however, from the original subsoil (58) was near the possible ard marks.

The assemblage is briefly characterised in Table 1 (full report Ballin 2008). Three pieces are debitage and three are tools. The debitage includes one minuscule chip (SF 6), as well as two blades (SF 3, 4). SF 3 is a relatively short and broad blade ($31 \times 13 \times 5$ mm), whereas SF 4 is more regular and narrower ($33 \times 9 \times 3$ mm). The tools include one short endscraper (SF 5), one scraper-edge fragment (SF 1), and one flake with edge-retouch (SF 2). SF 5 is a well-executed, robust end-scraper ($36 \times 20 \times 12$ mm), and it was manufactured on a regular hard-hammer flake. SF 1 is a fragment of a scraper-edge (12×13

Table 1 Lithic artefacts

	SF no.
Chips	6
Blades	3, 4
Short end-scraper	5
Scraper-edge fragment	1
Flakes w edge-retouch	2
TOTAL	6

 \times 8mm), where only the two corners of the working-edge survive. Most likely, the original scraper was a short end-scraper. SF 2 is a broad hard-hammer flake (43 \times 33 \times 7mm) with fully blunted lateral sides.

Although no strictly diagnostic types are present, technological attributes associated with the collection suggest that it may be a mixture of – as a minimum – Late Mesolithic/Early Neolithic and Late Neolithic artefacts. The narrow, regular blade (SF 4) was prepared by combined trimming and abrasion, which is the common approach experienced in connection with Late Mesolithic/Early Neolithic assemblages (Ballin 2006; forthcoming b). The broad flake used as a blank for retouched piece SF 2 has a finely faceted platform remnant, and it was clearly struck from a Late Neolithic Levallois-like core (Ballin forthcoming a; Suddaby & Ballin 2011).

7 THE MEDIEVAL FINDS

7.1 Small finds

The very small quantity and lack of quality among the small finds is initially surprising in the context of an episcopal manor. In part this may reflect the very small area excavated but also suggests that during the use of the buildings in Phases 3 and 4 the area was kept fairly clean. This is also true of the ditch until it was filled with rubble in Phase 6 after the manor buildings were demolished. The Phase 5 midden is unusual as it seems to have been almost purely comprised of food waste with little general rubbish and very little pottery. It is notable that there is a total lack of more personal items such as knives, buckles or brooches.

Copper alloy

Three fragments of copper-alloy scrap were found, one in the Phase 3–4 oven in Building 10, the others in the rubble of Phase 6. Two are probably small rim fragments from copper-alloy vessels.

- 1 Copper-alloy scrap fragment. 180 × 190mm; 1mm thick. SF 7, context 8, Phase 6.
- 2 Copper-alloy scrap, slightly curved. Probable vessel fragment. 460 × 280mm; 2mm thick. SF 8, context 3/1, Phase 6.
- 3 Copper-alloy scrap, twisted with one edge possibly from rim of a vessel.
 48 × 11mm; <1mm thick, SF 9, context 42, Phase
 3-4

Lead

A single piece of lead window came was found in the widespread burnt layer overlying the Phase 4 ovens in Building 16. This is quite likely to be from Building 16 itself as it appears to have become fairly derelict at this time before the midden dumping of Phase 5.

4 Twisted lead window came fragment. Length 68mm. One end appears to be c 5mm wide with flattened U- or H-section. SF 10, context 43, Phase 4.

Iron

Preservation of iron on the site was very poor. A total of only 52 nails or nail fragments were recovered. Most were from rubble, where they may be assumed to be part of the demolition of the stone buildings. Others were in contexts associated with ovens or hearths 42 and 51, and overlying burnt spreads suggesting the re-use as firewood of timbers taken from

the possibly already derelict buildings. Those that could be measured ranged between 37mm and 80mm in length. Other iron finds are described below.

- 5 Fragment of horse shoe with one nail hole. 53mm x 28mm. SF 11, context 22, Phase 5.
- Flat tapering strap with wider end bent at right angles.
 - Possible fitting from chest or furniture. $75 \times 10-13$ mm. SF 12, context 43, Phase 4.
- 7 Strap fitting with two rectangular plates riveted together.
 - 50×13 mm. SF 13, context 20/4, Phase 6.
- 8 Barrel padlock spring? Length 37mm. SF 14, context 51, Phase 4.

Stone

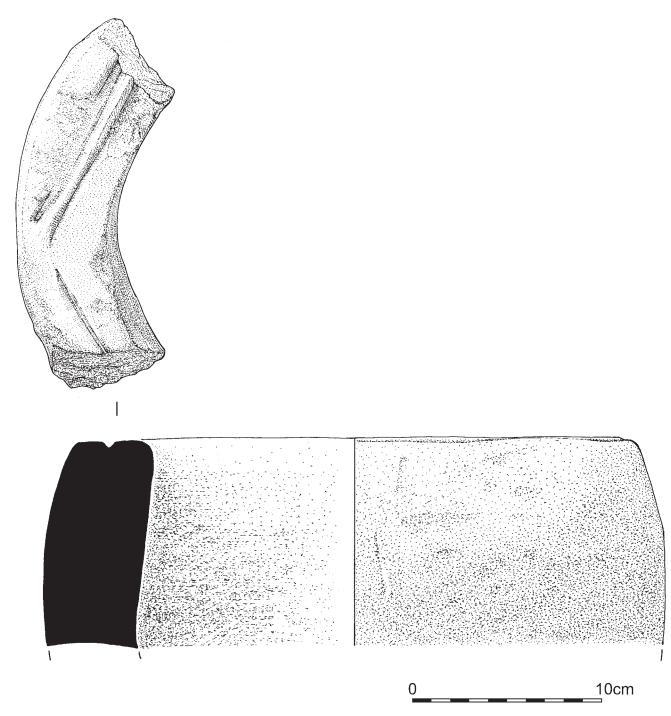
Part of a decorated stone basin or bowl (illus 12), c 300mm in diameter, may be compared with a stone basin from the Carmelite Friary at Linlithgow (Stones 1989, ill 90: 181L) or with the portable font c 266mm in diameter from Greyfriars Church in Aberdeen (Reid 1912, 20) and thought to date from the 15th/16th century. The context of the Old Rayne basin suggests that it was broken and discarded by the late 13th century. Although the suggested parallels are from religious contexts, it is equally possible that this had a secular use, possibly as a stone mortar (Platt & Coleman-Smith 1975, fig. 269, especially 2199: 13th century).

- 9 Roughly circular disc made from slate. 800 × 850mm; <10mm thick. Possible vessel lid. SF15, context 2/1, Phase 6.
- 10 Rim and part of wall of stone basin/bowl. 300mm external diam; 110mm surviving height, beginning to curve in to base; 45mm thick at rim, thickening to 55mm. Worn incised linear decoration on top of rim. SF 16, context 54, Phase 2.

7.2 Non-ceramic building materials

7.2.1 Slate

There were a very large number of broken and complete stone roofing slates (illus 13) from the rubble layers of Phase 6, especially from context 8 and from 20/3 where they appeared to have been thrown in to fill the top of the cistern pit. A large number of the more complete slates were sorted and a sample representative of the full range of sizes and types measured, ranging between $425 \times 265 \, \mathrm{mm} \times <25 \, \mathrm{mm}$ thick and $115 \times 70 \, \mathrm{mm} \times <10 \, \mathrm{mm}$ thick. All had peg holes at the slate head. These stone slates were clearly from a graduated slate roof, a long tradition in



Illus 12 Stone basin/bowl (No. 10). (Illustration by Jan Dunbar.)

Scotland (Naismith 1989, 98). Two of the slates had opposed U-shaped notches below the shoulder; these slates would have been from a valley between two sections of roof at right angles to each other – a good parallel to this can be seen in the roof of 16th-century Tilquhillie Castle, Aberdeenshire (Coyne 2000, fig. 6). The source of the slate is likely to have been in the Foudland area, some 10km away.

7.2.2 Worked red sandstone

Dressed red sandstone blocks survived in both

Buildings 10 and 16 at corners and doorways with small fragments elsewhere in the rubble. However, over the years sandstone from the site has been ploughed up and reused elsewhere. A block ploughed up in the 1960s, kept in a garden in Old Rayne and now in a garden in Elgin, gives an indication of the quality of the stonework that has been lost (illus 14).

7.3 The pottery

The assemblage of medieval pottery from Old Rayne is comparatively small, amounting to some 380



Illus 13 Roofing slates



 ${\it Illus~14~Dressed~red~sandstone~fragment~from~Old~Rayne, now~in~private~ownership~in~Elgin.}$

Table 2 Pottery by Phase

Phase	C13/14th Redwares	Imports	Modern C19th/20th	Prehistoric Pot
1–2	-	_	_	1
2	1	_	_	_
2–3	59	_	_	_
2–4	2	_	_	_
2–5	-	_	_	_
2–6		1 White gritty ware	_	
3		_	_	
3–4	7	_	_	
3–6	1	_	_	
4	64	2 N Yorkshire 1 early stoneware?	-	1
4–5	5	1 greyware	_	_
5	7	_	3	_
5–5		_	_	
5–6	2	_	_	
6	147	4 N Yorkshire(plus tiles + roof finials)	10	1

sherds, of which c 300 derive from Phases 1–6, with the remainder being from unstratified topsoil and a very small amount from the evaluation trenches.

With the exception of seven sherds, all the pottery is in the Scottish Redware tradition, locally made and dating to the 13th/14th centuries. Most of the Redware sherds are body sherds with only seven rims and five handles, four of which combined rim and handle. Two sherds of greyware may be of local production. With the exception of one sherd of glazed White Gritty Ware and a sherd of possible Stoneware, the only imported ware present is from N Yorkshire, probably Scarborough, and accounts for three sherds of the same jug (Table 2). Almost 50% of the pottery was recovered from Phase 6, the final destruction and levelling of the site. Not surprisingly, most of the material showed considerable erosion and was clearly redeposited. Although not closely datable, the pottery suggests that the main activity on the site was in the 13th and 14th centuries.

7.3.1 Form and function

As is often the case in the 13th and 14th centuries, the most common form of vessel in use is the jug. Almost without exception this is the case with the Old Rayne assemblage, and it is assumed that these are mainly table wares for water, beer or wine. The only exceptional form represented is a single, fairly abraded sherd of a urinal with a portion of the aperture. One striking aspect of the pottery assemblage is the virtually total absence of cooking pots; all the more surprising in the context of the Phase 4 ovens. Also absent are other forms of cooking vessels

such as skillets, dripping pans and meat dishes. This may be a reflection of the use of metal cooking vessels.

7.3.2 Decoration

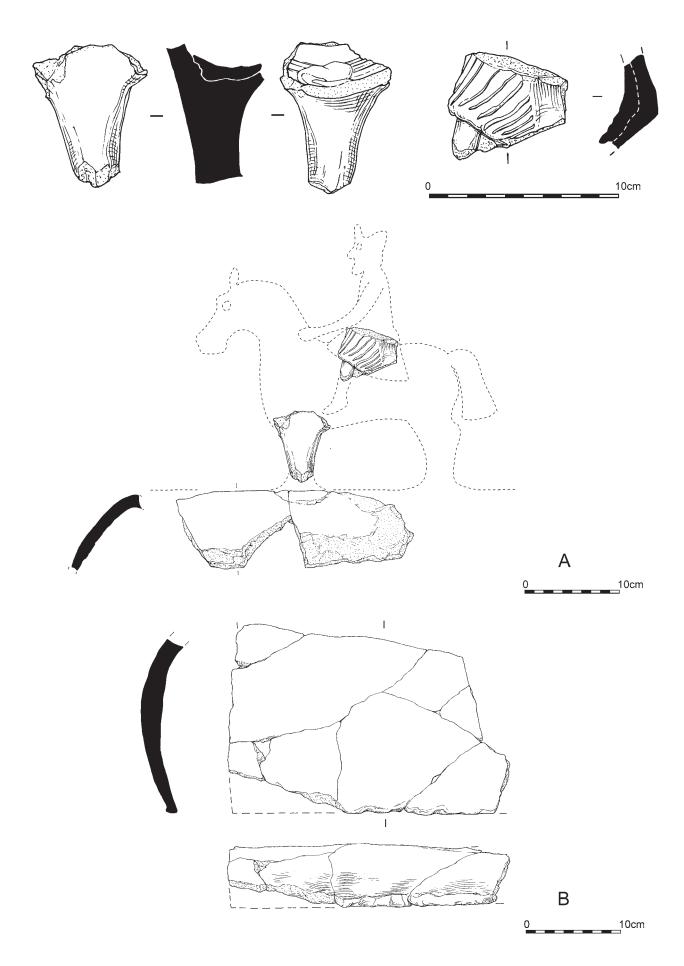
In general the vessels represented are glazed externally and lack the highly decorated features that are a common feature of English and continental pottery of this period. Some body sherds have rouletted decoration on applied strips and there is a single example of a possible face mask jug. A small number of sherds bear incised wavy line decoration and two have 'raspberry' roundels.

7.4 Ceramic roof furniture

One of the more unusual aspects of the surviving ceramic on the site was the presence in the demolition rubble of Phase 6 of portions of at least two locally produced ridge tiles and an imported exotic Scarborough Ware ridge tile or finial bearing a possible equestrian figure.

The locally produced ridge tiles are in the Scottish Redware tradition with a very coarse red fabric and covered with a drab olive-green glaze (illus 15: B). The more complete example measures at least 350mm in length by 240mm across. Although not common in Scotland, locally produced Redware ridge tiles of a similar type were found at the deserted medieval settlement at Rattray, also in a manorial context (Murray & Murray 1993, 168 and fig. 29).

Portions of a Scarborough Ware ridge tile were found. Although not complete, the surviving portions



 ${\it Illus~15A: Details~and~reconstruction~of~decorative~ceramic~ridge~tile~and~finial~imported~from~Yorkshire.} \\ {\it B: Locally~produced~Redware~ceramic~ridge~tile.} ({\it Illustration~by~Jan~Dunbar})$

measure 240mm in length by 160mm across, in a pinkish-beige fairly fine sandy fabric (illus 15: A). The tile, which has suffered severe spalling, was covered on its upper surface with a thick, lustrous green glaze, much of which has also become detached. Although it is far from certain, the upper surface of the tile has scarring, which may indicate the position of the finial.

Only two pieces of the possible finial, in the form of an equestrian figure, survive. Both pieces are in the same fabric as the ridge tile and covered in the same lustrous green glaze. The first piece (75mm long and, at the body, c 55mm across) represents the upper portion of a horse's leg where it joins the body of the horse (illus 15: A). The second piece (c 77mm long \times 66mm) would appear to be the lower portion of the rider. A series of incised horizontal lines may

represent the lower part of the rider's tunic, below which projects a possible piece of the rider's leg (illus 15: A).

No parallels have so far been found that would indicate how precisely the figure and the ridge tile come together but it is assumed that it would be similar to the zoomorphic finial on the ridge tile from Miserden Castle, Gloucestershire (Hurman & Nenk 2000).

The occurrence in Scotland of ridge tiles with either zoomorphic or equestrian finials is extremely rare, no parallels are known of 13th/14th-century date, the only definite known example being a highly decorated equestrian roof-finial from Canongate, Edinburgh which dates to the 16th century and is a Low Countries import (Haggarty & Murray 1992).

8 THE ENVIRONMENTAL EVIDENCE

8.1 The animal bone, by C Smith

The bulk of the animal bones and mollusc fragments from the site were recovered by hand-excavation, but two contexts from a midden in Phase 5 (contexts 22 and 38) were wet-sieved in order to retrieve small fish bones (full report Smith 2009).

8.1.1 Species present

The earliest phases on the site produced very little bone. Fragments identified only as indeterminate mammal bone were present in Phase 1–2 and Phase 2 (early medieval). Medieval Phases 2–3, 2–4 and 2–5 contained cattle, pig and indeterminate mammal fragments. In addition to these species, horse, sheep/goat and roe deer were present in medieval Phase 4.

The Phase 5 midden was, however, more productive and present in the hand-excavated contexts (18, 22 and 38) were the remains of cattle, sheep/goat, pig, horse, roe deer (*Capreolus capreolus*), dog, fox (*Vulpes vulpes*), domestic fowl (*Gallus gallus*), domestic/

greylag goose (Anser anser), amphibian (frog or toad), fish and small fragments of oyster (Ostrea edulis) and mussel (Mytilus edule) shell. Bones categorised only as large ungulate, small ungulate, indeterminate mammal and indeterminate bird were also recorded (Table 3). The sieved samples from two midden contexts contained a similar species range, although roe deer was absent. A single rabbit bone was present in the sieved sample from context 38 and a further amphibian bone was noted in the sample from context 22. It is worth noting that separate fragments from the same dog radius were recovered from contexts 22 and 38 in the Phase 5 midden.

The most frequently occurring mammals were cattle and sheep/goat, followed by pig. Although cattle outnumbered sheep/goat in terms of fragment count and weight, an estimation of the minimum numbers of animals (MNI) indicated that three cattle, four sheep/goats and two pigs were represented (Table 4). However, as individual cattle provided perhaps twelve times as much meat as primitive sheep breeds (Chaplin 1971, 134), the contribution to the diet from cattle to sheep/goat at Old Rayne is in the ratio of 36: 4, or nine times greater, based on MNI.

Table 3 Fragment count (n), weight of fragments (g), % food-forming mammals based on fragment count and % food-forming mammals based on weight

Species	n	weight (g)	% food-formers based on fragment count	% food-formers based on weight
Cattle	249	3282	64.2	76.2
Sheep/goat	105	521	27.1	12.1
Pig	28	271	7.2	6.3
Horse	3	216	0.8	5.0
Roe deer	3	17	0.8	0.4
Dog	3	37		
Fox	5	16		
Large ungulate	208	1320		
Small ungulate	81	123		
Indeterminate mammal	2214	3363		
Domestic fowl	40	42		
Goose	9	13		
Indeterminate bird	17	11		
Fish	68	11		
Amphibian	1	>1		
Mollusc		74		
TOTAL	3034	9318		

Table 4 Fragment count (n), weight of fragments (g), minimum numbers of animals (MNI) and % food-forming mammals in Phase 5 midden

Species	n	MNI	weight (g)	% food-formers
Cattle	213	3	2824	63.8
Sheep/goat	99	4	496	29.6
Pig	19	2	237	5.7
Horse	1	1	167	0.3
Roe deer	2	1	6	0.6
Dog	2	1	28	
Fox	4	1	15	
Large ungulate	197		1222	
Small ungulate	108		118	
Indeterminate mammal	1700		2672	
Domestic fowl	41	4	42	
Goose	9	1	13	
Indeterminate bird	17		11	
Fish	65		10	
Amphibian	1		>1	
Mollusc			74	
ГОТАL	2478		7936	100.0

8.1.2 Age of animals at death

An estimate of the ages at which domestic animals died or were killed provides useful information regarding patterns of livestock management. However, it is to be expected that conditions of preservation may not have been favourable to the survival of the bones of younger animals at this site. This is because younger bones are relatively less well mineralised and therefore contain a higher proportion of organic material than those of older animals, thus in conditions unfavourable to organic preservation younger bones will tend to be destroyed more quickly.

With this in mind, mandibular tooth wear and eruption patterns as well as the state of epiphyseal fusion of the long bones was noted. All of the surviving mandibles of cattle came from mature adults in which the lower third molar was completely in wear (one example in each of Phases 2–3, 4 and 5). Two sheep/goat mandibles in the Phase 5 midden came from animals estimated to have died or been killed between 3–4 years and 4–6 years respectively. A partial pig mandible from the same midden probably died between the ages of 13 and 20 months.

Epiphyseal fusion evidence for cattle and sheep/goats from the Phase 5 midden is presented in Table 5 (the evidence for other phases and species being too scant). Despite the potential preservation bias and the small sample numbers, it would appear that more sheep than cattle were killed at a younger age. This is not unusual in a medieval context and has been

noted elsewhere in Scotland, particularly in urban settings.

As regards other animals, the dog radius from the Phase 5 midden was unfused both proximally and distally and, although large, must have come from an immature animal. A roe deer mandible in a Phase 4 context (43) retained its deciduous dentition and was therefore also immature.

8.1.3 Butchery

Evidence of butchery was generally in the form of knife cuts or chop marks noted on the bones of cattle, sheep/goat and pig. There was no evidence that saws had been used and it is assumed that carcasses were disjointed using axes or cleavers. There was some evidence of skilful removal of limbs, as shown by slivers of bone derived from the articular ends of the femur and humerus of cattle, evidently produced when cutting the carcass into manageable pieces.

8.1.4 Size of animals

Anatomical measurements were made where butchery and preservation allowed. Although no intact long bones were recovered, the bones of domestic livestock appear to have come from animals which were small in stature when compared with bulky modern breeds. These small cattle, sheep/goats and pigs were the norm in the medieval period. The

Table 5 Phase 5 midden: age categories of cattle and sheep/goats at death, based on epiphyseal fusion of long bones

	Ca	attle	Sheep/goat	
Age Category	n	%	n	%
F/J			1	3.3
J	1	4.2		
J/I	1	4.2	7	23.3
I/A	8	33.3	7	23.3
A	14	58.3	15	50.0
Total	24	100.0	30	99.9

Key: F/J= Foetal/Juvenile; J = Juvenile; J/I = Juvenile or Immature; I = Immature; I/A = Immature or Adult; A = Adult

domestic fowl bones from Old Rayne were also from small birds, some apparently of bantam size. The geese were of a similar size to the wild greylag.

A single large dog radius recovered from the Phase 5 midden was from a young animal and therefore could not be used to give an accurate estimate of height. However, the dog from which it came was probably above average height for this period and may have come from a large working dog, such as a hound.

8.1.5 Discussion

The animal bone assemblage indicates a meat supply dominated by domestic livestock and poultry. A good supply of fish was also available, as well as marine molluscs such as mussel and oyster. There was very little evidence that hunting took place, other than from a small number of roe deer bones, a partial fox and a large immature dog, which may possibly have been a hound. The lack of evidence of hunting is perhaps surprising given that in the 13th century Alexander II granted the privilege of 'free forest' to Bishop Ralph de Lambley over the lands of Brass and Fetternear. A summer palace and hunting lodge was located at Fetternear in the parish of Chapel of Garioch (Slade 1971, 179). It may be the case that venison and other game were consumed elsewhere than at Old Rayne, perhaps at Fetternear itself, or that the meat supply from domesticated animals was sufficient for the household's needs.

8.2 The fish remains, by R Cerón-Carrasco

Fish remains were identified from three Phase 5 midden contexts (18, 22 and 38) and a Phase 5–6 deposit (52) over the midden. All the fish bones were examined and identified to the highest taxonomic level, usually to species or to the family group (Cerón-Carrasco 2009). Nomenclature follows Wheeler & Jones (1989, 122–123). Haddock (Melanogrammus aeglefinus) and cod (Gadus morhua) were the only two species present in this small fish bone assemblage. The Gadidae family group are marine cod-family fishes; in Scotland this group

Table 6
Phase 5 fish species representation by NISP

Species	NISP
Cod	5
Haddock	77
NI Gadidae	2

includes some of the well-known species including cod and haddock. Table 6 summarises the species representation by NISP (Number of Identified Specimens) per fragment count for the Phase 5 midden as this produced most of the identifiable fish bone elements.

8.3 The plant remains, by S Timpany and D Masson

Seven samples from Old Rayne, Aberdeenshire were sent to Headland Archaeology for processing and identification (Timpany & Masson 2009). Three of the samples were taken from the lower fills of the ditch (2/4, 3/3, 3/4), in part to assess if there was any evidence that the ditch had been waterlogged. Three further samples were taken from Phase 3 and 4 hearths/ovens 42 and 60 (42, 60/2, 60/3) to assess their function. One sample was taken from the Phase 5 midden (22).

8.3.1 Plant remains

Charred cereal grain was found within five samples (contexts 3/3, 3/4, 22, 42 and 60/2) with a mixture of grain recovered including oat (*Avena* sp.), club/ bread wheat (*Triticum aestivocompactum*), rye (*Secale cereale*) and barley (*Hordeum vulgare*). The grains were generally well preserved within the sample from oven 42, however, grains from the other samples were found to be poorly preserved, being either abraded and/or broken. Charcoal fragments were present in the samples from hearths/ovens 42 and 60. A charred hazel (*Corylus avellana*) nutshell was recovered from context 60/2.

8.3.2 Ditch fill

Only two samples from the ditch fill (contexts 3/3, 3/4) produced finds, with a third sample (context 2/4) being void of archaeological materials. The ditch assemblage was found to consist of rare to occasional amounts of charred oat and barley grain, together with a rare amount of burnt bone in context 3/3. The poor preservation of the grain being abraded and broken and the small quantity of burnt bone suggests this material has been washed into the ditch from nearby surroundings. The abraded grain in particular suggesting it was exposed for some time before being incorporated into the ditch fill. None of the ditch samples processed was waterlogged.

8.3.3 Hearths/ovens, Phases 3-4

The fills from two hearths/ovens were found to contain a mixture of predominantly burnt bone and charred cereal grain (including burnt fish bone in oven 60). The hearths/ovens were thought to represent cooking ovens during the excavation

and the finds recovered from the sample processing appear to have borne this out. It would appear that hearth/oven 42 was used for both cooking meat and drying grain or baking. This oven contained the greatest quantity of cereal grain, which was largely of oat and rare barley, rye and club/bread wheat. Hearth/oven 60 on the other hand appears to have been largely used for the cooking of meat, including fish. Charcoal is present within these samples which is likely to relate to remnants of the fuel used within the ovens. Also present in all samples are daub fragments, which could have originated from the superstructure of the ovens.

8.3.4 Midden, Phase 5

The materials recovered from context 22 are consistent with midden dumps seen in other urban medieval middens (eg Timpany 2008). Much of the material recovered from this sample is likely to relate to the dumping of domestic waste, in particular that of animal bone (Smith above) and fish bone (Cerón-Carrasco above), with rare quantities of charred grain also present (oat and barley).

9 DISCUSSION

The documentary evidence indicates that from the 12th century Old Rayne was part of the lands of the bishop of Aberdeen and that from at least the 15th century it was an administrative centre for some of those lands. As such it must be evaluated as a manorial centre comparable to contemporary secular sites such as Rattray, Aberdeenshire (Murray & Murray 1993). However, it was also one of the occasional residences of the bishop and must have been able to house him and his household in some comfort. Both of these facets of the site will be examined in the light of the archaeological evidence, while emphasising that only a very small part of the site has been excavated, so conclusions are tentative and limited.

The ditch appears to have been dug around the base of a low knoll, forming an irregular D-shaped plan, possibly beside an existing track or road (illus 16). This irregular plan and the use of a slight natural mound in a manner reminiscent of many mottes in Scotland led RCAHMS (2007, 154) to describe Old Rayne as difficult to classify specifically as either a

motte or a moated site. In common with both, the ditch would have provided a possibly limited defence but, as importantly, it would have both defined and emphasised Old Rayne's manorial status. It is notable that all four of the excavated ditch sections indicate that, apart from a little natural silting and erosion of the sides, the ditch was kept open and empty until the dereliction and demolition of the late 16th–18th centuries.

In size, at 75–80m in diameter, it was a reasonably large manorial site, comparing with the 60–70m of the Comyn manor at Rattray (Murray & Murray 1993) and larger than many mottes in the area (RCAHMS 2007, 152–3). The size may, however, simply reflect the physical possibilities of the site and the needs of its rural and agricultural economy rather than its episcopal status: for instance by comparison, the 13th-century bishop's palace in the more restricted urban context of Cathedral Square in Glasgow only appears to have been c 28m in diameter (Clarke & Thomson 1987). An inventory dated 1519 of the bishop of Aberdeen's urban palace in Old Aberdeen lists accom-



Illus 16 View looking west across Building 16 (foreground) and Building 10 (background) towards the village street. The 1990 excavation was on the site of the garage and picnic table on the right.

modation for the bishop, his household and guests, as well as buildings related to the domestic economy of any large medieval household: kitchens, stores, bake-and brew-houses and a doocot for fresh meat (Innes 1845, ii, 174). In the rural context of Old Rayne there would have been additional necessary buildings such as grain stores, stables and byres, and it is possible that these too may have been within the moated area. There was also a chapel on the site by the late 14th century (Innes 1845, i, 164).

The structural evidence from the Phase 3 buildings of the late 13th/early 14th centuries is indicative of the manor's status. Building 16 appears to have been at least two-storeyed and possibly of L- or T-shaped plan with dressed red sandstone at the quoins, windows and doors, and it may have had glass windows. The roof of well-graded stone slates had a ridge of glazed ceramic tiles, at least one of which was imported and highly decorated. The original function of the building is unclear but its quality suggests it may have contained private apartments or guest chambers, only being used as a kitchen at a later period. The smaller secondary Building 10 may always have been a kitchen with the adjacent cistern perhaps supplying water for both buildings.

It is beginning to appear that stone or partially stone buildings may have been more common in medieval Scotland than originally thought, with 12th- to 15th-century examples excavated in Perth, Aberdeen, Dundee, Peebles, St Andrews and Edinburgh (Murray 2010, 134-5). Nevertheless, in the 13th century a stone building of this quality would have represented a huge investment in terms of materials and demonstrates access to masons, glaziers and slaters, who would of course have been employed in church building and therefore available to the bishops. The trend of replacing timber buildings with stone has been demonstrated in the 13th century in an episcopal context at Spynie, the main residence of the bishops of Moray (Lewis & Pringle 2002, 169) and in the early 14th century in an aristocratic secular context at Rattray (Murray & Murray 1993, 124–8).

Apart from the structural evidence there was little to indicate the status or wealth of the site; there were no coins, no personal items and virtually no imported pottery. The only object which potentially might have had any ecclesiastical reference is the stone basin found in a 13th-century context. This lack appears to be in contrast to another of the Aberdeen bishop's palaces, at Fetternear (Dransart & Trigg 2008) and to the evidence from a small excavation in the precinct of the Brechin bishop's palace in Brechin, where there are a range of high-status small finds (Murray & Murray 2009, 2010a). This apparent paucity may be a bias reflecting the small area that was available for excavation, especially the lack of floor or midden deposits from the 13th- and early 14th-century phases of the site, but a wider range of artefacts might have been expected from the late 14th/15th-century midden of Phase 5.

Even in the 13th and 14th century there would

probably have been a small settlement adjacent to, but outside, the ditched area. Support for such a hypothesis is given by the evidence for a settlement beside the Moray bishop's palace at Spynie (Lewis & Pringle 2002, 11–12) or indeed the 'village' beside the secular manor at Rattray (Murray & Murray 1993). The inhabitants of the Rattray settlement included specialist craftsmen such as blacksmiths and potters and at Spynie there appear to have been fishermen living in the adjacent settlement. It is not unlikely that medieval Old Rayne may have had a mill and smithy as well as the homes of the tenants who worked on the bishop's land.

As a manor the bishop's establishment at Old Rayne would have had its own farmland as well as administering the wider estates. Traces of rig and furrow cultivation observed in the evaluation trenches 4 and 6 in the field to the east and north-east of the enclosure (illus 1 and Murray & Murray 2010b) may date back to the medieval manor, although they could have continued in use until the Agricultural Improvements of the 18th century. A couple of very abraded sherds of medieval pottery in the topsoil in this area are likely to have been from the spreading of midden material. Oats, club/bread wheat, rye and barley were all identified from samples from the Phase 3 and 4 ovens and some oats and barley from the Phase 5 midden, so it would appear likely that all may have been grown on the episcopal estates in the 13th to 15th centuries, but the sample is too limited for any trends to be identified. Oats, wheat and barley have been found regularly in urban medieval contexts, but rye is relatively rare and may have been only grown on a small scale in medieval Scotland (Dickson & Dickson 2000, 236). The environmental evidence indicates that the earlier oven 42 in Building 10 was used for both cooking meat and baking bread, or possibly drying grain (Timpany & Masson above). The slightly later oven 60 in the then derelict Building 16 appears in contrast to have been used primarily for cooking meat and fish. However, it should be stressed that such ovens could also have been used for brewing barley into ale and for preserving fish and meat by smoking, as well as for non-culinary activities such as dyeing cloth. Both the larger circular ovens (42 and 51) and the smaller keyhole-shaped oven (60) are types that can be seen among the 13th- and 14th-century ovens on the manor site at Rattray (Murray & Murray 1993, fig. 8) and similar structures are relatively frequent on urban medieval sites.

The bulk of the animal and fish bone is derived from the Phase 5 midden and is not therefore representative of the whole life of the manor. However, in common with many contemporary sites, cattle, sheep/goat and pigs were all represented, with cattle providing most of the meat eaten during this period (Smith above). The fish on the site are most likely to have been brought there from Aberdeen, or perhaps

less likely, from the Buchan coast. The dominance of haddock and cod is similar to assemblages from Aberdeen (Cameron & Stones 2001, 277–8) and Rattray (Murray & Murray 1993, 206). The minimal evidence of hunting has been noted (Smith above) and is in marked contrast to the Rattray manor, although it should be noted that deer bones were not present (or not surviving) where they might be

expected at the 13th/14th-century hunting lodge on the motte at Strachan, Aberdeenshire (Yeoman 1984, 345).

The evidence not only suggests considerable similarity between this episcopal manor and its secular counterparts but it also emphasises the very small number of manorial sites yet excavated in northern Scotland.

10 ACKNOWLEDGEMENTS

The 2008 excavation was funded by Hamish McIntosh and the authors are grateful for his help and support throughout. The authors would also like to thank Moira Greig and Alexandra Shepherd for access to the records of the 1990 excavation,

Penny Dransart for discussing Fetternear and Dave Harding and all others who worked on the 2008 excavation for their hard work. We are grateful to Jan Dunbar for illustrations 12 and 15.

11 REFERENCES

- Ballin, T B 2006 'Re-examination of the Early Neolithic pitchstone-bearing assemblage from Auchategan, Argyll, Scotland', *Lithics* 27, 12–32.
- Ballin, T B 2008 *Old Rayne, Aberdeenshire : The Lithic Assemblage*. Unpublished full report and catalogue in archive.
- Ballin, T B forthcoming a 'The British Late Neolithic "Levalloisian", and other operational schemas from the later prehistoric period. A discussion based on finds from the Stoneyhill Project, Aberdeenshire', Proceedings of Conference held by the British Neolithic Studies Group, at the British Museum 2005.
- Ballin, T B forthcoming b 'The Lithic Assemblage', in Murray H K & Murray J C, in preparation, An early Neolithic building and Mesolithic occupation at Garthdee Road Aberdeen.
- Boece, H 1527 Scotorum historiae a prima gentis origine. Paris.
- Cameron, A S & Stones, J A 2001 Aberdeen: an indepth view of the city's past. Edinburgh: Soc Antiq Scot (Monograph ser 19).
- Cerón-Carrasco, R 2009 Report on the analysis of the fish remains from the excavations at Old Rayne, Aberdeenshire. Unpublished full report and catalogue in archive.
- Chaplin, R E 1971 *The Study of Animal Bones from Archaeological Sites*. London: Seminar Press.
- Clarke, M & Thomson, M 1987 'Cathedral Square, Bishop's Castle: tower, wall, drain, medieval and later pottery', *Discovery Excav Scot*, 50–1.
- Coyne, J 2000 'Tilquhillie castle the owner's approach', in R Clow (ed), Restoring Scotland's Castles. Glasgow: John Smith & son, 67–86.
- Dickson, C & Dickson, J 2000 Plants and People in ancient Scotland. Stroud: Tempus.
- Dransart, P & Trigg, J 2008 The Bishop's Palace, Fetternear 2005–2006. Lampeter: Scottish Episcopal Palaces Project.
- Greig, M & Shepherd, A 1990 'Old Rayne', *Discovery* and Excav Scot, 31.
- Groome, F H 1892–96. 2nd edit. Ordnance Gazetteer of Scotland: a graphic and accurate description of every place in Scotland. Edinburgh. On line at www.gazeteerofscotland.org.uk.
- Haggarty, G & Murray, (J) C 1992 'A highly decorated equestrian roof-finial from Edinburgh', in D Gaimster & M Redknap Everyday and exotic pottery from Europe: Studies in honour of John G Hurst, Oxford: Oxbow books, 194–7.
- Hurman, B & Nenk, B 2000 'The Gerald Dunning archive and the study of medieval ceramic roof furniture', *Medieval Ceramics* 24, 63–72.
- Innes, C N (ed) 1845 Registrum Episcopatus

- Aberdonensis. Ecclesiae Cathedralis Aberdonensis Regesta Que Extant in Unum. Edinburgh: Spalding Club.
- Lewis, J & Pringle, D 2002 Spynie palace and the bishops of Moray. Edinburgh: Soc Antiq Scot (Mongraph Ser 21).
- Murray H K 2010 'The Buildings' in D Perry et al Perth High Street: Archaeological Excavation 1975–1977, Perth: Tayside and Fife Archaeological Committee, 127–198.
- Murray H K & Murray J C 1993 'Excavations at Rattray, Aberdeenshire: A Scottish deserted burgh', *Medieval Archaeol* 37, 109–218.
- Murray H K & Murray J C 2008 Bishop's Manor, Old Rayne. *Discovery Excav Scot* new ser 9, 27.
- Murray H K & Murray J C 2009 'Bishop's Close, Brechin', *Discovery Excav Scot*, new ser 10, 31.
- Murray H K & Murray J C 2010a 'Bishop's Close, Brechin', *Discovery Excav Scot*, new ser 11, 32.
- Murray H K & Murray J C 2010b 'Full archive report of the excavations at the Bishop's Manor, Old Rayne', Aberdeenshire in 1990 and 2008. Unpublished full report in archive.
- Murray H K, Murray J C & Lindsay W J 2009 'Medieval timber-lined wells in Elgin', *Proc Soc Antiq Scot* 139, 213–27.
- Naismith R J 1989 Buildings of the Scottish Countryside. London: Gollancz.
- NSA 1845 The New Statistical Account of Scotland. Edinburgh
- OS 1870 Ordnance Survey. 'Aberdeen', Sheets XLIV.8 and XLIV.4 (1867–70), 25 inch: mile
- Platt C & Coleman-Smith R, 1975 Excavations in medieval Southampton 1953–1969, vol 2: the finds. Leicester: University Press.
- Pryde, G S 1965 *The burghs of Scotland: a critical list*. Oxford: Oxford University Press.
- RCAHMS 2007 In the shadow of Bennachie: A Field Archaeology of Donside, Aberdeenshire. Edinburgh: RCAHMS.
- Reid, RW 1912 Illustrated Catalogue of the Anthropological Museum, Aberdeen: University of Aberdeen.
- Roy. Military Map of 1747–55 online at http://www.nls.uk/maps
- Shepherd, I 2006 Aberdeenshire: Donside and Strathbogie: An illustrated Architectural Guide. Edinburgh: Rutland Press.
- Slade, H G 1971 'The House of Fetternear: a history and a description', *Proc Soc Antiq Scot* 103 (1970–1), 178–91.
- Smith, C 2009 *The animal bone from Old Rayne, Aberdeenshire*. Unpublished full report and catalogue in archive.
- Stones, J A (ed) 1989 Three Carmelite Friaries:

- Excavations at Aberdeen, Linlithgow and Perth 1980–86. Edinburgh: Soc Antiq Scot (Monograph Ser 6).
- Suddaby, I & Ballin, T B 2011 'Late Neolithic and Late Bronze Age lithic assemblages associated with a cairn and other prehistoric features at Stoneyhill Farm, Longhaven, Peterhead, Aberdeenshire, 2002–03'. Scottish Archaeological Internet Reports, 45.
- Timpany, S 2008 SRAB08: Palaeoenvironmental Sample Assessment of Three Sites in Aberdeen.

- Unpublished Client Report, Headland Archaeology Ltd.
- Timpany, S & Masson, D 2009 WGI-07: Old Rayne, Aberdeenshire: Sample Assessment Report. Unpublished full report and catalogue in archive.
- Wheeler, A & Jones A K G 1989 *Fishes*. Cambridge: Cambridge University Press.
- Yeoman, P1984 Excavation at Castlehill of Strachan, 1980–81', *Proc Soc Antiq Scot* 114, 315–364.