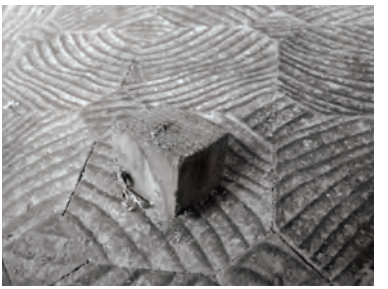
VERNACULAR BUILDING 33

Scottish Vernacular Buildings Working Group

2009–2010



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Cover: Details of the heather huts at Drumlanrig Castle (photographs by Dave Hutchinson): see pp 29–36.

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Acknowledgements

The Editor is particularly indebted to Veronica Fraser and Dave Hutchinson for their enduring support and assistance, and offers warm thanks also to John G Harrison, Ted Salthouse, Brian Wilkinson, Geoff Leet and Ronnie Robertson for their careful preparation and presentation of their pieces and their swift responses to queries.

PREFACE

Although it would be hard to envisage a causal link between the two, these times of recession have certainly coincided with a drop in the number of submissions for *Vernacular Building*. Happily, however, the articles presented here – though small in number – are sufficiently rich in content and varied in subject matter to constitute a worthy publication that will be of interest to any vernacular building enthusiast.

First, we are immersed in the workings of a seventeenth-century construction site, as John G Harrison relates the findings of his research on the planning and erection of Cowane's Hospital, Stirling. Delving deep into the city's archives, Harrison has discovered a wealth of information that gives a vivid picture of the logistics of such a project, from the decision-making processes to the procurement of suitable materials, and from the pay scales of the workers to the expenses incurred by securing deals over drinks. We learn how activity ebbed and flowed according to the seasons, as well as being affected by outbreaks of sickness and socio-political developments of the time.

We then return to the subject of water mills, a theme of several recent *Vernacular Building* essays focusing on Shetland and Orkney. Here Ted Salthouse gives an international account of the development of the horizontal mill, which has a history dating back to pre-Christian times. The workings of the mills' mechanisms are explained, and regional variations in their design and function are pointed out.

Turning to a less practical and more whimsical version of the vernacular, our next focus is the heather huts at Drumlanrig Castle in the Scottish Borders, seen by some SVBWG members during the 2009 Autumn Conference. Dave Hutchinson explains the origins of these intriguing shelters, highlighting the creative use of materials and examining differences between them.

In a separate essay, Hutchinson then goes on to investigate the history of woodworking professions in Scotland. His clear

definitions of the nature of each of the trades – from sawyer to joiner and from wright to cabinet maker – will prove invaluable to those researching architectural history who may have little awareness of the distinctions between them. Examining the development of the trades over the centuries, he covers not only the craftsmanship involved but also aspects such as professional hierarchies and the sourcing of timber from both home and abroad. Letterheads, bills and advertisements give a further glimpse into this fascinating field.

Bringing the main articles to a close is a report by Brian Wilkinson on an initiative dedicated to raising awareness of our rural heritage and enhancing the collection of evidence about it. Launched in October 2006 by the Royal Commission on the Ancient and Historical Monuments of Scotland, Scotland's Rural Past encourages the engagement of local communities, and provides volunteers with the skills they need to survey and record sites on their doorstep. The specific example of investigative work carried out at High Morlaggan in Argyll serves to illustrate how the project functions and how valuable it is proving to RCAHMS and the public alike.

In our 'Shorter articles and notes' section, a series of observations from Geoff Leet about horizontal mills leads into reports of SVBWG conferences and meetings. These are followed, as usual, by reviews of recent publications on a range of subjects that are likely to be of interest to our readers.

Abigail Grater

BUILDING COWANE'S HOSPITAL, STIRLING, 1636–50

John G Harrison

Introduction

Cowane's Hospital (sometimes known as the Guildhall) stands beside the Holy Rude Kirk in Stirling. Cowane's charity (which still exists, though with radically changed aims) was established with funds left by John Cowane or Cowan, a wealthy Stirling merchant who died in 1633. The surviving financial accounts provide a record of the building work from the start of preparatory work early in 1636 to completion in 1650. Later publications mentioning the building have used as their source the 1919 study by David B Morris, which contains a brief description of the work along with an account of Cowane's life and information about the charity.[1] The building has undergone radical changes, particularly in the mid-nineteenth century, but still much original structure

Figure 1. Cowane's Hospital has a distinctive E plan.

survives and that, with the very detailed documentation, makes it an important building. This paper is based on fuller examination of the documents, though it does not involve discussion of internal details which are now lost. It suggests some significant revisions and draws some general conclusions about the building industry and its products in the seventeenth century.

The documentary record and the building process

There are several sources relating to the establishment of the charity and its subsequent administration.[2] However, the detailed information on the building work is drawn from the general accounts for the charity which, for the years in question, focus largely on this subject. There are two copies of the accounts: SCA SB5/3/1 and SB5/3/2. SB5/3/2 is the original record, though it has a gap from 1649 to 1668. By 1644 there were suspicions of false accounting and SB5/3/2/1 was begun as a (fairly accurate) duplicate whilst matters were investigated, and was continued thereafter. They are quoted indifferently by date.

The man whose accounts had been questioned was James Robertson, a Stirling merchant, who was appointed as master of works before work began. He had overall responsibility for purchasing and co-ordinating supplies, paying the wages and so on. He was allowed 'expenses' and claimed extensively for trips to visit suppliers, locate materials and negotiate contracts. He was replaced by two merchants acting jointly from mid-1644, the story ending with his death-bed deposition (sometime between August 1646 and December 1648) that the accounts were accurate and with payment of the claimed balance to his widow and daughters in 1652.[3]

Work began with the demolition of the existing houses on the site, putting the reusable timber and stone into storage; the demolition involved the masons, slaters and various barrowmen in steady work from early March to May 1636. In May a 'lodge' was built, with deals and nails, the 'little wooden hut' essential to any building site until recent decades;[4] and during that spring and

summer, items such as timber and lime were being bought in (the timber specially shipped in from Leith). Meanwhile, since the bedrock in Stirling ranges sharply from outcrops to deep declivities, coal and peat were burned on the rock surface 'where the house is foundit', taking six weeks to achieve the levels required for cellar and wall-footings.

Around that time, too, an agreement was made with James Rynd, the main mason for the project. He was a burgess of Stirling though none of his other major work has been identified. Discussions with Rynd and his men 'at the devysing the plot of the house' suggest that he may have provided an outline plan and determined the exact site. Around the same time Rynd was also paid for 'devysing the turnpyck stair' – a point to be considered again later. But, whilst Rynd was to have an important role, a decision had been made to employ an Edinburgh 'architect'. Sometime that spring, the Provost of Stirling held discussions in Edinburgh with Sir Anthony Alexander and John Mylne, mason. Sir Anthony, a son of William, Earl of Stirling, was himself a burgess of the town and royal surveyor in Scotland at this period but he died in London later that year. It was the royal master mason, Mylne, who came to Stirling 'to draw the plott of the house' for which he was paid £40 10s Scots in addition to various costs for drinks with his 'man'. Mylne returned briefly to Stirling during the following year, 'revissing and correcting som thingis of the pleet [plot or plan]'.

During the first year, sand and other materials were brought to the site by hired horses but, on Whitsunday 1637, Robertson bought two horses at Dunblane for carrying the sand. They were kept until October that year when they were sold. In the mean-time, shoeing had cost £9 5s and their feed (grass, bran and draff) had cost £29 8s; they would certainly lose condition if expected to work on such a poor diet and that may explain the fact that the horses were sold for £18 6s less than they cost. More horses were bought the following year but thereafter Robertson reverted to hiring horses as required.

In the second week of May 1636 'James Rynd and his men begane to hew'. Rynd was typically paid £4 per week at this stage,

his three ‘men’ were paid 12s per day each and his two prentices 6s per day each. Nobody was paid for days off though Rynd was often paid extra as expenses when, for example, he had to visit quarries to order stone.

For the first few years the work progressed with a fairly regular rhythm, falling off sharply or even stopping in winter, such as in 1638–9 when there was no work from 22 December to 24 February. In summer there were more men of all sorts at work and they were paid more, per day; there is a payment in 1647–8 of 14s for drinks during discussions with the masons ‘when the days lengthened’, their joint pay then going up from £6 to £8 per week. Barrowmen, paid the least per day, were those most likely to be laid off in winter or to work short weeks – and they did not get jaunts ‘on expenses’ either. It was Andrew Leckie, one of the barrowmen, who received a bonus of a pair of shoes because he had been assigned ‘all the hevie bak liftis’ – is it coincidence that, shortly afterwards, he died?

A major break in that annual rhythm came from September 1640 to January 1642 with little building work of any kind, perhaps because of cash flow problems since the Earl of Moray, who had a substantial tranche of the capital, had stopped paying the annual rent or interest due. But the accumulation of building materials did continue. In 1640–41, slates which had been being accumulated over several years and from several sources were put into the ‘ludge’ which was securely nailed up. In 1637–8, men travelled to Burntisland to purchase 39 long fir trees and two short ones and to Leith for 50 ‘trees great and small’. More timbers were bought from Leith in late 1640, as were wandscott and knapple (both types of timber) in 1641. These purchases were all shipped upriver to Stirling.

One of the key purchases was of great timber from Norway in 1640–41. Initially, James Bizzat, merchant of Perth, met Robertson and three other Stirling merchants to agree the deal – over the inevitable drinks. Two contracts were drawn up by the Stirling town clerk, and Robertson paid the cash to the clerk for transmission to his opposite number in Perth, where Robertson shortly went for the signing. Probably, once that was done, the cash or a credit line was given to Bizzat so he could make the purchases in Norway.

Eventually, Robertson got a message from Bizzat, via 'ane Norroway scipper and certaine of his company and William Grant merchant in Perth', that the timber had arrived at the harbour at Alloa. The messengers and Robertson all had a drink together before Robertson and several assistants set off to Alloa to 'receive' the wood. It had probably arrived on a ship designed for the carriage of just such cargo.

This delivery comprised 60 great trees (that is, beams) 36 feet (11m) long and 12 inches (30cm) square, 32 trees of 24 feet (7.3m) long and 380 'schorne deals' of redwood (probably pine) each 14 feet (4.3m) long and 12 inches (30cm) wide. There were also 190 deals of 12 ells (11.3m) long and 60 single trees. After four days when he 'receivit' the timber, Robertson spent about a fortnight organising the transport. The deals were sent upriver by boat but the bigger timbers were made into rafts or 'floatts', one for the 'great timber' and two for the lesser ones. Then, with the assistance of two Dutchmen with their boats, the journey up the sinuous River Forth to Stirling began, 'being 3 tyds by the way'. Such rafts would be too massive to sail or to be very steerable and probably all they could do was tie up as the tide turned against them. The largest timbers would weigh around 1,100 to 1,300 pounds (approximately 500 to 600kg) each. It took 14 men to bring the floatt of the great timber ashore when it got to Stirling and it cost 5s to carry each of the 60 great trees the half mile (0.8km) or so from shore to site – a day's wages for a labourer.

By January 1642, when work resumed, there was an extensive supply of building materials in store, and the walls must have been more or less complete since on 26 February 1642 Alexander Jack and his team of slaters were setting to work on the roof, which was finished about October 1643. Meanwhile, there was further wright work, including putting in window frames and work on chimney heads, continuing into February 1644. By that time rigging stanes were being put in place, wooden partitions between named rooms were being worked on and doors were being hung for recognisable 'chambers'. But work in 1644 was fragmented and finished even before the end of the financial year in September.

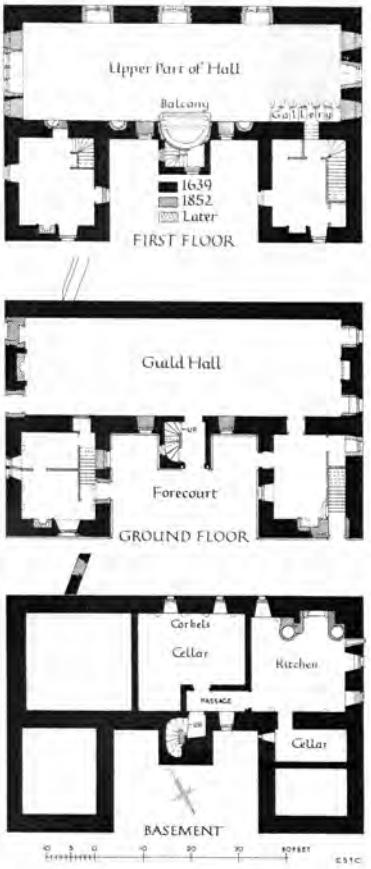


Figure 2. Plans of Cowane's Hospital, drawn in 1963. (Crown Copyright: RCAHMS)

Initially the interruption was probably due to the tensions associated with incipient war, and by January 1645 there were 'daily grievances and complaints' in the town about the quartering of soldiers and related issues.[5] Then, from later July 1645 to March 1646 work was stopped 'by visitation of the pestilence';[6] after a brief resumption, the building accounts show a further break from 27 August 'in respect of the outbreaking of the sickness'. Only in October did Rynd and Cunningham resume work, with much reduced teams, continuing until March 1650.

The structure was substantially finished even before these interruptions; it was probably early 1648 when rope was provided to tie the ladders 'for harline [harling] the house'. Also in 1648, though Rynd had been paid for a plan of a turnpike early in the work, Alexander Cunningham was now paid for 'the draft of the steeple'. The steeple itself was built the following year. When surveying the building in 1963, RCAHMS, unaware of this change of plan, noted the anomaly of having a modified wheel-stair down to the cellar with a wooden stair of dog-leg form within the square steeple to the first floor and bellcote. Probably the requirement

for the bellcote was the prime reason for the change of plan. But the new steeple also incorporated a niche for the portrait statue of the founder.

In 1643–4 John Mylne had been paid 'to draw upe umquhil [the late] Jon Cowanes portrait', and the following year John Service, a Stirling mason, was paid for 'drawing the draucht for ye boss of ye portrait in ye mid jame', whilst John Mylne was later paid for 'correcting of ye said draucht' and Rynd then went to Edinburgh 'to Learne the draucht that Jon Myln drew for ye boss of ye portrait'. Shortly afterwards Robertson went to Donibristle to arrange for William Aitton, master mason, to make the 'portrait'. This 'portrait' was almost certainly not the statue now on the building which was not made until 1650; the 'boss' was more probably a niche or stand for the portrait rather than the portrait itself, whilst the 'mid jame' of 1643–4 was not the steeple of 1650. Service died in April 1645, four months before the recognised outbreak of the 'pestilence' in July.[7]

Most of the work on the steeple was done by Rynd and Cunningham and their teams. The timber used for this phase was local oak (probably from Touch, a mile (1.6km) or so west of the town) and is still an important structural element in the tower, supporting roof and bell. The lead roof of the steeple is another unusual feature, the work done by John Skirving, an Edinburgh plumber who received extra payments 'to cast the letters' as they had not been in his original contract, whilst a tinker then cut out the copper 'thane' and 'flowe of deluss' [weather vane and fleur-de-lys] which were then painted with linseed oil and red lead.

Figure 3. Statue of John Cowane erected over the main entrance in 1650.

In 1649 Mylne was again approached about the 'portrait' for which he was paid in two

tranches, the last on completion and delivery at the shore. The wrights set up a scaffold and during the week of 2 to 8 April 1650 Rynd and his men spent a day putting the statue into place, ready for its first coat of paint, which quickly followed. The building was now 'finished', though its brief phase of occupation as an almshouse did not really begin until 1671 and ceased well before the century's end.[8]

Overview and analysis

This detailed examination suggests that neither the steeple nor the statue are realised as originally intended. Another aspect of Morris's account which needs to be re-evaluated is his belief that stone was brought from Cambuskenneth Abbey for the work. It is based on a payment for drinks with Sir John Erskine in 1637–8 when he was asked to speak to his mother about getting stones from the Abbey. But none of the many entries relating to the subsequent acquisition and transport of stone refers to stone from Cambuskenneth. Perhaps, after all, his mother refused or there was some other problem.

Apart from the demolished houses formerly on the site and the stones of a derelict house in the town bought for the purpose in 1639–40, building stone came from a range of sources. Whinstone was available from quarries round the town, while freestone came from sites mainly to the east of Stirling, including Cat Craig [NS805896] and Plean Bank [NS8287] from which the stone was carried by land, whilst from Elphinstone (Airth parish) it was brought upriver by small boat. Though payments were made to the quarry proprietors for 'craig leave', the quarriers were employed directly by Robertson. Freestone was dressed at the quarry by the masons, presumably to ensure it met the specification for doors and windows and to save transporting material which would only be wasted. At one site, the quarrier had to 'seek a post' for freestone, whilst at Cat Craig in 1637–8 the quarrier had to 'redd the craig' before starting work. This is not because these were new quarries: stone had come from Cat Craig for rebuilding the Tolbooth in 1576 and for work in the castle in 1617.[9] Evidently there was no ongoing quarrying business at these sites, though they all operated

over centuries. The sand pits south of the town were equally long-established but in 1637–8 several barrowmen spent three days 'seeking sand holes' and again 'sand leave' had to be paid.

Slates were from three different sources. The least important was Kippenross (near Dunblane), from where Alexander Jack procured 500 'sclates' in 1641–2. The Kippenross slates were grey or mudstone slates. The 5,200 sclates purchased or ordered in Perth and Dundee in three lots in 1640–41 were probably similar slates of Carmylie type. But the 3,000 skailie received at Drip Ford in 1638–9 and the 21,500 skailie from 'the west' purchased in 1641–2 were almost certainly blue slates of the Highland boundary series, probably from the Aberfoyle area. The Forth is tidal to the falls and rapids at Drip/Craigforth, and goods brought down the upper tributaries were either landed there for carriage to the town or transferred to larger vessels for onward shipment on the tidal river. In 1674 Lord Elphinstone allowed the Earl of Menteith to build a barn at Craigforth, at or near the place where the 'earl's skaillie lies'. There are records of sarking and of 10,500 skailie nails, suggesting the main slating method; the lesser number of sclate pins would be used to fix the grey sclates, perhaps to slating rods.[10]

Lime, as with most recorded building sites in Stirling from the sixteenth to eighteenth centuries, was a mixture of 'boat lime' brought by ship from the lower shores of the Forth and more local lime from the middle reaches of the Bannock Burn.[11] It was used for mortar, plaster and harling.

As the Cowane's Hospital records show, the building process cannot be understood in purely technical terms, divorced from the social and economic context. The accounts reveal the annual rhythm of work, the crises of war and disease, the injuries to the workmen and the drinks so essential to every agreement. In January 1638 there was a modest payment for drinks for the masons on Handsel Monday, a very early record of what later became an important tradition of giving employees and workers a gift (handsel) on this day, the first Monday after New Year.

The way the work was organised shows the link between construction and social processes even more clearly. Building work in seventeenth-century Scotland was usually organised either on a contract or a direct labour system.[12] Direct labour, where a Master of Works co-ordinated the work and purchases, as in this case, is more widely and more often recorded in Stirling at this period, continuing in use into at least the early eighteenth century. And these accounts show one advantage of such a system. No contract could have made provision for the materials-supply and cash-flow problems, much less for the political tensions or the outbreaks of war and pestilence which interrupted and so extended the work. Direct labour allowed for flexibility. Similarly, in spite of Mylne being the obvious 'architect', there was room for local people (the mason, the wright or the council) to reorganise and modify the plans. On the other hand, flexibility is not always a virtue and the steeple is a good example of the sort of extravagant 'afterthought' found in some other direct-labour buildings.[13]

Materials supply was always problematic for large projects, not least as the best materials might be at a distance and so be costly to transport. Reuse of old stone was an obvious economy measure, and whinstone rubble was available from quarries close to the town. But freestone came from several different sources, though it is unclear if choice was based on suitability for a given purpose, on availability, on price or on other factors. A national reference collection of local building stones would be remarkably useful and the documents could suggest sites to investigate.

Timber presented specific problems. The pattern of purchases of timber from east-coast ports can be traced back to the sixteenth century at least and reflects the long-established timber trade with the Baltic and Scandinavia; for example, timber for rebuilding the Stirling Tolbooth in 1576 also came from Leith. By chance, 1641–2 (the year of 'the float') was the peak year for Norwegian timber exports to Scotland. Whilst the exposed older timbers visible in the cellar at Cowane's Hospital do not appear to be in their original locations, I understand that others, in the roofs, probably are. The structural timbers in the steeple appear to be the local oak

purchased for the purpose in 1649. Work at Stirling Castle has recently identified documented timbers within the upstanding structure. Dendrochronological study then added an astonishing new level of understanding about sources and about the timber supply industry. Well-documented buildings, such as Cowane's Hospital, with the range of documented timber sources, offer a superb testing ground for such multidisciplinary approaches.[14] In the early 1640s there was no Stirling merchant who could supply the requirements, and the need to search out supplies at Leith or Burntisland must have increased costs. By about 1680 Stirling merchants were importing timber directly from Norway in general cargo ships and could supply substantial quantities from stock; some merchants appear to have had a degree of specialisation in timber.[15] Even if the largest specifications remained a specialised business, the more ready availability of timber must have reduced costs and probably influenced building methods, too.

In 1610 the council had to send to Glasgow or Dumbarton for a slater for the kirk roof.[16] But there were at least six slaters working on Cowane's Hospital in 1641–2, including two Alexander Jacks and Hugh Jack. The family came from Doune and the first Alexander had been admitted as a burgess of Stirling in 1618, whilst Peter and another Alexander were admitted in 1634.[17] Use of gray and blue slates (mudstone and metamorphic types respectively) from three distinct sources again suggests supply difficulties.[18] Requiring particular mention is the use of skailie brought 'from the west' and delivered to Craigforth, which almost certainly refers to blue slates of the Highland Boundary series. These were probably from Aberfoyle, though the earliest unambiguous record for the Aberfoyle quarries so far found is from 1668 when James and Archibald Jack were leasing the workings – an interesting example of the links between materials supply and artisanal skills.[19] Other building trades such as glazing, painting and plastering saw a similar pattern across the century with new trades appearing in the town and greater numbers at work. Even for this work, the only artisan who was not locally based was the plumber. Masons, wrights, slaters and the other artisans

worked both in the town and across a wide rural area, sometimes in other towns, so this was a widespread change and must have influenced buildings of almost every type. Indeed, the increase in numbers in some of these trades seems incontrovertible evidence of a much wider demand for their skills and so for 'improved' types of buildings across a wide spectrum of society.

Certainly, the example of Cowane's Hospital suggests that further research on such issues would provide new and valuable insights into buildings of the period. In that regard it is worth emphasising that the Stirling records (and probably those of some other towns) contain very detailed coverage of a wide range of early-modern building projects. Many are urban and sophisticated, like Cowane's Hospital, but rural types of building were not unknown in the towns, whilst all towns had a rural hinterland with truly rural buildings. The burgh of Stirling and its charities built and maintained many such buildings in the seventeenth century (cottages, barns, byres and so on); so, surely, did other towns. Simple buildings of the pre-Improvement period in Scotland[20] are all now long-vanished or reduced to archaeological footings. It is now recognised that there was a gradual transition to the building types and materials of the Improvement period. Multidisciplinary studies asking new questions are the most promising way of advancing our knowledge of this important phase; but the documentary record, and perhaps ironically particularly the urban documentary record, could be one of the best ways of exploring the linkages, the long transition from the 'traditional' – if not unchanging – past to the relative modernity of the Improvement period. Certainly, the documentary resource has been under-used by students of the Scots vernacular tradition. I hope that this short study helps to highlight the potential of the documents to contribute to a multidisciplinary approach.

Notes

Money is expressed in £ Scots throughout; £1 sterling equalled £12 Scots

NAS – National Archives of Scotland

SCA – Stirling Council Archives

SCL – Stirling Central Library

1 D B Morris, *The Stirling Merchant Gild and life of John Cowane*, Stirling, 1919; Royal Commission on the Ancient and Historical Monuments of Scotland, *Stirlingshire: An Inventory of the Ancient Monuments, Vol.II*, Edinburgh, 1963, pp 289–93; J B Stevenson, *Glasgow, Clydeside and Stirling, Exploring Scotland's Heritage Series*, ed Anna Ritchie, Edinburgh, 1995, p.65; RCAHMS Canmore database, http:/canmore.rcahms.gov.uk/

2 R Renwick, *Extracts from the Records of the Royal Burgh of Stirling, 1519–1666*, Glasgow, 1887, pp 172–4 & 177; W B Cook and D B Morris, *Extracts from the Records of the Merchant Guild of Stirling, AD 1592–1846*, Stirling, 1916, p.54; SCL S361.76 HOS, Deed of foundation, *c*.1870; ibid., Report on Cowane's Hospital; Morris, *op.cit.*, pp 301–31.

3 SCA Accounts of Cowane's Hospital SB5/3/2, account 1644; B66/20/4, Stirling Burgh Council Minutes, 6 July 1646, 13 July 1646, 20 Aug 1646, 4 Dec 1648; SCA SB5/6, Miscellaneous Cowane's Hospital Records, receipt by Agnes Lindsay and others for £2,436 3s 2d owed to deceased James Robertson, her husband.

4 J G Harrison, 'Wooden huts and shelters in 17th-century Stirling, with an early example of a hingin' lum', *Vernacular Building*, Vol.18 (1994), pp 2-6.

5 Renwick, *op.cit.*, p.186.

6 SCA Stirling Kirk Session Minutes CH2/1026/3; Renwick, *op.cit.*, pp 187–9.

7 NAS CC21/5/5.334-6, testament of John Service, died April 1645.

8 SCB B66/20/5, Stirling Burgh Council Minutes, 7 Oct 1671.

9 NAS E82/55/9, Stirling Burgh Accounts 'to ye bigging of ye tolbuthe', 1575/6; J Imrie and J G Dunbar (eds), *Accounts of the Masters of Works for Royal Palaces and Castles, Vol.II, 1616–1649*, HMSO, 1982, pp 26–7 & 29.

10 J G Harrison, 'Water-borne transport on the upper Forth and its tributaries', *Forth Naturalist and Historian*, Vol.28 (2005), pp 105–9; J G Harrison, 'Mudstone slates in early modern Stirling', *Vernacular Building*, Vol.20 (1996), pp 56–60; NAS GD220/6/1846/7 Graham of Montrose papers, agreement about building barn at Craigforth; I

am grateful to Professor Richard Oram for drawing my attention to this last item.

[11] J G Harrison, 'Lime supply in the Stirling area from the 14th to the 18th centuries', *Forth Naturalist and Historian*, Vol.16 (1993), pp 82–9.

[12] J G Dunbar, 'The organisation of the building industry in Scotland during the 17th century', in *Building Construction in Scotland: Some Historical and Regional Aspects*, SVBWG, Dundee and Edinburgh, 1976, pp 7–15.

[13] J G Harrison, 'The Toun's New House: an early Georgian development in Stirling', *Architectural Heritage*, Vol.5 (1994), pp 21–8.

[14] A Crone, *Stirling Castle Palace: Archaeological and Historical Research 2004–2008 – Dendrochronological Analysis of Oak and Pine Timbers*, Historic Scotland, http://sparc.scran.ac.uk/publications/pdfs/L2%20dendrochronology%20of%20oak%20and%20pine%20report.pdf; T C Smout, A R MacDonald and F Watson, *A History of the Native Woodlands of Scotland, 1500–1920*, Edinburgh University Press, 2005, p.125; NAS E82/55/9 Stirling Burgh Accounts 'to ye bigging of ye tolbuthe', 1575/6.

[15] SCA SB5/3/1 discharge 1678–9; NAS E82/55/5, f.176r; NAS RH15/106/422/8 James Stivenson to Andrew Russell, 21 March 1681; J G Harrison, 'The Toun's New House', *op.cit.*.

[16] Renwick, *op.cit.*, p.125.

[17] J G Harrison, *Stirling Burgess List 1600–1699*, Stirling, 1991.

[18] Harrison, 'Mudstone slates in early modern Stirling', *op.cit.*.

[19] G Emerton, *The Pattern of Scottish Roofing*, Historic Scotland, Edinburgh, 2000, pp 124–5; NAS GD220/6/1808/19 Graham of Montrose papers, 12 October 1668. Tack by Earl of Menteith et al to James Jack, slater in Doune, of the slate craig below that set to his brother Archibald; my thanks to Louis Stott for drawing my attention to this reference.

[20] M Glendinning and S Wade Martins, *Buildings of the Land: Scotland's Farms, 1750–2000*, Royal Commission on the Ancient and Historical Monuments of Scotland, Edinburgh, 2008; A Carruthers and J Frew, 'Small houses and cottages', in G Stell, J Shaw and S Storrier, eds, *Scotland's Buildings*, Tuckwell, East Linton, 2003, pp 90–107.

THE HORIZONTAL WATER WHEEL

Ted Salthouse

The remains of grain mills powered by horizontal water wheels can be seen on Orkney, Shetland and at a few other places in the Highlands and islands. These are very simple structures and generally regarded as inefficient and primitive when compared with mills driven by vertical wheels. Horizontal mills are characterised by a horizontal water wheel and vertical axle, which passes through the lower millstone to turn the shaft and upper millstone. There is no gearing. The water supply is conducted to one side of the wheel through a channel and the wheel turned by impact. Thus the mill is suited to a small but fast flow of water. In this there are similarities with the impulse turbine, but there is no evidence that the latter is a direct development of the simple wheel. Water is taken from an adjacent river; small reservoirs are sometimes used to conserve water.

Such mills are not confined to Scotland, and some of those located elsewhere show a degree of development not seen in the Scottish examples. Mills driven by horizontal wheels have been found in Greece, Norway, North America, Ireland, France, Romania, Persia and China. During excavations of the Saxon strata of the town of Tamworth in Staffordshire a water mill with two horizontal water wheels was found,[1] and archaeological evidence from Ireland suggests dates prior to AD 1200–1300, possibly as far back as the third century AD, for their use. Colin Rynne has recently reviewed the information available on the siting of such mills in Ireland in the early medieval period.[2]

Possibly the first written reference to such a mill is in a Greek epigram written in the first century BC by Antipater,[3] and horizontal and vertical mills were in widespread use throughout Greece up to the Second World War. In 2003 my wife and I spent some time in Greece and visited the Open-Air Water Power Museum just outside Dimitsana in the Peloponnese. This was one of the areas

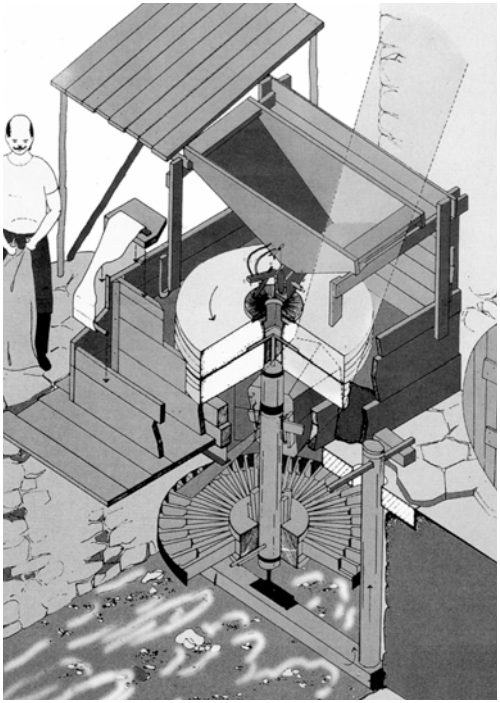


Figure 1. Diagram of a Greek horizontal water mill. (From the guide-book of the Open-Air Water Power Museum, Dimitsana)

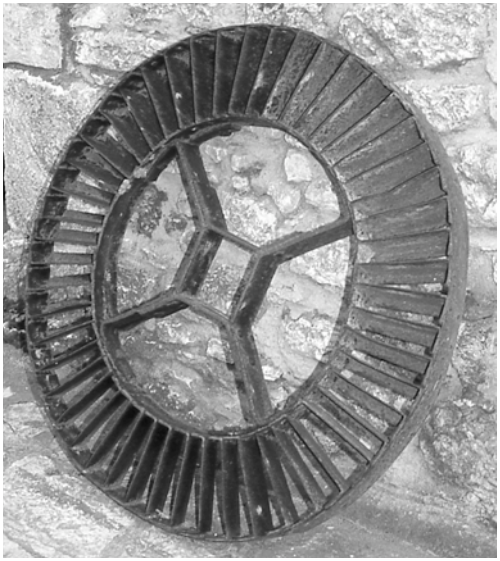


Figure 2. A metal horizontal water wheel in the Open-Air Water Power Museum, Dimitsana.

where the Greek war of independence from Turkey started: it was well away from the main centres of population and Dimitsana had a long tradition of the manufacturing of black powder as a cottage industry. Numerous small gunpowder mills were erected and the remains of these can still be seen. The stamps used to incorporate the powder were driven by a camshaft connected directly to a simple overshot, vertical water wheel. With this heritage Dimitsana was a suitable site for a water power museum.[4] The museum has a range of vertical water wheels and mills mainly associated with the manufacture of gunpowder and tanning together with an example of a Greek grain mill driven by a horizontal wheel (see fig.1).

While the general arrangement of this mill is very similar to those found in Orkney and Shetland, there are distinct differences in the construction of the wheel. Greek examples use a large number of curved or angled blades, made initially of wood and more recently of metal (see fig.2). Wheels recorded in Shetland have a small number of flat wooden blades set at a small angle to the vertical. Similar differences occur in wheels from other countries. Those excavated in Ireland have scooped blades, approximately twenty in number (see fig.3), and in this respect are similar to

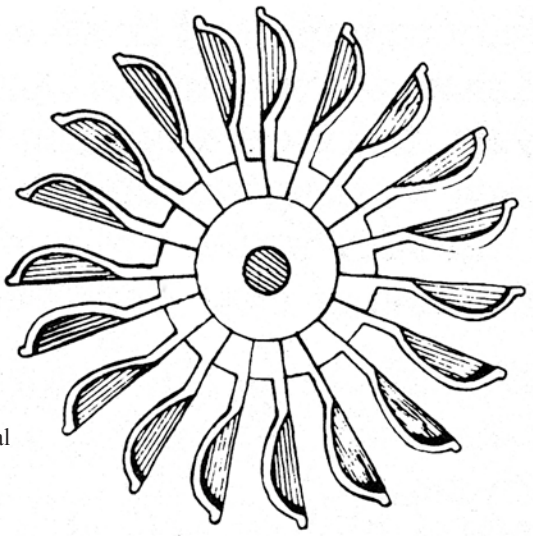


Figure 3. Reconstruction of an Irish water wheel from Moycraig, County Antrim (Robert McAdam, Ulster Journal of Archaeology, *First Series, Vol.IV (1856), pp 6–15.)*

Iberian, Greek and Persian wheels. Norwegian and Faeroese water wheels are similar to those found in Scotland and have fewer, flat blades.

The example from Huxter in Shetland, which is illustrated in Geoffrey Hay and Geoffrey Stell's book *Monuments of Industry*, has nine flat boards set at a small angle to the vertical.[5] Faeroese mills had eight flat boards, either set at an angle or vertical. In his study of the horizontal water mills of the Faeroe Islands, Kenneth Williamson concluded that such wheels were a recent introduction there and that the design came from Norway.[6]

There is a suggestion that Shetland mills had curved blades in earlier times and that flat blades were substituted as they became freely available from Norwegian sawmills. If so, they were probably similar to the Norwegian example illustrated in Gilbert Goudie's 1886 essay 'On the horizontal water-mills of Shetland',[7] which shows a wheel comprising eight slightly curved blades set at a small angle to the vertical (see fig.4).

In his review of the development of the horizontal wheel, E Cecil Curwen suggests that the design originated somewhere between China and southern Europe and from there was taken to Ireland and then Norway.[8] This has been disputed but the dates – first century BC for Greece, seventh century AD for Ireland and later for Scandinavia – suggest that it is quite plausible. Curwen

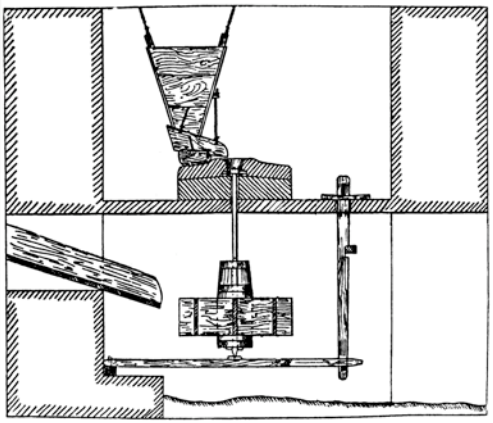


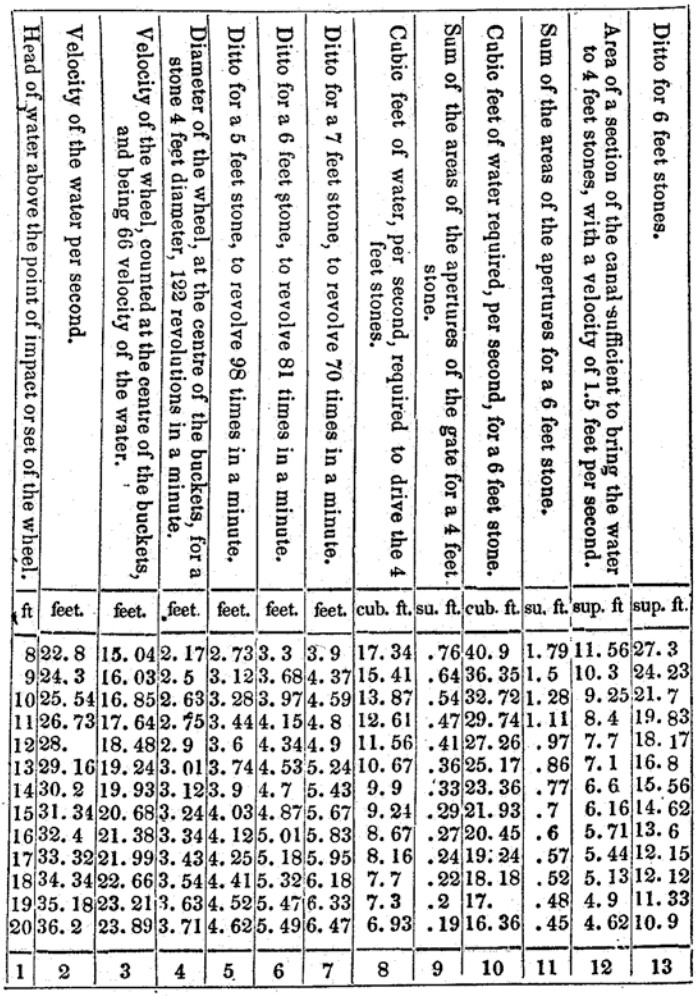
Figure 4. Horizontal water mill. (From Gilbert Goudie, 'On the horizontal water-mills of Shetland', Proceedings of the Society of Antiquaries of Scotland*, Vol.XX (1886), pp 257–97)*

also noted that whereas northern wheels rotate in a clockwise direction, those from the south rotate anticlockwise.

Louis C Hunter points out in his *A History of Industrial Power in the United States* that the horizontal water wheel played an important role in America and was until recent years in use in parts of southern Appalachia.[9] The North American 'tub wheel' reflects Scandinavian practice in that it has flat wooden blades but differs in one important detail. The wheel with its blades is contained within a circular wooden container, the tub, which constrains the inward flow of water. Tub wheels were made larger than those recorded in Shetland. A description from Maine gives 4.5 feet (1.4 metres) for the wheel diameter; and in his *The Young Mill-Wright and Miller's Guide* (written in 1795),[10] Oliver Evans gave data for wheels up to 7 feet (2.1 metres) in diameter (see fig.5) – compared with some 3 feet (91 centimetres) for the Shetland mill. The tub wheel was also used to power the up-and-down sawmill; this necessitated the use of gearing. Power take off by pulley was also used. The largest installation of horizontal wheels recorded by Hunter was at the Springfield Armory of the Federal Ordnance Department in Massachusetts. A total of 27 water wheels were employed, 13 being tub wheels.

Hunter also mentions tests made by French engineers on similar wheels, reported by Jean-François d'Aubuisson de Voisins,[11] that were used extensively in the south of France. D'Aubuisson de Voisins published his *Traité d'Hydraulique* in the first half of the nineteenth century, and the English translation (*Treatise on Hydraulics*) appeared in 1852. He notes that while vertical water wheels were generally used in the north of Europe, horizontal wheels were common in the south, stating: 'they operate nearly all the mills in the southern departments of France.' He distinguished two types of horizontal wheel: firstly, those in which the water impinged on the wheel as a jet, as in the Greek or Norse wheels; and secondly, those in which the wheel, placed at the bottom of a tub, open beneath, was rotated by the whirl of water cast upon it.

He notes that those operated by a single jet were very common



Head of water above the point of impact or set of the wheel.	Velocity of the water per second.	Velocity of the wheel, counted at the centre of the buckets, and being 66 velocity of the water.	Diameter of the wheel, at the centre of the buckets, for a stone 4 feet diameter, 122 revolutions in a minute.	Ditto for a 5 feet stone, to revolve 98 times in a minute.	Ditto for a 6 feet stone, to revolve 81 times in a minute.	Ditto for a 7 feet stone, to revolve 70 times in a minute.	Cubic feet of water, per second, required to drive the 4 feet stones.	Sum of the areas of the apertures of the gate for a 4 feet stone.	Cubic feet of water required, per second, for a 6 feet stone.	Sum of the areas of the apertures for a 6 feet stone.	Area of a section of the canal sufficient to bring the water to 4 feet stones, with a velocity of 1.5 feet per second.	Ditto for 6 feet stones.
ft	feet.	feet.	feet.	feet.	feet.	feet.	cub. ft.	su. ft.	cub. ft.	su. ft.	sup. ft	sup. ft.
8	22. 8	15. 04	2. 17	2. 73	3. 3	3. 9	17. 34	. 76	40. 9	1. 79	11. 56	27. 3
9	24. 3	16. 03	2. 5	3. 12	3. 68	4. 37	15. 41	. 64	36. 35	1. 5	10. 3	24. 23
10	25. 54	16. 85	2. 63	3. 28	3. 97	4. 59	13. 87	. 54	32. 72	1. 28	9. 25	21. 7
11	26. 73	17. 64	2. 75	3. 44	4. 15	4. 8	12. 61	. 47	29. 74	1. 11	8. 4	19. 83
12	28.	18. 48	2. 9	3. 6	4. 34	4. 9	11. 56	. 41	27. 26	. 97	7. 7	18. 17
13	29. 16	19. 24	3. 01	3. 74	4. 53	5. 24	10. 67	. 36	25. 17	. 86	7. 1	16. 8
14	30. 2	19. 93	3. 12	3. 9	4. 7	5. 43	9. 9	. 33	23. 36	. 77	6. 6	15. 56
15	31. 34	20. 68	3. 24	4. 03	4. 87	5. 67	9. 24	. 29	21. 93	. 7	6. 16	14. 62
16	32. 4	21. 38	3. 34	4. 12	5. 01	5. 83	8. 67	. 27	20. 45	. 6	5. 71	13. 6
17	33. 32	21. 99	3. 43	4. 25	5. 18	5. 95	8. 16	. 24	19. 24	. 57	5. 44	12. 15
18	34. 34	22. 66	3. 54	4. 41	5. 32	6. 18	7. 7	. 22	18. 18	. 52	5. 13	12. 12
19	35. 18	23. 21	3. 63	4. 52	5. 47	6. 33	7. 3	. 2	17.	. 48	4. 9	11. 33
20	36. 2	23. 89	3. 71	4. 62	5. 49	6. 47	6. 93	. 19	16. 36	. 45	4. 62	10. 9
1	2	3	4	5	6	7	8	9	10	11	12	13

Figure 5. Table of statistics relating to horizontal water wheels. (From Oliver Evans, The Young Mill-Wright and Miller's Guide*, 13th edition, Philadelphia,1850; reprint, New York, 1972.)*

in mountainous regions in the Alps and Pyrenees. The example described in his book has a diameter of 1.6 metres (5 foot 3 inches) and is 20 centimetres (8 inches) in height. The curved floats have a length of 40 centimetres (16 inches) and are 18 in number. It is stated that the water jet is cast on the blades with a

velocity of 7 to 8 metres per second, and acts almost wholly by impulse. He notes that, from experiments using such wheels, the head of water was typically 4.11 metres (13 foot 6 inches) and the flow some 0.3 cubic metres (10½ cubic feet) per second. This produced a force of some 33 newtons at a 1.1-metre (3-foot-7-inch) radius and a rotational speed of 100 rotations per minute.

On the other hand, he notes that on rivers such as the Garonne and the Aude, where there is much water and little fall, tub mills (*moulins à cuve*) are used (see fig.6). Here the wheel is placed at the bottom of a masonry well or cylinder, open at both ends. The wheel, 1 metre (3 foot 3 inches) by 20 centimetres (8 inches), carries nine curved wooden floats. The well is 1.1 metres (3 foot 7 inches) in diameter and 2 metres (6 foot 7inches) deep. The wheel is placed at the bottom of the well and the cylinder pierced by a vertical slot, extending from the wheel almost the whole height. This serves as the water lead; it narrows down towards the cylindrical well, so that at the point the water issues from the lead the slot is only 22 centimetres (8¾ inches) wide. One of its sides is tangential to the side of the well. The water whirls down, turning the wheel as it passes. Because of centrifugal force, some effect is inevitably lost as water passes through the narrow gap between the wheel and the wall. According to d'Aubuisson de Voisins, such mills had been described in earlier French engineer Bernard Forest de Bélidor's mid-eighteenth-century volume *L'Architecture hydraulique*.[12] For a typical wheel, with a head of 2.4 metres (7 foot 10 inches) and a flow of 0.86 cubic metres (30½ cubic feet) per second, the force at the end of a 1.2-metre (4-foot) arm was 299 newtons (67.26lb). The rotational speed was 81 rotations per minute.

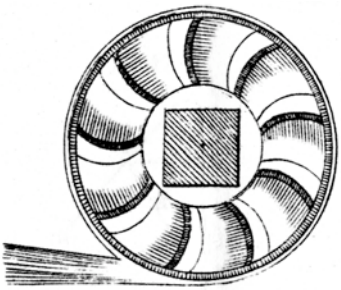


Figure 6. Diagram of a moulin à cuve*, from Jean-François d'Aubuisson de Voisins,* A Treatise on Hydraulics for the Use of Engineers*, English edition, Boston, 1852.*

Such a mill is preserved at Cougnaguet on the river Ouysse, a tributary of the Dordogne. It has four horizontal wheels with deeply curved wooden cups set in carefully built circular stone chambers. The drive is direct to the top millstone and in this and other respects they are very similar to the simple wheels above, but much more effective. The wheel, from memory, is some 1 to 1.5 metres (3 to 5 feet) in diameter, and it is stated that the mill could produce some 4 tonnes of flour per day. The wheels rotated at 80 rotations per minute. D'Aubuisson de Voisins was quite clear that early water turbines such as that developed in France by Benoit Fourneyron (1802–1867)[13] were based on such a mill.

Notes

1 M Watts, *The Archaeology of Mills and Milling*, Stroud, 2002.

2 C Rynne, 'Water-power as a factor of industrial location in early medieval Ireland', *Industrial Archaeology Review*, Vol.XXXI (2009), pp 85–95.

3 E C Curwen, 'The problem of early water-mills', *Antiquity*, Vol.XVIII:71 (1944), pp 130–46.

4 S Nomikos, *Water Power in Pre-Industrial Greece*, Athens, 1997.

5 G D Hay and G P Stell, *Monuments of Industry*, Edinburgh, 1986, p.9.

6 K Williamson, 'Horizontal water-mills of the Faeroe Islands', Antiquity, Vol.XX (1946), pp 83–91.

7 G Goudie, 'On the horizontal water-mills of Shetland', *Proceedings of the Society of Antiquaries of Scotland*, Vol.XX (1886), pp 257–97.

8 Curwen, 'The problem of early water-mills', *op.cit.*.

9 L C Hunter, *A History of Industrial Power in the United States, 1780–1930*, Vol.1: *Waterpower*, Charlottesville, Virginia, 1979.

10 O Evans, *The Young Mill-Wright and Miller's Guide*, 13th edition, Philadelphia,1850; reprint, New York, 1972.

11 J-F d'Aubuisson de Voisins, *A Treatise on Hydraulics for the Use of Engineers*, English edition, Boston, 1852.

12 B Forest de Bélidor, *Architecture hydraulique*, Paris, 1739 (new edition, 1819).

13 N Cossons, *The BP Book of Industrial Archaeology*, Newton Abbot, 1987, pp 52–4.

THE HEATHER HUTS AT DRUMLANRIG CASTLE

Dave Hutchinson

There are five 'heather huts' in the grounds of Drumlanrig Castle. Three are intact, and are listed at category B, described as mid-nineteenth-century rustic summerhouses; of the others, one is little more than a pile of logs, and one has been greatly enhanced in recent years. These five delightful structures were built as part of a job creation scheme in the 1840s. At the time, rural estates were leaching manpower because of both the changes in agricultural practice and the obvious attractions of work in the developing industrial centres and the promise that emigration presented. To keep a residual workforce, the Duke of Buccleuch and Queensberry created this project as part of the considerable landscaping of the gardens on the estate at Drumlanrig.

All of the huts are based on an octagonal frame with the main supports being eight sunken tree trunks, a very traditional structure similar to the early roundhouse. The interconnecting framework, roofplates, lintels, windows and doorways are all created using cut and checked logs, and all joints are secured using nails. The construction could best be described as rustic. Each hut has a slate roof, but this would appear to be a later 'improvement' as they all originally had heather roofs. Clearly, at some stage, the difficulties of maintaining the thatched roofs were overcome by replacing them with a more permanent slate structure. Externally they would appear to be little more than Victorian garden huts and with the exception perhaps of Hut 4, which has seen modern enhancements, they are really of little note. However, once they are entered and the threshold crossed, you are met with interiors that are at once surprising, remarkable for the intricate workmanship and in many ways quite beautiful.

Hut 1 (fig.1) lies to the north of the Duchess Well, high in the woodland looking down on the castle, and has a north-facing

Figure 1. Hut 1.

Figure 2. Hut 1: roofplate.

Figure 3. Hut 1: detail of wall.

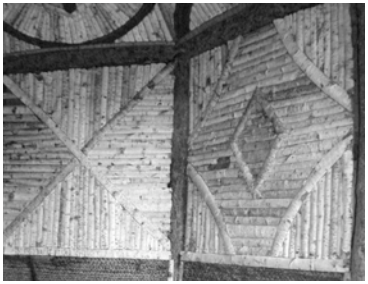


Figure 4. Hut 1: detail of wall lining.

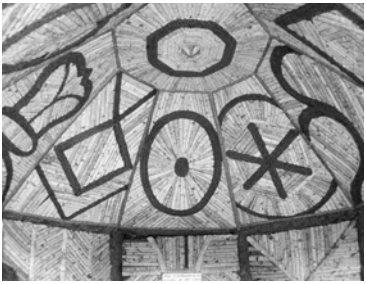


Figure 5. Hut 1: ceiling lining.

Figure 6. Hut 1: fixed interior bench.

Figure 7. Hut 1: sample of plaited heather rope similar to that used for bench covering.

doorway. The sides of the octagonal structure are six feet (1.8m) wide and the height to the roofplate (fig.2) is seven feet (2.1m). The roof is an octagonal prism and edge joints are in lead. The five walls between the sunken tree trunks are made from slabs sawn from the surfaces of logs and laid in geometrical patterns (fig.3). These walls are lined with horizontal close-fit sawn pine boards. In turn these boards are decorated on the inside with split birch branches arranged in geometrical patterns and pinned to the boards (fig.4). The ceiling is similarly lined with birch and has borders of heather rope (fig.5). A low bench for seating runs round the five walls (fig.6), standing some 18 inches (46cm) high, and is surfaced with plaited heather rope, a sample of which is hanging within (fig.7). The floor is of rough cobbled stones, many of which have been disturbed from their original placing.

Hut 2 (fig.8) is enclosed on seven sides and is generally of the same construction. The roof is a lower pyramid and is again slate with divides. Each wall has a shaped window and is lined with a frame of bark slabs in geometric patterns (fig.9). The inner walls are lined with small-diameter split branches. Individual patterns extend from the wall through to the ceiling, with each inner face of the pyramid edged with a larger straight of natural timber (fig.10). All timbers have their bark intact. A feature of this and of hut 4 is the tessellated wooden floor (fig.11). The pattern is

Figure 8. Hut 2.

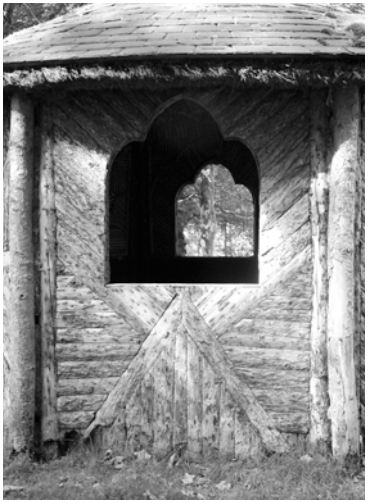


Figure 9. Hut 2: window and exterior wall detail.

Figure 10. Hut 2: patterned interior wall lining.

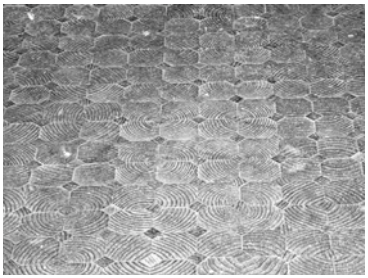


Figure 11. Hut 2: tessellated wooden floor.

Figure 12. Hut 2: detail of tessellated wooden floor.

Figure 13. Hut 2: floor tessellations with close-fit boards beneath.

made up of square and octagonal sections with exposed end grain. The floor appears to be laid on close-fit boarding (figs 12 & 13).

Hut 3 (fig.14) is again of similar construction. Unlike the previous two, this roof is conical and the inner ceiling has radiating branches (fig.15). Again the inner walls are lined with split branches in geometric patterns, but in this hut they are

Figure 14. Hut 3.

Figure 15. Hut 3: ceiling with radiating branches.

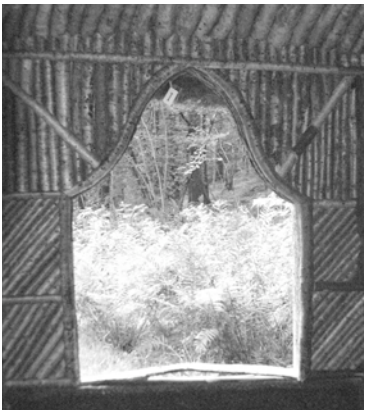


Figure 16. Hut 3: detail of window, showing interior wall linings.

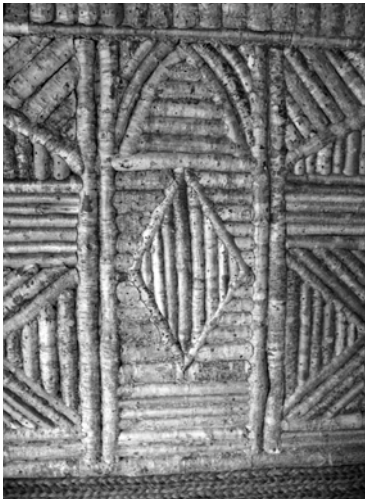


Figure 17. Hut 3: detail of interior wall lining.

Figure 18. Hut 3: cobbled stone floor.

slightly larger and more rugged in form (figs 16 & 17). As in hut 1, the floor is of cobbled stones, many of which have been removed (fig.18).

Hut 4 (fig.19) has been recently restored and extended. The original part is the central octagon with the inner conical roof. The extension and modern addition is the veranda encircling the centre. This again is constructed on sunken tree trunks but with rustic corner bracing. The external walls follow the pre-existing patterns, in a style similar to that seen on the other huts; but the interior walls are very different (figs 20 & 21). Here they are made of a mixture of sphagnum moss and lichen arranged in a number

Figure 19. Hut 4.

Figure 20. Hut 4: patterned wall lining in lichen and moss.

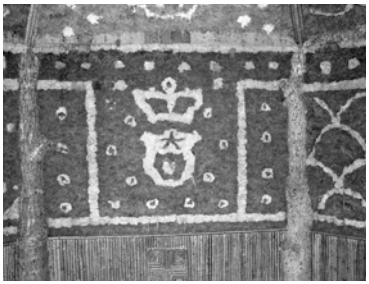


Figure 21. Hut 4: detail of wall lining, showing 'brave heart' motif.

Figure 22. Hut 4: fixed low benching lining interior walls.

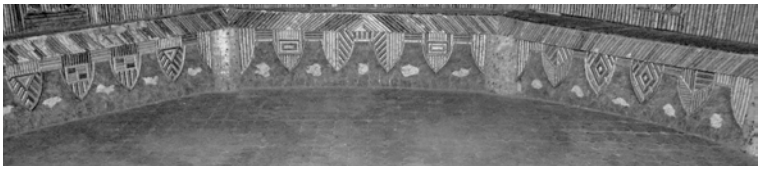


Figure 23. Hut 4: detail of shield frieze on base of interior benching.

of patterns which include the 'brave heart' motif from the Duke's crest. The walls are again fitted with low benching (fig.22), both inside and out; those on the inside are fronted with various shields relating to the Queensberry family (fig.23).

Some of these huts were visited during the SVBWG Thornhill

Conference in October 2009. They present a fascinating enhancement of the primitive roundhouse form, which might be considered one of the earliest vernacular constructions applied to the use of timber.

Acknowledgements

I am indebted to the Duke of Buccleuch and Queensberry for permission to access to these huts, and to the staff of the Buccleuch Estate for their help and support.

SNAIDHEADAIR – WORKER WITH WOOD IN SCOTLAND

Dave Hutchinson

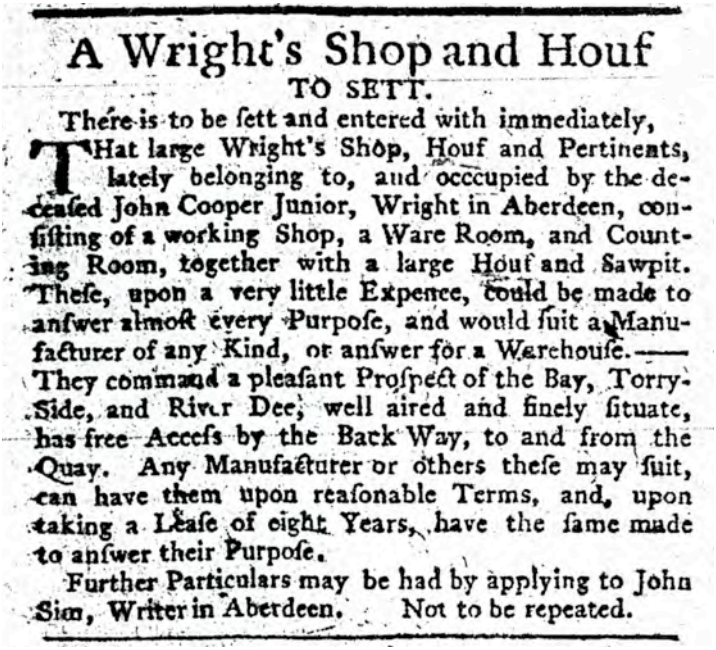
I have for some time been researching the *snaidheadair* of Scotland. *Snaidheadair* is the Gaelic word for 'worker with wood', a beautifully all-embracing term. There is often some confusion about the titles associated with the woodworking trades, so in this paper I will attempt to explain terms such as wright, carpenter and joiner and, where I have found it, include supporting documentation such as billheads and advertisements. Though many of these terms are general, they have historically taken a different or specific meaning in Scotland. I have considered them in two main aspects: firstly, those who prepare timber; and secondly, those who work and make from timber.

I have not included the hewers and cleavers of timber who preceded the qualified tradesman and were the makers of much of our earlier housing, such as the roundhouse, crannog and cruck-frame cottage. These tended to be skills acquired or passed down and very much part of the life-skills of these small communities. Nor have I included the many woodworking trades that exist beyond the home.

Sawyers and merchants

The preparation tradesmen are those who saw, mill and supply. These vary from the small country business to industrial operations, all of which supplied timber for the vernacular building trades.

Sawyers prepared timber for traditional building needs such as roofs, lintels, sarking, frames and doors. In some cases timber prepared in this way was used directly in the buildings; in other cases further preparation, such as planing and moulding, followed. The simplest form of sawing system involved two men and a long handsaw working over an open pit. Tree trunks were rested on timbers that straddled the pit and were held in place using huge



A Wright's Shop and Houf
TO SETT.

There is to be ſett and entered with immediately,

THat large Wright's Shop, Houf and Pertinents, lately belonging to, and occcupied by the deceaſed John Cooper Junior, Wright in Aberdeen, conſiſting of a working Shop, a Ware Room, and Counting Room, together with a large Houf and Sawpit. Theſe, upon a very little Expence, could be made to anſwer almoſt every Purpoſe, and would ſuit a Manufacturer of any Kind, or anſwer for a Warehouſe.—— They command a pleaſant Proſpect of the Bay, Torry-Side, and River Dee, well aired and finely ſituate, has free Acceſs by the Back Way, to and from the Quay. Any Manufacturer or others theſe may ſuit, can have them upon reaſonable Terms, and, upon taking a Leaſe of eight Years, have the ſame made to anſwer their Purpoſe.

Further Particulars may be had by applying to John Sim, Writer in Aberdeen. Not to be repeated.

*Figure 1. A wright's workshop available with sawpit, Aberdeen (*Aberdeen Journal*, 1776).*

iron staples called 'dogs'. From this practice come the terms 'top dog' and 'underdog'. The top sawyer, or top dog, worked from above while the pitman, or underdog (often the apprentice, or loon), was down in the pit and was showered with sawdust as they cut through the logs. This method of sawing was still used throughout the nineteenth and into the beginning of the twentieth century. Often workshops embraced a number of trade facilities, as shown in the advertisement for the sale of John Cooper's premises which included a sawpit (fig.1).

To meet increasing demand for home and agricultural building, water was harnessed to power reciprocating saws. The first of these seem to have been in use in Leith in the sixteenth century, but it was much later that they became common, and by 1800 there were many such mills in Strathspey. As the eighteenth century moved into the nineteenth, further progress was made in the development of woodworking equipment, with the circular saw

being invented in the mid-1820s; these were common throughout Scotland. Sawyers delighted in displaying engravings of their machinery on their letterheads, as with D Sutherland & Son who had sawmills in Union Street, Wick from the mid-nineteenth century (fig.2).

During the nineteenth century, water power gave way to the steam engine, and with it a host of further machinery so that timber could be engineered to create smooth surfaces, both flat and moulded. It also became possible to mill tongue-and-groove panels for linings and ogee mouldings for trim (fig.2).

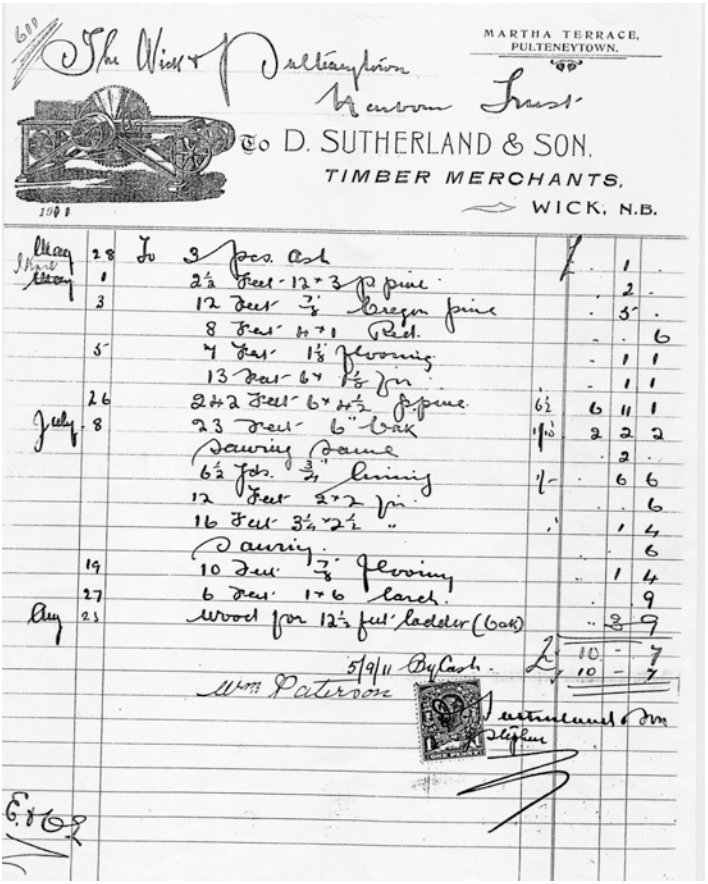


Figure 2. A sawmill account from D Sutherland & Son, 1911.

The vernacular woodworker had a variety of sources from which to gain his supplies, and these were usually graded in three qualities. Generally the poorest, cheapest and easiest to obtain came from estate sawmills: many estates had building stocks of timber, stone, brick and lime in what closely approximate to builders' supply yards, to be drawn on by the estate workers and local tradesmen. A list of such materials was agreed by the Rogart Ground Officer with D MacKay, the local house carpenter, for improvements to a croft in his parish in the 1890s (fig.3). These transactions were often accompanied by vouchers for the estate's internal accounting system; in others the only remaining evidence is sawmill marks, showing dimensions on a board that identified that pile in the tradesman's picking list and the word 'counted' to show that the selection was complete (fig.4).

The medium quality came from superior Scottish sources; in the Highlands, Speyside timber was the most favoured, while

Figure 3. Letter from the Ground Officer to the Factor of the Duke of Sutherland, regarding improvements to a croft house at Rogart in 1894 (from the Sutherland Papers, by permission of Lord Strathnaver).

Figure 4. Sawyer's mark of 'counted' on a joist, from the Sutherland Estate Sawmill, part of the 1894 improvements to a croft house (see fig.3), Rogart, Sutherland.

That from and after the 10th current, there will be dayly ſold at the Saw-Miln in the Forreſt of GLENTANNER, Fir Timber at the following Dimenſions and Prices, viz.

Sterling l. s. d.

DEALS 10 *foot long, from 7 to 10 Inches broad, Inch and quarter thick, per ſix Score, 7 Shil. 6 pence Sterling per Dozen.* } 3 15 0

DEALS 8 *foot long, from 7 to 10 Inches broad, Inch and quarter thick, per ſix Score, 5 Shil. and 6 pence Sterl. per Dozen.* } 2 15 0

DEALS 6 *foot long, from 7 to 10 Inches broad, Inch and quarter thick, per ſix Score, 4 Shil. Sterl. per Dozen.* } 2

NARROW DEALS.

DEALS 10 *foot long, from 6 to 7 Inches broad, Inch and quarter thick, per ſix Score, 6 Shil. Sterl. per Dozen.* } 3

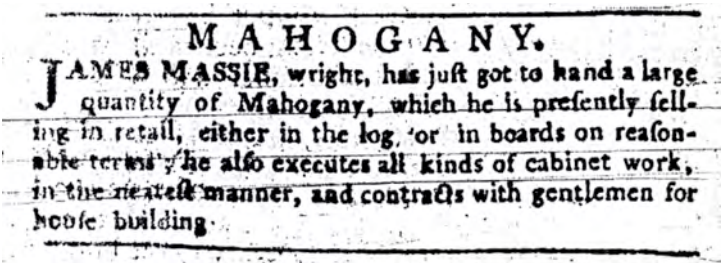
DEALS 8 *foot long, do. breadth and thickneſs, per ſix Score, 4 Shil. Sterl. per Dozen.* } 2

DEALS 6 *foot long, do. breadth and thickneſs, per ſix Score, 2 Shil. Sterl. per Dozen.* } 1

*** *All other ſizes in Proportion to their breadth, length and thickneſs.*

N. B. *Upon previous Application to* Donald Cumming *Saw-Miller at ſaid Miln, Deals, Planks, Spars, Square Joiſts, &c. of any Dimenſions whatever, may be had at reaſonable Rates.*

*Figure 5. Deals of timber for sale from Glentanner (*Aberdeen Journal*, 1753).*


MAHOGANY.

JAMES MASSIE, wright, has juſt got to hand a large quantity of Mahogany, which he is preſently ſelling in retail, either in the log, or in boards on reaſonable terms; he alſo executes all kinds of cabinet work, in the neateſt manner, and contracts with gentlemen for houſe building.

*Figure 6. Mahogany for sale (*Aberdeen Journal*, 1768).*

Glentanner was the most prized in the North East (fig.5). Many landowners in the Lowlands looked to growing and harvesting timber.

The best quality came from imported sources: pine from the Baltic and, increasingly, hardwoods from America providing ballast for return voyages. These timbers would be bought from merchants often based near harbours. Incoming loads of timber that arrived in log form could be sawn and stack dried alongside timber that had come in board form. Wrights would also buy in timber and then offer for sale any excess over their needs, especially with rare hardwoods (fig.6). To some merchants this was sufficient, but increasingly they were attracted by the greater profit to be made by planing and moulding boards ready for use.

Wrights

Perhaps the oldest term for a skilled woodworker in Scotland is ‘wright’, a name that continued in usage until the end of the nineteenth century. Wrights formed guilds that were able to monitor standards and establish prices, the Wrights and Coopers becoming one of the dominant Guilds within the Incorporated Trades (fig.7). Guilds of Wrights and Coopers still exist today and in Aberdeen, for instance, applicants are still required to produce an essay piece (a sample of their work) so that their craftsmanship might be measured as being sufficient for membership. In the advertisement of a sale by Archibald Campbell in 1768, particular mention is made in the details that a writing desk and drawers is an essay piece made by John Cooper, wright of Aberdeen (fig.8).

THE JOURNEYMEN WRIGHTS *in Aberdeen give notice to the public, that considering the lowness of their wages, and the dearth of every article they need to buy, they cannot any longer work at the former wages; and that after the 10th of June curt. every man is to have his wages raised 2 d. per day more than they now have; and as the masters have raised theirs a year ago, it is but reasonable that the journeymens be raised likewise.*

So they hope the masters will take this as a notification of the same.

*Figure 7. A notice from the Journeymen Wrights of Aberdeen (*Aberdeen Journal*, 1768).*

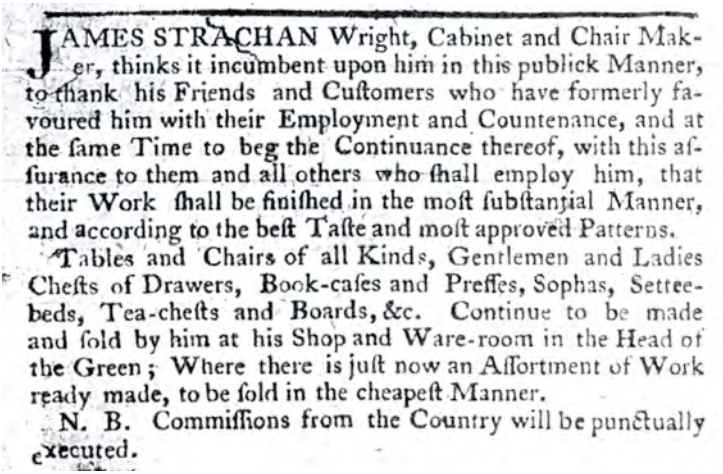
Skills and knowledge were passed from the master and the journeyman to the apprentice. This knowledge was jealously guarded and for some considerable time there was quite a distinction between work executed by a wright and that of an untrained carpenter. This is clearly seen when looking at furniture and in particular in the intricacies of the many variations of the

TO BE SOLD,

By Way of Roup, at Archibald Campbell's, Vintner in the Shipraw, on Wednesday, the 25th current, at 4 o'Clock Afternoon.

A *Curious* MAHOGONY TABLE *with three Leaves. The first when opened serves for a Dining Table; the second a Card Table; the third serves for a Backgammon Table, and Draught-board, out of the Body of which arises by Springs a Writing-Desk with nine Drawers, and reading Frame. The whole is an Essay-piece, made by John Cooper, Junr. and is to be viewed any Time before the Day of Sale, at his Work-shop, in Mr. Burnet's Close in the Guest-raw, Aberdeen, where Gentlemen may be well served in Cabinet or Joyner-work of all kinds at reasonable Rates. Commissions from the Country carefully obeyed.*

*Figure 8. A sale of timber work including an essay piece by John Cooper (*Aberdeen Journal*, 1755).*



JAMES STRACHAN Wright, Cabinet and Chair Maker, thinks it incumbent upon him in this publick Manner, to thank his Friends and Cuſtomers who have formerly favoured him with their Employment and Countenance, and at the ſame Time to beg the Continuance thereof, with this aſſurance to them and all others who ſhall employ him, that their Work ſhall be finiſhed in the moſt ſubſtantial Manner, and according to the beſt Taſte and moſt approved Patterns.

Tables and Chairs of all Kinds, Gentlemen and Ladies Cheſts of Drawers, Book-caſes and Preſſes, Sophas, Settee-beds, Tea-cheſts and Boards, &c. Continue to be made and ſold by him at his Shop and Ware-room in the Head of the Green; Where there is juſt now an Aſſortment of Work ready made, to be ſold in the cheapeſt Manner.

N. B. Commiſſions from the Country will be punctually executed.

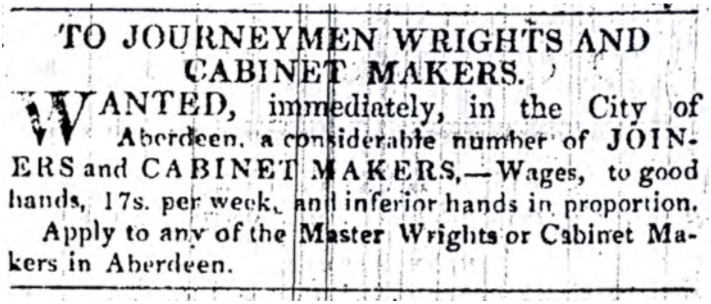
*Figure 9. Advertisement for cabinet and chair maker (*Aberdeen Journal*, 1767).*

mortice-and-tenon joint. Initially wrights were to be found in all areas of woodwork, from house construction to furniture and fittings. With time (and apart from the specialist areas of mill, ship, wheel and cart work) they tended to be furniture makers, gradually adopting the increasingly fashionable name of 'cabinet maker' and, in a few cases, 'chair maker' (fig.9).

Joiners

In urban areas during the eighteenth century, those wrights involved in house building increasingly adopted the title of 'joiner' (occasionally written 'joyner'), and undertook the same rigorous training and master–journeyman–apprentice regimes as the wrights. Craftsmen of this quality were in high demand (fig.10). Apart from structural woodwork they would also work on staircases, panelling and fixed furnishings (fig.11). Many joinery businesses would have a master, several journeymen and a number of trainees at different levels. Some would be able to undertake all the work involved in a particular job, while others

would contract out or buy in complete or ready-to-assemble structures from the many specialist suppliers evolving as demand increased. The 1885 bill from John Rutherford of Aberdeen for supplying birch and pine boards also includes ready-made parts for assembly into chairs, tables and beds (fig.12).



TO JOURNEYMEN WRIGHTS AND CABINET MAKERS.

WANTED, immediately, in the City of Aberdeen, a considerable number of JOINERS and CABINET MAKERS,—Wages, to good hands, 17s. per week, and inferior hands in proportion.

Apply to any of the Master Wrights or Cabinet Makers in Aberdeen.

*Figure 10. Appeal for craftsmen in Aberdeen (*Aberdeen Journal*, 1803).*

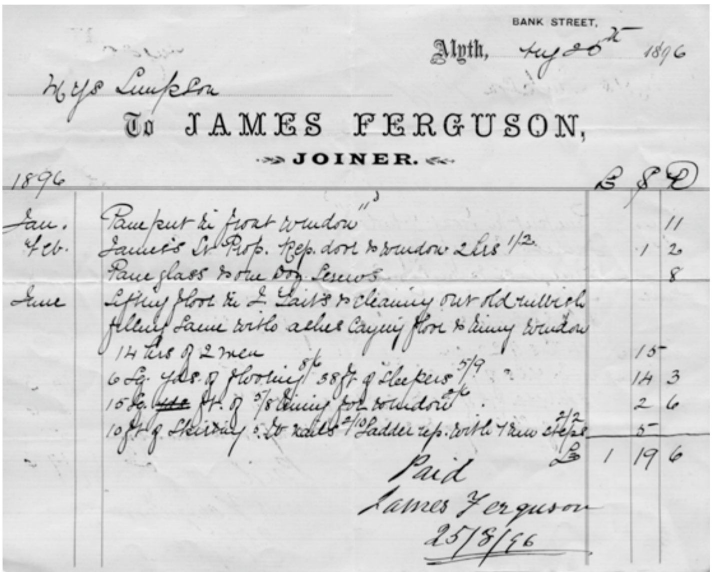


Figure 11. Billhead of James Ferguson, joiner, Alyth, Perthshire, 1896.

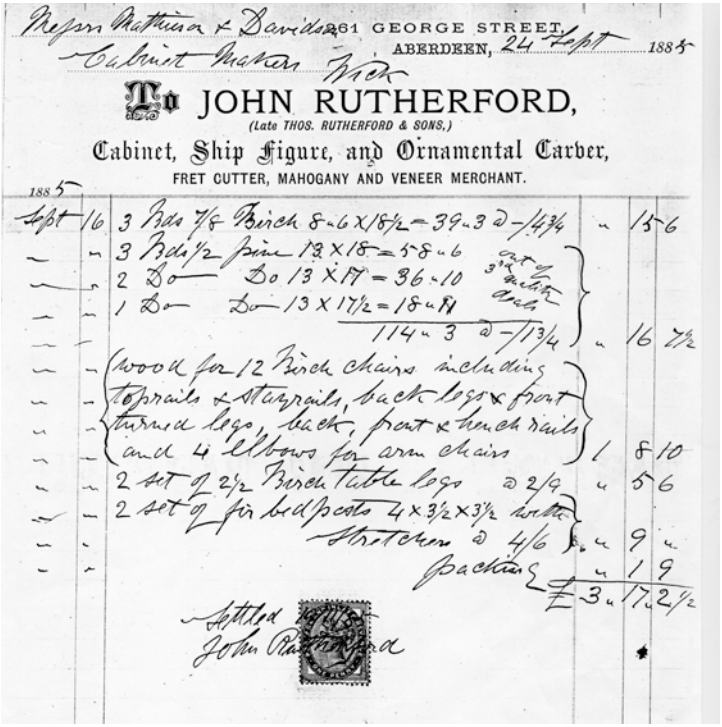


Figure 12. Wood products supplied to Wick, Caithness from Aberdeen, 1885.

House carpenters

The house carpenter was the generic rural woodworker making the crib, the coffin and all other items in between. Though many of these were untrained, there was often a family history of good hand skills that had been passed on, and much of their work was of considerable skill. There were also a considerable number who were trained: many wrights chose to work in construction rather than furniture, and others left the workshops in which they had become journeymen and established themselves as sole traders in rural areas. The great attraction of this must have been the wide variety of work involved; it may not have been as grand as working in the larger town or country houses, but there is clear evidence that house carpenters' work could be equally skilled. The carpenter undertaking the work in Rogart (fig.3) had previous training in a

Figure 13. Wooden rule stamped by D MacKay, Rogart, Sutherland, 1896.

Glasgow cabinet maker's and achieved the status of journeyman before returning to Sutherland, and the work done in this cottage was of the highest order. After over a hundred years, including sixty years of abandonment, the staircase was still as tight and firm as when first made. Very often the house carpenter was the equivalent of today's 'project manager', being generally the last man on the job and having begun work as soon as walls were erected.

In the nineteenth century, house carpenters were involved in the considerable improvement and replacement of the vernacular housing stock – fitting new roofs, adding staircases, lining rooms and making furniture (fig.3 lists timber required for such an improvement). They were often the unsung heroes of the wood-working trades, leaving very little in terms of paper trails for us to archive. Just occasionally when a cottage is being renovated, small indications emerge – such as the broken rule belonging to D MacKay, house carpenter (fig.13), found beneath the floorboards

Figure 14. Letterhead of Francis Brodie, Edinburgh, 18th century.

of the now abandoned croft in Rogart and assigned to the work carried out there in 1894 (see fig.3).

There is one notable exception, which serves to turn everything upside down; Francis Brodie, arguably one of eighteenth-century Scotland's finest furniture makers, humbly offered 'House Carpenter and Joiner work by the best work men' on his billheads (fig.14).

Cabinet makers

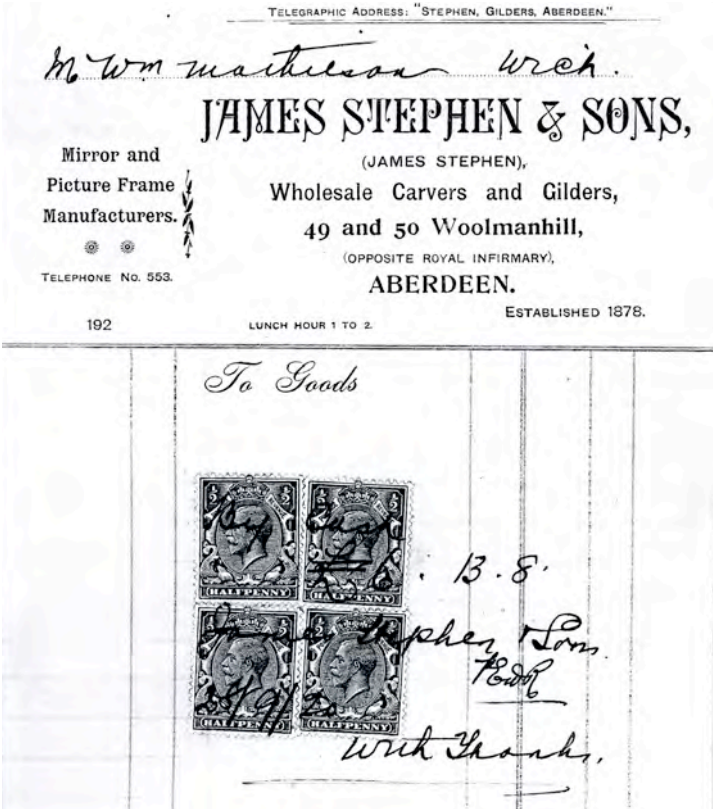
Perhaps the most skilled of woodworkers, cabinet makers were mainly to be found in the towns, and increasingly established ware-rooms or showrooms from which people could buy furnishings and fittings to embellish their homes (fig.14). Whilst these would not have directly furnished the vernacular home, there are many instances of local tradesmen copying styles seen in the 'big house' for more humble dwellings – such as the wonderful armchair by a wright from Dunbeath which strives to copy the regency styles seen in the castle but remains limited by his vernacular skills (fig.15).

Figure 15. Chair made by Dunbeath House wright, Caithness, mid-19th century.

Specialist skills

Woodcarvers and woodturners, though not often called upon to assist with vernacular housing, did sometimes play their part. Woodturners were often contracted to supply newel posts and balusters for staircases. There was also considerable trade for turned furniture parts such as legs for chairs and tables which were then integrated into pieces made by local craftsmen. The work of the woodcarver in the vernacular home would have been very minimal. Woodcarvers were more likely to be employed in the wealthier properties in town and country, or in the more architectural constructions needed for ecclesiastical and civic works. The sweeping staircases of grand houses present the ideal combination of specialist woodworking skills, with the many turned parts combining with the carver's work in the curves of the banisters and perhaps decorative lanterns on the newel posts (figs 16, 17 and 18).

Figure 16. Billhead of James Carvie & Sons, joinery manufacturers, Aberdeen, 1885.


TELEGRAPHIC ADDRESS: "STEPHEN, GILDERS, ABERDEEN."

M^r Wm matheson wr^k.

JAMES STEPHEN & SONS,

Mirror and Picture Frame Manufacturers.

(JAMES STEPHEN),

Wholesale Carvers and Gilders,

49 and 50 Woolmanhill,

(OPPOSITE ROYAL INFIRMARY),

ABERDEEN.

TELEPHONE No. 553.

ESTABLISHED 1878.

192

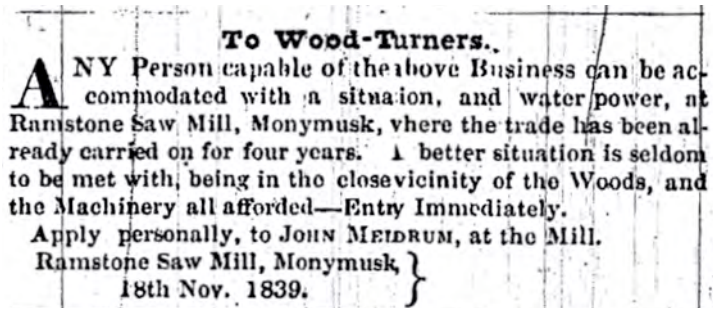
LUNCH HOUR 1 TO 2.

To Goods

13.8.

With Thanks.

Figure 17. Billhead of James Stephen & Sons, trade carvers, Aberdeen, 1919.


To Wood-Turners.

ANY Person capable of the above Business can be accommodated with a situation, and water power, at Ramstone Saw Mill, Monymusk, where the trade has been already carried on for four years. A better situation is seldom to be met with, being in the close vicinity of the Woods, and the Machinery all afforded—Entry Immediately.

Apply personally, to JOHN MELDRUM, at the Mill.

Ramstone Saw Mill, Monymusk, 18th Nov. 1839.

*Figure 18. Advertisement for woodcarvers offering water-powered machinery (*Aberdeen Journal*, 1839).*

Furniture manufacturers

By the beginning of the twentieth century, furniture manufacturers such as Bow's of Glasgow (fig.19) had produced mail-order catalogues which were increasingly used by householders throughout Scotland, particularly in the Highlands and Islands, and regional furniture manufacturers such as McEwens of Wick were established (fig.20).

Figure 19. Front cover of Bow's Emporium mail-order catalogue, Glasgow, 1908.

Figure 20. Billhead of Alexander McEwen, furniture manufacturer, Wick, Caithness, 1880.


Barnluith ~~CAIRNIE~~ STREET,
Alyth, Janʸ. 13th 1908
Mr. D. Robertson. Airlie Brae
To JOHN CHRISTISON,
1907 JOINER AND FUNERAL UNDERTAKER.

Figure 21. Billhead of John Christison, joiner and undertaker, Alyth, Perthshire, 1907.

Undertaking

Whilst undertaking is not of itself a woodworking trade, coffin making is, and a tradition of the woodcraftsman also being the undertaker was widespread throughout Scotland and remains in some areas today. George Hugh MacKay of Melness in Sutherland left a beautifully scripted notebook of estimates which had figures for repairing a door, making a new window and fashioning a coffin all on the same page. The billhead from John Christison of Alyth advertises this diversity (fig.21).

Call for information

This paper is part of a wider study in which I am including tools, workshops, individual craftsmen and finished work associated with our wealth of vernacular woodworking. I would greatly appreciate any information or material that members might like to share.

Acknowledgement

For this study and my wider research I am greatly indebted to Janet Brinsden, who graciously shared her research into the wrights of Aberdeen.

SCOTLAND'S RURAL PAST: IMPROVING KNOWLEDGE AND RAISING AWARENESS THROUGH COMMUNITY INVOLVEMENT

Brian Wilkinson

Scotland's Rural Past (SRP) is a five-year, nationwide project hosted by the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS). Since October 2006, the SRP team has been working with local communities, schools and organisations across Scotland to research, record and raise awareness of their rural heritage.

Deserted rural settlements and their associated landscapes are still a significant feature of the Scottish countryside. The majority of these sites are of relatively recent date and typically represent settlements abandoned or cleared of their inhabitants from the mid-eighteenth century onwards, following the introduction of Agricultural Improvements. Thousands of these derelict settlements can be seen across rural Scotland, yet surprisingly few have ever been comprehensively recorded by archaeologists. Equally, few have been the subject of historical research to piece together the history of their development, use and subsequent abandonment. The last 300 years has seen a dramatic shift in population away from the Scottish countryside to urban areas, and these abandoned ruins represent a wealth of unexplored evidence about rural life during a time of massive social change. They are a valuable asset to the nation and a physical link to a recent past and way of life so radically different to that of contemporary Scots.

The SRP team has provided training to volunteers in archaeological survey and recording techniques and in historical document research methods. This training teaches the skills necessary for volunteers to undertake their own site surveys and research, then add the results of their work to the national record. Through a programme of training, and ongoing professional support, the SRP

team enables groups to develop projects focusing on recording sites of interest to them, and researching the history of the area and the lives of past rural communities. There are currently 62 SRP projects underway or completed across the length and breadth of the country – from Unst in Shetland to an RSPB reserve in Dumfries and Galloway, from Great Bernera in the Western Isles to the Lammermuir hills of East Lothian – and around 700 volunteers of all ages are actively participating in research and fieldwork.

An online recording form has been developed to enable participants to submit their records remotely to the RCAHMS database via the SRP website. Once submitted and processed, their data are added to the national database and made publicly accessible through Canmore, RCAHMS' online archive (http://www.rcahms.gov.uk/canmore.html). Over 100 new records have so far been submitted to the RCAHMS database, and a further 300 or so are expected before SRP officially finishes in autumn 2011. Many of these records are extremely thorough and also capture unique local knowledge and memories. This work is of real value and is adding significant new detail to our understanding of vernacular architecture, historic rural settlement patterns and former landscape use.

This is one – very important – way in which SRP projects are contributing to current understanding and appreciation of our rural heritage. However, many of the projects are also helping to raise awareness of the rural past in their area through a variety of initiatives aimed at a wider audience. These include guided walks and cycle rides, talks and presentations, exhibitions, hands-on training days, poetry, a play, an excavation and even a 'Time Team' television programme for Channel 4. These events and activities are developed, organised and run by local SRP projects, often supported by funding and local stakeholders that the projects have recruited. In the past year alone, over 55 separate community events have been arranged by SRP groups around Scotland, helping literally thousands of local people to find out more about their rural heritage.

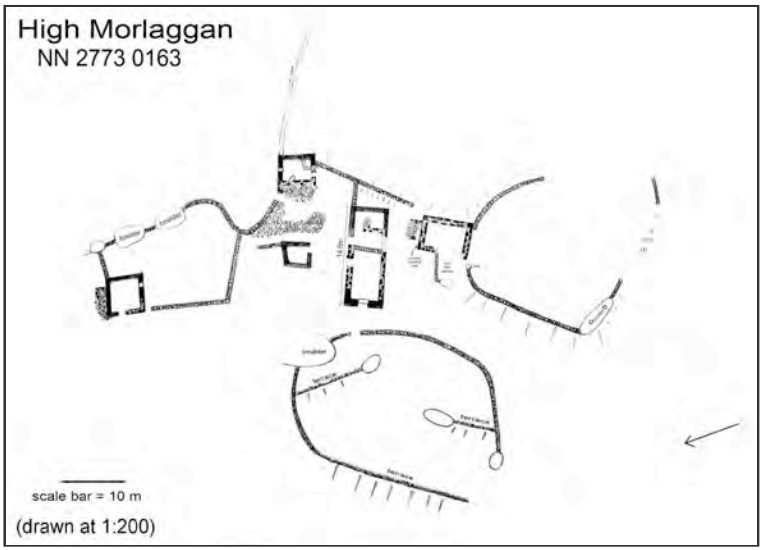
SRP at High Morlaggan

The High Morlaggan SRP project at Arrochar, Argyll, is an outstanding example of the variety of activities being undertaken under the banner of SRP. The project, managed enthusiastically by local residents Sue Furness and Fiona Jackson, is investigating a deserted settlement that stands on a hillside above the eastern shore of Loch Long. Both amateur archaeologists and keen walkers, Fiona and Sue became interested in the drystone ruins they could see on the hill when the bracken was down. Keen to find out about the history of the site and its inhabitants, they began their historical research. Asking around locally, looking at old maps, finding old postcards and researching census and estate records produced a wealth of information but little idea of what to do with the results of their searches. Fortunately, their investigations led them to Scotland's Rural Past. The SRP team provided training, support and equipment to enable Fiona and Sue to survey and record the ruins.

Figure 1. The bracken-infested ruins of one of the High Morlaggan township buildings and its garden plot. (Crown Copyright: RCAHMS)

Figure 2. Plane table survey allows SRP volunteers to create detailed plans of abandoned rural settlements. (Crown Copyright: RCAHMS)

Figure 3. Plane table survey drawing of High Morlaggan. (Crown Copyright: RCAHMS)



What emerged from their field survey was an accurate plan of a farming township of approximately two-and-a-half acres (one hectare), consisting of five buildings with garden plots, enclosures, open fields with surviving rig-and-furrow cultivation and clearance cairns, all surrounded by a drystone head dyke. These structures are representative of a typical post-medieval farming community, whose occupants would have maintained themselves on this patch of fertile ground, growing oats or barley

within the bounds of the township head dyke and pasturing their cattle on the surrounding hills. The township showed signs of lengthy occupation, seen through the reuse and remodelling of buildings, adapting their layout and perhaps function through time. It was possible to discern the different phases of building, identifying where additional rooms had been added, internal walls built and doorways altered. It was not possible to say definitively which of the buildings were dwellings as the surviving stonework did not reveal the presence of any fireplaces, perhaps indicating the use of open hearths or a hingin' lum, or alternatively indicating a different function as barn or byre.

Supplementing the archaeology at High Morlaggan, historical research into the site uncovered records in the Procurator Fiscal's Library, Glasgow, dating back to the early sixteenth century. In 1514 the land had been given to John McFarlane by Dugal McCoull, in payment of a debt, and it is depicted as 'Murlagan' on Timothy Pont's late-sixteenth-century map of Gare Loch, Loch Long and the Holy Loch. Morlaggan remained McFarlane property throughout the sixteenth and seventeenth centuries and was given variously as life-rent to the spouses of members of the Clan McFarlane until the lands were sold in 1784. Estate records from the early 1800s record four tenants at Morlaggan, and its amalgamation with a neighbouring farm provided pasture for 600 sheep. This is corroborated by the namebook of the First Edition Ordnance Survey from 1860 which records a shepherd living at High Morlaggan. The fortunes of the site dwindled during the twentieth century: only two roofed buildings are shown on the Third Edition Ordnance Survey map of 1914, and the Helensburgh Directory of 1916 provides the final mention of anyone living there.

Realising they did not want to keep their new-found skills and their research to themselves, Fiona and Sue began to think about how they might share their results more widely. This has taken a number of different approaches to attract and enthuse a variety of audiences. They contacted their local head teacher at Arrochar Primary School to gauge interest in setting up a heritage project in

which the whole school could take part, and which would be in line with the latest curriculum developments. 'A Curriculum for Excellence', recently launched in Scottish schools, places increased emphasis on pupils' personal achievement and on experiential and interdisciplinary learning – curriculum fundamentals which can be well met through an archaeology project. Several activities were designed to offer many different approaches to children's learning and to appeal to as many children as possible. Working with the SRP education officer, a guided visit to High Morlaggan was arranged for the senior pupils. They came to the site with tape measures and clipboards to make scale drawings of the buildings, and then used their plans to create 3D reconstructions of the township back in the classroom with Google SketchUp. Younger pupils remained in school but were able to create scale models of the township out of clay, and work together to make a collage depicting life in High Morlaggan two hundred years ago. Funding was successfully applied for from the local education authority and the Clore Duffield Foundation, which enabled several artists to work with the pupils throughout the school term. These included a Gaelic waulking song group, a poet and a visual artist, each of whom facilitated the children's creative exploration of life in the past. Perhaps the most notable achievement of the heritage project was the school's collaboration with Theatre Alba, who worked with pupils to write a play which the children performed for their parents in and around the preserved township at Auchindrain Museum.

Figure 4. Pupils from Arrochar Primary School took measurements of the settlement remains and created scale models. (Crown Copyright: RCAHMS)

Figure 5. Excavation of a byre-dwelling at High Morlaggan. (Crown Copyright: RCAHMS)

Further archaeological work took place in autumn 2009. With funding from Loch Lomond and The Trossachs National Park and Scottish Natural Heritage, archaeologists from Kilmartin House Museum were engaged to partially excavate the township. It was hoped that this would provide evidence of domestic life and agricultural practices, and discover more about the layout and function of the buildings by uncovering their floors. Additionally the excavation would enable members of the local community to get involved in the archaeological process as volunteer excavators. This they did, far exceeding all expectations with around 100 people visiting the excavation and taking part in the digging, during one of the wettest Novembers on record.

The excavation revealed that two of the buildings had been byre-dwellings, with human occupation at one end of the building, evidenced by hearths, and animals in the other – a common arrangement in rural settlements of the period. Most of the finds, including pottery and fragments of a rotary quern, dated to the 1800s, but potentially earlier buildings were identified. The

Figure 6. A sheep pen inserted into a former byre dwelling shows changing use of the township over time. (Crown Copyright: RCAHMS)

possibility of a further season of excavation in 2010 is being explored, with the aim of discovering earlier evidence for occupation, and extending our understanding of High Morlaggan even further back into the past. The results of all the research so far will be presented to the local community in an exhibition and illustrated talk at the new community hall in Arrochar, and project reports will be made available online, with full publication in due course.

Conclusion

Scotland's Rural Past is not just about creating new records for RCAHMS; equally important is raising awareness of the archaeological resource and creating opportunities for its interpretation by local people. As the High Morlaggan project has shown, a creative approach to researching the past can engage the whole community. The enthusiasm and initiative shown by all the High Morlaggan participants is typical for the majority of SRP projects, and it is this which makes SRP such a success.

Publication note

This article will also appear in a forthcoming issue of *History Scotland* magazine.

SHORTER ARTICLES AND NOTES

Some observations on horizontal mills

Geoff Leet

Inspired by articles on mills in recent issues of *Vernacular Building*, I decided to put pen to paper to record a number of observations I have made on this subject over the years.

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During the 1997 SVBWG Shetland Conference, a keen-eyed member spotted a hexagonal block of concrete cast with a steel bar as an axle. Each face had a 45-degree slot suitable for a wooden paddle, clearly designed as the hub for a horizontal mill. We had earlier seen the stonework of many such mills down the Clumlie Burn but no timber had survived. The concrete hexagon was now used as a weight for one corner of a tarpaulin covering an upturned boat that lay to the right of the road south of the Clumlie Burn. Other members may recall the exact location. I was surprised that horizontal mills were still being refurbished into the concrete era.

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I can recall only three horizontal mill sites in Caithness, all ruinous. A crofter, Bobby McLeod, explained how he took his grain to the big mill and how it was laid on part of the iron drying kiln floor, separated from other crofters' grain by planks. When grinding was complete he was sent a postcard.

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In Elizabeth Beaton's *Caithness: An Illustrated Architectural Guide* (Edinburgh, 1996; p.107), the large Achingale Mill near Watten is shown. Although remote from any harbour, it had annual custom from Orkney, suggesting a shortage of milling capacity on the islands.

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Hugh Cheape's *Kirtomy Mill and Kiln* (Edinburgh, 1984), an SVBWG publication, is an excellent guide to Sutherland's horizontal mills. (I miss the use of the term 'click mill' and the thought of the contented hum in the valley with the harvest safely in.)

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Surviving features of most pre-clearance townships are the robust egg-shaped grain kilns beside a small barn. Grain must be dried before milling, whether by quern or mill wheel. At Achscoriclate, at the south-east corner of Loch More (ND08204430), in a drying kiln I found part of a perforated red brick tile, used to support the grain and to reduce the risk of a kiln fire. I am not aware of any similar find. The fragment is of a waffle-like corner, 19 by 11 by 4.8 centimetres (7½ x 4⅜ x 1⅞ inches) in size. In the base are square cavities of 5 by 5 centimetres (2 x 2 inches), each 2.7 centimetres (1⅛ inches) deep and each with four or five conical holes, the holes reducing to 4 millimetres (⅛ inch) diameter at the top face. (The tile is now in Caithness Horizons, the Thurso museum.) The drying kiln is located 0.9 kilometres (half a mile) from the remains of a horizontal mill (ND08504480), the mill wheel lying on the heather downstream of the mill.

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Kilns in large mills used perforated iron plates supported on cast-iron beams and columns. The grain drying floor was usually isolated by iron fire doors from the rest of the mill.

SVBWG CONFERENCES AND MEETINGS

2009 Spring Meeting
Glasgow, 25 April

The quickly arranged SVBWG Spring 2009 meeting in Glasgow proved to be a fascinating day. After meeting just off George Square in the splendid surroundings of the Corinthian Bar

(formerly the Sheriff Court and the Union Savings Bank of Scotland), we proceeded by open-top bus to Easterhouse. There we explored the exterior and part of the interior of Blairtummock House, a mansion of 1840 extended in the late nineteenth century and recently restored by Simpson & Brown. Of great interest were the eighteenth-century architectural fragments incorporated in the walled garden.

Aboard the bus again, we travelled to what is arguably the earliest house in Glasgow, Provan Hall, begun in the late fifteenth century and one-time country residence of the medieval prebendary of Barlanark. The property, owned by the National Trust for Scotland and leased to City of Glasgow Council, comprises two ranges, the older with Renaissance detailing, which are joined by a defensive wall. In bright warm sunshine we explored the complex and the eighteenth-century formal garden, which, like Blairtummock, contains earlier architectural fragments.

Once back in the centre of Glasgow, we were led on a tour with the theme 'Tobacco, Slavery and Abolition' by Stephen Mullen, who has made a study of this aspect of eighteenth- and nineteenth-century Glasgow. As we viewed the homes, banks, trading areas, churches and graves of the Tobacco Lords, we learned of the not inconsiderable part that Glasgow had played in the slave trade, and also in its abolition. The stories behind familiar buildings proved fascinating, and were an apt conclusion to a most interesting day.

Veronica Fraser

2009 Autumn Conference
Thornhill, Dumfriesshire, 9 to 11 October

The 2009 Annual Conference was rather a change from the usual pattern, being held in the Autumn as opposed to the usual Spring. This was due to a combination of events including ill health on my part in the early part of 2009. Dave Hutchinson's relocation

to Wanlockhead was the catalyst for this quickly organised event.

The weekend involved looking at the contrasting impact of agriculture and industry on the Buccleuch and Queensberry Estate. Based in the Thornhill Inn, 24 delegates gathered after dinner to receive a talk on the Drumlanrig policies; unfortunately the Estate Manager was unable to join us and one of the most experienced rangers ably stepped in to give us an illustrated introduction to what we would visit the following day.

On Saturday morning, the overcast skies cleared as we made our way to Clonhie Steading, some twenty minutes from Thornhill. This should have required a fairly stiff uphill walk from where the coach could reach. However, on arrival, our driver, Mary, turned out to be as resourceful as 'Margaret, the Bus' (as delegates to Newton Stewart will remember), and decided to 'go for it', driving all the way up the track to the steading and thus saving a great deal of time.

Clonhie is a large courtyard steading with a detached farmhouse to the east. Built of rubble with ashlar dressings and limewashed, it comprises four ranges and a cobbled courtyard with access either side of the detached east range. The two-storey west range includes a three-bay stable, a two-bay cartshed and a barn with ventilation slits at the north end. The remaining ranges are single storey. The south range has been extended and partly rebuilt in brick. The immediate impression noticed by delegates was the size of the roofing slates: laid in diminishing courses, as you would expect in a quality building, those in the lowest courses were enormous. The regular thickness of the slates suggested that they were possibly English rather than Scottish in origin. In addition, we found that the roof structures utilised both English and Scottish methods – trusses, purlins and slating on battens side by side with rafters and sarking, sometimes on the same range! The treatment of skews showed another peculiarity: slates were laid across the wallhead of the gable and stone skews bedded on top of the slates, often with the slating projecting slightly beyond the skew to form a drip. Once noticed, this detail was evident on many buildings on the estate and on cottages in Wanlockhead.

Following coffee and scones in the Drumlanrig Castle old kitchen, we walked through the castle gardens to examine the exotic heather huts. These rustic garden houses are the result of a work creation project initiated by the then Duke in the middle of the nineteenth century. They are all octagonal structures formed on eight vertical tree trunks connected by hewn and sawn timbers. Originally thatched in heather, which has since been replaced with slate, they have elaborately decorated walls and interiors using cleaved hazel and birch together with heather and coloured lichens. Each hut has surround seating using heather rope, some have tessellated woodblock floors and one has a patterned floor of small stone cobbles.

In the afternoon, after a delicious lunch at the Castle, we travelled to Gateslack Cemetery Cottage, a roofless ruin near Durisdeer. This turned out to be one of those fascinating buildings which defy rational explanation. There is no indication of it ever having been used as a habitation; the gable walls are of the same thickness as the long side walls; small square openings for ventilation/light all show signs of and fittings for hinged shutters and security fixings; outward-opening doors are fitted into recesses with indications of fixings to fasten them in an open position on the outer wall face. All agreed that Gateslack merits further research and recording.

On finding that the church in Durisdeer was open, we took the opportunity to look at the extraordinary Queensberry Mausoleum. Built on the north side of the church, forming a Greek-cross plan, the mausoleum houses a wonderfully sculpted sepulchral mural monument by John van Nost of a Duke of Queensberry and his wife, *c*.1711. The entrance to the vault lies below a baroque white marble baldachino on four barley-sugar columns. In all not very vernacular, but well worth visiting.

The final visit of the afternoon was to Morton Mains Farmhouse and Steading: a truly vast complex, a huge open square with eighteenth-century barns and ranges of cart sheds, stables and piggeries. More recent is the Haybarn, listed category B, of double-pile construction: originally two parallel barns with a void

between that has been subsequently roofed over. Each corner comprises buttressed masonry piers of rubble with ashlar dressings. The corners are linked by wooden lintels with angle braces on the long walls. The gables are boarded with ventilation hatches, all under a slated roof. It was difficult to determine whether any part of the original farmhouse survived to be incorporated into the large, uninspired, nineteenth-century farmhouse by William Burn.

On Saturday evening, following dinner we were introduced to the history of lead mining at Wanlockhead.

Sunday was spent entirely at Wanlockhead and the Hidden Treasures Museum of Lead Mining, where we were extremely well looked after, being welcomed by coffee and enormous scones – despite just having had breakfast, delegates did their best not to disappoint the kitchen staff! For the morning we divided into small groups to visit a lead mine, miners' cottages and the Wanlockhead Library, formed in 1756 by 32 men, including the local preacher – closely behind that at Leadhills which is both the first subscription and working-class library in Britain. There was so much to take in and the time slots were somewhat short, so we were ready for a break at lunchtime.

After lunch, twenty or so delegates opted to try their hand at panning for gold, and some departed with a small plastic phial of water with, I thought, almost imperceptible specks of the precious metal – certainly not enough to increase SVBWG funds!

We then walked through the village down the valley to the Wanlockhead Beam Engine. A pumping engine designed to drive water out of the mine, it lies over Straitsteps mine where it was last in use. Thought to have been constructed in the mid-nineteenth century, it is the only water-bucket engine to be seen on a mine in Britain. These mechanisms, known as 'bobbing johns', were replaced by small steam-driven pumping engines.

Walking away from the village past the remains of cottages and the old Glencrief mine, we came to the remains of a smelting mill. The galena (lead ore) was crushed and washed, then mixed with coal or peat on a fire kept hot by an air blast from bellows

powered by an adjacent waterwheel. The molten lead ran off into a collecting pot from where it was scooped and poured into moulds. The Wanlock Burn is canalled and harnessed throughout the glen in stone-sided gulleys.

The Old Meadowfoot Graveyard lies beyond and contains a wealth of memorials with fluidly cut and distinctive lettering. The nineteenth-century Meadowfoot smelter lies beyond the graveyard. A unique feature of this smelter are flues lined with wood, which condensed the lead-rich gases from the smelter.

While some delegates had to return homewards on Sunday evening, the remaining group of 20 were able to enjoy a private visit to Drumlanrig Castle on Monday morning. The Castle had only closed for the winter a week or so earlier, so all the state rooms were still well set out. The senior guide was able to give us more time and attention than he would have been able to spare during the open season, and delegates had the opportunity to ask and discuss details that might normally be missed. Dave Hutchinson was in his element and could often be found diving under a table or chair to explain constructional details of fine furniture by Alexander Peter, Francis Brodie and William Mathie, all celebrated furniture makers in eighteenth-century Edinburgh.

This brought to an end a fascinating weekend, and thanks are due to Dave and Jill Hutchinson for all their efforts as local organisers.

Ronnie Robertson

2010 Annual Conference
Thurso, Caithness, 23 to 26 April

During the Spring Conference 2010, the SVBWG Council agreed that Caithness was worthy of a revisit: surprisingly it was 1999 that we last visited Caithness, centred on Wick. To avoid duplicating any of the sites from the Wick conference, we concentrated on

the eastern part of Caithness and made use of the Inventory of Vernacular Buildings of Caithness produced by Andrew Wright.

We were very comfortably based in the St Clair Hotel in Sinclair Street, where following dinner on Friday evening Andrew Wright gave a presentation based on his research for the Inventory. This proved to be a stimulating opening to the Conference.

Saturday morning began with a visit to St Peter's and St Andrew's Church in the centre of the New Town of Thurso. Lyn Leet gave a talk on the history of the building and her involvement over many years with the repair of the church. Lyn and her husband Geoff then guided us through the streets of the new town area where, as usual, with so many eyes looking at details, many interesting discussions were generated.

The simple soup-and-sandwich lunch which I had arranged at the hotel turned out to be more elaborate, with quiches and cakes included. Delicious! We were then led down to the Old Town by local historian Alan McIvor, who entertained us with many amusing stories about the area. (Alan was later, at the AGM, given a year's membership of the Group as a token of our appreciation.) By mid-afternoon we gathered at Old St Peter's Church to meet George Watson, a local historian and antiquarian who has researched and written on Old St Peter's with the late Harry Gordon Slade. The resulting exploration was greatly enjoyed. The final visit of the afternoon was to 'Caithness Horizons', the Victorian Gothic former Town Hall of 1870 which, together with the adjacent Carnegie Library, has been reinvented as a unique visitor attraction telling the story of Caithness, ancient and modern – the landscape, the buildings, the flora and fauna – with interactive computers enabling the user to see such things as the buildings of the island of Stroma, abandoned in the 1960s.

Dinner on Saturday was followed by the necessary AGM.

Sunday required coach transport for field visits, the first of which was Reay Parish Church (1739), a simple, rectangular church with a distinctive tower at the east gable. The traditional internal layout includes a long central communion table and im-

posing eighteenth-century pulpit with stylised Ionic pilasters on the backboard and hexagonal sounding board.

Sandside Harbour was the next stop: an imposing harbour of *c*.1830 designed by James Bremner for Major William Innes of Sandside for both trade and fishing. The seaward-facing walls are built of vertically laid masonry. The coach had difficulty negotiating the right turn into the lane leading to Sandside house, but as it was such a lovely morning we all walked up the lane to the house where we were welcomed by the owner of the estate, Mr Minter. We had requested permission to look at the fine eighteenth-century farm buildings, including kiln barn and doocot. Mr Minter responded well to questions about the buildings and spontaneously invited us to view the interior of the house. This unexpected diversion revealed mid-eighteenth-century plaster panelling and, in the early-twentieth-century wing, which was added by the Pilkington (glass) family, corridors panelled with a very high dado, the panels covered with entire deerskins and the space above the dado hung with heads and antlers – an extraordinary, love-or-hate experience.

We ate our picnic lunches in the garden area of our next stop, Castlehill Harbour. The village of Castletown was laid out by James Traill (1758–1847), lawyer and Sheriff-depute of Caithness, who was the energetic landlord of Olrig Parish and Castletown. He was deeply involved in agricultural improvements and industrialised the flagstone industry for which he constructed the harbour. Caithness flagstones were used for paving all over Great Britain and exported widely, including to New Zealand and South America. Castlehill Harbour was constructed for Traill by James Bremner in *c*.1820, and has a wide paved triangular quay designed to facilitate the handling of large quantities of flagstones by boat.

An unscheduled visit to the Parish Church at Dunnet, visited in 1999 as part of the Wick conference, was appreciated as many of the members present had not been to the earlier conference. Unfortunately, the interior of Mary Ann's cottage, Westside Croft, had been dismantled for the winter to allow essential structural repairs to be carried out, and was not ready to receive visitors.

This meant that the additional hour we had spent at Sandside was recovered, and we moved to the final visit of the day, Ham Mill.

A warehouse probably dating from the eighteenth century and converted to a mill in the early nineteenth century, Ham Mill is a tall, four-storey building with severe structural problems due to the realigning of the road closer to the mill at the end of the nineteenth century and modern heavy traffic. Andrew Wright was able to explain the feasibility study being carried out for the current owner of the Estate to seek the repair and reuse of the building. The nearby Ham Harbour was worth the walk along the beach. Similar in construction to both Sandside and Castlehill harbours, it had been badly damaged in the early 1950s, and as a result over the years further storms have reduced the once massive walls to a pile of loose stones, so randomly thrown about that it was difficult to imagine that there had ever been a structure there.

On Sunday evening, Lyn Leet gave a presentation of vernacular buildings and churches that she had recorded or carried out repairs to, again stimulating good discussions.

Numbers were depleted on Monday morning after breakfast as some delegates returned south by train. Those left drove along the coast to a private visit of the Castle of Mey and lunch at Mey's Castle Arms Hotel.

Ronnie Robertson

2010 Autumn Meeting
New Lanark, Lanarkshire, 6 November

Plans are under way for the Autumn Meeting, due to take place at New Lanark. The mill town was founded in 1785 by the industrialist David Dale, who put his strong Christian principles into practice by providing for the welfare of those working in his textile business through the creation of this model working and living environment. A full report of the day will appear in the next issue of *Vernacular Building*.

REVIEWS

Edited by Veronica Fraser

Scottish Burgh Survey Series:

Historic Barrhead

E Patricia Dennison, Simon Stronach and Russel Coleman. Edinburgh. Historic Scotland. 2008. ix + 84pp. £9.50. 978-1-902771-69-4.

Historic Kirkintilloch

Martin Rorke, E Patricia Dennison, Simon Stronach and Russel Coleman. Edinburgh. Historic Scotland. 2009. xiii + 91pp. £9.50. 978-1-902771-58-8.

Historic Tain

R D Oram, P F Martin, C A McKean, T Neighbour and A Cathcart. Edinburgh. Historic Scotland. 2009. xiii + 162pp. £9.50. 978-1-902771-61-8.

The Scottish Burgh Survey is an invaluable resource in offering guidance on the archaeological evidence present in Scotland's towns, as well as providing a summary of the history and buildings of individual burghs for the more general reader. Begun in the 1970s in a basic format (now out of print), the series entered a second phase in 1995. The third phase of the project began in 2006, and includes the burghs of Tain, Barrhead and Kirkintilloch, as well as Govan, Dunbar, Mauchline and Maybole, and will continue with Whithorn, Fraserburgh, Wigtown and Galashiels. In all, around 70 volumes have been published, ranging geographically from Wick to Kirkcudbright. The third series, a collaboration between Historic Scotland and the Council for British Archaeology,

is presented in a way which has moved on considerably from the first; the volumes have a glossy finish, and are extremely well illustrated, with informative historic views, mostly from public archives. Each volume contains a broadsheet which allows a map of the area to be reproduced at a useable scale and provide additional information.

The surveys continue to follow a simple but effective and informative format. As well as providing a historical summary of a burgh, they highlight those aspects which would benefit from further investigation; suggestions are made of areas of the burghs which would probably yield further information through excavation, buildings which are good candidates for detailed survey are identified, and collections of documents which have been summarised but not studied in detail are named. Their primary purpose is as a tool in the planning process, and they are aimed at local authorities, developers and residents of the areas. They are not intended to be comprehensive histories but a distillation of information to provide an introduction and overview. They include substantial bibliographies to assist with deeper research as well as useful glossaries.

The examples of Tain, Barrhead and Kirkintilloch ably demonstrate the scope of the series. Each deals in turn with Site and Setting, History and Archaeology, and the Potential of the burgh, namely areas from where further information may be gathered. This last section acknowledges that the volumes are part of an ongoing process of discovering the history of our burghs. Place-name evidence, map and documentary research, and the results of building survey and excavation are all used to build up a picture of the historical resource, whether surviving or long gone. All volumes deal well with the industrial past, whether textile manufacturing (both in weavers' homes and in mills) in Barrhead and Kirkintilloch, subsequent foundry work in these towns, or sanitary engineering in Barrhead. Tain was more of a religious and commercial centre, but later became known for its distilling. The building types associated with all these activities, and the homes and lives of the people who carried them out,

are examined. Details are all important: for example, a late-seventeenth-century tax in Tain on bent grass, juniper and broom to prevent their overuse in roofing is mentioned; as is the fact that the last thatched building in Kirkintilloch was demolished in 1947; and the Dovecothall area of Barrhead is highlighted as a reminder of a lost structure.

To summarise: these volumes present a succinct distillation of the history of many of Scotland's burghs. They are an excellent resource for those seeking to develop and to monitor development, but may also be seen as an excellent historical introduction.

Reviewed by Veronica Fraser

Buildings of the Land: Scotland's Farms 1750–2000

Miles Glendinning and Susanna Wade Martins. Edinburgh. Royal Commission on the Ancient and Historical Monuments of Scotland. 2008. xi + 215pp. £30. 978-1-902419-57-2.

This book is the long-awaited main outcome of the Scottish Farm Buildings Survey (SFBS) which began in 1993. The impetus for SFBS was the realisation that the evidence of the surviving farm buildings of the Scots agricultural revolution was now 'becoming obsolete in its totality'; unsuitable for modern farming, the resource was bound to be either lost altogether or changed so radically that only tokens of the original form and function would survive. So, the primary objective was to record the remains before they are lost; an objective the more important since, for a substantial part of the nineteenth century, Scots farming was a model for the world.

The eighteenth and nineteenth centuries had seen demolitions and replacements on, if anything, an even more radical scale, as the agents of agricultural Improvement did not merely rationalise or modernise earlier buildings but eradicated them as symptomatic of 'the bad old ways'. The consequence is that the authors can report only a single, confirmed surviving building from before

the eighteenth century: the fine, late-seventeenth-century barn at Simprim Farm, Berwickshire.

A survey of 30,000 farms (the early-1990s total) was clearly impossible, and even developing and deploying a strategy to locate a fair sample was a 'monumental' task, based on a rationale which is carefully explained. The preliminary review covered around 3,000 sites, whittled down to around 300 for more detailed study. The aim was to cover the most representative, across all the main agricultural areas, whilst also seizing the opportunity to record special gems. So the book will not necessarily cover your own favourites, or even your own immediate area, but it almost certainly will cover comparable sites and areas and thus, a key role, provide a rationale against which new, detailed local studies can be carried out.

The scale of the work allows broad, general conclusions to be drawn – most importantly, perhaps, concerning the 'national' character of the buildings. There were regional building types to conform to arable or pastoral farming, and in every area there were large, sometimes grandiose, farms and smaller ones down to the level of the croft. However, particularly prior to 1850, local variation in architectural style mainly reflects the slower adoption of the ideas of Improvement in the north and west than in the south and east, rather than the continuation of a local vernacular.

The survey's long gestation time presents two technical opportunities which have been seized. Some of the background and detail of the surveys can now be traced online via the Canmore database (http://www.rcahms.gov.uk/canmore.html), a saving on space which allows the book to focus on other material. Furthermore the astonishing technical level of the design and printing of the book – particularly with its 140 or so wonderful photographs, drawings, maps and plans – could not have been achieved at any price in the early 1990s.

The brief first chapter is introductory and the three subsequent ones are broadly chronological (pre-1850, 1850–1914, 1914–present). Chapter Four recognises that by the early twentieth

century the national, and indeed the international, aspect of industrial farming was now dominant, and concentrates on the new types of buildings for specific purposes, emphasising the key role of new materials. Throughout the book, the buildings are related to their wider context. Chapters Two and Three both begin with a general discussion of the main issues – philosophical, economic, agricultural and so on – as they affected the various regions, each continuing with a region-by-region presentation of individual sites.

These regional aspects have presented the authors with a major problem, again seized as an opportunity, since there is a lack of previous well-researched regional agricultural histories which critically examine the published and manuscript primary sources. There are areas for which the short sections in this book are, without a doubt, the best summary available; but some are rather thin – little over a page for the pre-1850 West Central region (including Ayrshire, Renfrew, Dumbarton, Stirlingshire and parts of Lanarkshire). Inevitably, too, there is an over-reliance, as the writers acknowledge, on primary sources generated by the Improvers themselves, with all their biases. Up to half of the final chapter, similarly, is taken up with discussion of these general issues, and the consequence is that this is 'two books in one', both very good but neither as complete as it might have been.

In all periods, change was dynamic but was not linear; crofts and small farms might be less spectacular than the great mains farms and architect-designed steadings, but they were 'improved' nonetheless, and this book is at its best in drawing out the rationale of this complex pattern. The key ideas, particularly in the early phases of Improvement, were those of the elite and derived from the Enlightenment, and there is an apt comparison with contemporary prisons, hospitals and schools. However, in some areas more than others, tenants as well as landlords were important drivers of change.

Inevitably, there are gaps; houses are only touched on in relation to the other buildings. The geographical spread is wide but selective. The wide range means that not all topics could

be covered in equal detail, but it is sufficient enough that few topics are not touched on at all: hen houses, kilns, potatoes, slate, smallholdings and Stirlingshire all figure in the useful index. There are occasional irritations. The Forestry Commission was to create five million acres of new forest in Britain – a much less precise requirement than the '2,023,429ha' printed in the text. The statement that pre-Improvement tenants 'had no security of tenure' (p.20) is later corrected or at least qualified.

It is the authors' expressed hope that the book will stimulate further research. Much of that future work will, doubtless, involve surveys of small clusters of sites, or even of individual buildings. Those surveys can now be placed into a wider context but, as the book also reminds us, the task is urgent.

So, this is a splendid book which many readers of this journal will want to own as well as to read. It could be placed on the reference shelves or the architecture shelves, but it is certainly handsome enough for the coffee table.

Reviewed by John Harrison

Wanderings with a Camera in Scotland: The Photography of Erskine Beveridge

Lesley M Ferguson. Edinburgh. Royal Commission on the Ancient and Historical Monuments of Scotland. 2009. 182pp. £25. 978-1-902419-52-7.

As you handle this book, its very package presents an air of hopeful expectation. The choice of pictures for the front and back of the jacket entice you to turn the book, back and forth, contrasting the simple rubble cottage from Blarmachfoldach with the social intrigues of a street scene from Stromness. The book opens to a start paper, cleverly tinted to give an image implying a ghost of the past. This image is repeated later and in it we get an indication of Erskine Beveridge's ability to capture a scene that goes beyond its original concept as a photograph and becomes, by virtue of its

composition and quality, an historical document archiving a moment in autumn on a farmstead on the Ardgour peninsula. Your eye is drawn to the cartshed in the foreground, the peat stack to its side, and the birch trunks stored for use later, perhaps as rafters or purlins in some future repair. In the middle ground is a delightful thatched cottage nestled in a dell of broad-leaved trees, no doubt including a rowan and all surrounded with fields of stooks. So in this single image we have a wealth of rural history, but because of Erskine's artistic eye we get so much more.

I found many of the images quite inspirational and many I am sure could serve well as sources for all manner of creativity; perhaps this is why John Hume, in his preface, describes Erskine Beveridge (1851–1920) as 'one of the finest amateur photographers of his generation'. Some understanding of this comes from the introduction, which sheds light on his years at Edinburgh University and on his membership of and exhibitions with the Edinburgh Photographic Society. If one could plan one's interests to coincide with associated invention and development, and then combine them with the wealth and time to fulfil them, then this is a prime example of practice. Sadly we are not all so blessed, and one wonders what the subjects of photography would have been from the crofter, fisherman or shopkeeper had they had the facility to practice.

One slight disappointment, to me as a photographer, is the lack of detail on the equipment he used, the plates and their processing; but because there were no journals or logs found, this may have been unavailable. Certainly the quality of the plates and their processing is demonstrated by both their sharpness and depth of field, and the occasional darkening of the corners is a delightful reminder of the restrictions of early lenses. The limitations of late-nineteenth-century photography are also to be seen in shots of the esplanade at Anstruther Wester, where the blurred images of fishermen preparing their nets are contrasted with a sharp background of fine early-eighteenth-century houses with crow-step gables. In the same chapter appears a rare interior photograph taken in Kirkmay House, depicting a good example of a Victorian

drawing room. Its importance as an historical record of décor is delightfully enhanced by its clear indication of the problems of indoor photography in the late nineteenth century. It had to be taken using incident light and a long exposure, and during the time the cap was off the lens someone opened the door on the right-hand side leaving a ghost of an image, most clearly seen against the polished wooden floor.

The photographs that have been selected also give an extensive cross section of Scottish vernacular buildings, from cottages built from field boulders in random and bonded construction to village and town houses of locally quarried stones and well-cut ashlar. There are roofs in pantiles, slate and tin and some superb examples of thatching. Grander homes and hotels have been included, as well as a selection of ecclesiastical buildings. There are one or two excellent pictures of harbours. There are wonderful contrasts to be seen between the sheltered harbour and town houses of Crail and the beached boats and cottages on Barra; contrasts made particularly pertinent by the knowledge that the same photographer was responsible and that these images were taken within ten years of each other. There are also many photographs of agricultural buildings, including a fine timber-clad watermill at Contin and a barn on Hoy with a round-ended grain-drying kiln and a windmill to generate power for threshing.

I have no idea how many plates of Erskine Beveridge's images survive, other than the indication in the preface that these are but a small selection. At one level it makes a great book to dip in and out of, but at another it is, without doubt, a fine resource and one to which I will find myself continually referring. The full selection of images is held by RCAHMS and is available to view through the Canmore database (http://www.rcahms.gov.uk/canmore.html); but the book offers a beautifully presented landscape edition, superbly reproduced, and a text that is carefully understated but sufficient to allow the images to speak for themselves.

A very modest and not particularly exciting photograph of a broch by the road above the River Strathmore has included, almost out of shot to the right, Erskine Beveridge's horse and carriage

with what would appear to be an assistant waiting patiently for the next location. We might speculate as to where that may be, but without doubt his 'wanderings' were worthwhile and the record he has left is outstanding.

Reviewed by Dave Hutchinson

A Palace Fit for a Laird: Rowallan Castle – Archaeology and Research 1998-2008 (Archaeology Report No 1)

Gordon Ewart, Dennis Gallagher et al. Edinburgh. Historic Scotland. 2009. viii + 131pp. £14.95. 978-1-84917-015-4.

For centuries the house of the Mure family, Rowallan, with its twin-turreted gatehouse has been one of the most distinctive of Scottish castles. This volume, the first in a series of archaeological reports sponsored by Historic Scotland, provides a suite of detailed studies unravelling and interpreting the physical structures of the building that we see today, and setting this against its documented past.

The first section deals with the archaeology and architecture of the house. Excavations carried out by Kirkdale Archaeology between 1998 and 1999 have revealed evidence that opens up new vistas in the site's prehistory; the discovery of a cremation burial illustrates ritual use of the knoll on which the castle stands as far back as the late Bronze Age, while traces of timber structures of uncertain function demonstrate occupation in the later Iron Age.

Rowallan is a fine example of how a small Scottish country residence waxed and waned with the fortunes and aspirations of its owners. The oldest element of the standing structure is the stump of the north-east tower. This has not been closely dated, but can probably be attributed to the thirteenth or fourteenth century. By comparison with other nearby estate centres, the scale of the tower indicates that it was a residence of secondary rank, the main estate centre of the time probably being at Polkelly. The fifteenth century saw Rowallan become the principal residence

of the Mure family, and with this began the successive investments that created the building we see today. The focus shifted from the old tower to its ancillary ranges as successive modification, adaptation and expansion brought the house into line with contemporary fashion and requirements, with the addition of the hall range in the late fifteenth century, and the twin-towered forework, gallery and 'woman house' in the mid-sixteenth century. The flexibility of the courtyard plan and existing buildings allowed much of this work to take the form of extensive remodelling, rather than wholesale demolition and construction. The result is that the present building is a palimpsest of some seven hundred years. Tom Addyman's detailed analysis of the fabric provides insights into the careful, deductive processes necessary in unpicking the interwoven complexities of the building's development and the evolving use of its ranges. These are fully and clearly illustrated in the particularly valuable accompanying series of phased plans and elevations.

Rowallan is not unique in its complex history, but it is unusual in preserving so much early fabric in a visible form. Elsewhere, where structures of a similar antiquity have survived eighteenth- or nineteenth-century rebuilding, they are commonly hidden behind later veneers and additions. Such radical reworking was indeed proposed for Rowallan several times in the nineteenth century; if executed this would have swept away much in the building that is now seen to be of great interest. Ironically, Rowallan's preservation is largely due to its decline in status; no longer regarded as the principal residence of the proprietor, the resources and will required to initiate and carry through the work on an increasingly obsolete and problematic building were evidently not available.

Paralleling the structural history, the volume also provides similarly detailed studies by Dennis Gallagher and John Harrison, of the historical background and the designed landscape. The volume has helped to clarify the uncertainties of later tradition and of documentary ambiguity, restoring the Comyns to their rightful place as Rowallan's thirteenth-century owners. The

Mures, the family most associated with Rowallan, are shown to have succeeded to the estate only in the late fourteenth century. Thereafter the family retained the castle until the mid-nineteenth century, when it was sold to the Corbetts, and were thus responsible for most, if not all of the standing buildings.

Following on the model of the Rowallan volume, this new series of publications will build into a useful and authoritative resource, for both architectural and social historians and archaeologists.

Reviewed by Iain Fraser

The Garden Cottage Diaries: My Year in the Eighteenth Century

Fiona J Houston. Glasgow. Saraband. 2009. 224pp. £17.95. 978-1-887354-66-0.

For the year of 2005, SVBWG member Fiona Houston lived as if in the year 1790. Partly undertaken in protest against twentieth-century living habits, partly for research (at the time she was working on an exhibition on 'The Guid Scots Diet'), her journey into the past resulted in a column in *The Herald*, magazine articles and radio pieces, and now this fascinating book. As well as shedding light on how people lived without all the conveniences of modern life, and governed much more by nature, this volume is a story of determination and resolve. That said, Houston was practical and did not enter the past slavishly, so one also sees her sense of humour in dealing with the issues that arose.

Houston's decision to research how our ancestors would have dwelt, fed, entertained themselves and spent their days is part of a reaction against today's throwaway, convenience society which others share, but her chosen way of life was an experiment which drew upon lessons of the past. She chose as her context an eighteenth-century ancestress, Anne Houston, wife of a Galloway schoolmaster. The standard of living of a schoolmaster's wife was one which would be attainable and sensible to imitate, and the

outhouses of Houston's Peeblesshire manse provided a suitable accommodation. With a small amount of work, a single-room cottage (which may have been the original manse) in the range of domestic offices was adapted; the chimney and windows were repaired, a boxbed was created and a door partition, as SVBWG members viewed at Moirlanich during the 2006 Drymen conference, was erected. The cobbled floor, which overlay the original earthen layer, was for habitation covered over by wooden boarding, to which a dominie of the period would have aspired, and may, in a generous parish, have achieved. Inevitably compromises had to be made as it made sense to use modern tools, methods and transport in preparation for the project. Unable to use the open hearth for cooking, Houston installed an anachronistic range lacking the critical parts which would have allowed the burning of coal, thus restricting herself to more authentic wood. The existing garden, already used to provide fruit and vegetables, was exploited as far as was authentically possible.

Beginning in January, the cottage was an authentic 5 to 6 degrees Celsius. Inevitably, a person of the twenty-first century will always bring references from their own time and can never be fully in the shoes of people of the eighteenth century. By her own admission, Houston's own life does not take advantage of all the conveniences of modern living, and she emerges as a most hardy, practical and resourceful individual. The impression given of the depredations of constant cold and lack of light, the sheer physical labour involved in many routine tasks, and the time required to do them is realistic.

Houston ran the experiment for a calendar year. There are entries of garden and household tasks for each month, and the seasonal bounty that could be obtained from the garden and from foraging in the surrounding countryside is listed. Houston's research for the project was meticulous. The *Statistical Account* was invaluable in providing information, as were the engravings of Thomas Bewick, and the writings of Thomas Pennant, Elizabeth Grant of Rothiemurchus and Dorothy Wordsworth. Several cookery books were consulted, including *A New and Easy*

Method of Cookery by Elizabeth Cleland, published in1755. For clothing, Houston looked to the engravings of David Allan and John Kay, and includes a pattern for sewing a sark. The household utensils that she used were of the period or were good replicas; throughout the year, she became adept at making such items as rag rugs, brooms, a drying rack, ink, and rush lights. Tellingly, these tasks did not require strong light, as the lack of artificial light during long evenings appears one of the most limiting and trying aspects of eighteenth-century living. Also underlined is the hardship of the 'hunger gap', the period in late winter and early spring when supplies, particularly of vegetables and preserved fruit, are running out, and the next year's produce is still to appear. Again, resourcefulness was required to ensure a balanced diet was achieved at this stage; nettles and wild garlic could be a source of vitamins.

The provision of food inevitably dominates the year's tasks, whether growing, harvesting, preserving or butchering it. Houston worked within the confines of a schoolmaster's budget; meal would have been included in his stipend, and contributed to a carbohydrate-heavy diet. The budget for the year is presented in detail; there was not much of a margin for error, but purchases would include bacon, lemons and sugar, and authentic presents such as fish, ham and a pineapple were accepted. One particular example shows how much the obtaining of a basic item has changed; the process of acquiring unpasteurised milk to make cheese was as complicated as if it were an illicit substance, such are current food standard regulations. One learns of the trial and errors involved in cooking with imperfect heat sources, all the more worrying when waste was more crucial; people would have begun to learn these and other domestic skills from an early age in a way which few do now.

Inevitably, a year of living in this way was hard but not without its rewards. There was freedom of the time dictates of modern living, as the day was shaped more simply by the availability of light and warmth. The protracted nature of many tasks meant that days were full and a closeness to nature was experienced; from

one viewpoint this meant suffering from some deficiencies, but it also meant that the passing of the seasons and the sights and sounds of the natural world were more apparent. Houston found that the diet and the necessary hard physical work of tasks such as cutting wood, carrying water and laundering clothes were healthily beneficial, and she resolved to continue with some such aspects after the experiment, as well as cutting down on the use of a car. Inevitably she was glad to finish the year, but such aspects as the joy of period music, and the kindness of friends who would visit to help pass a long dark evening or share food, would stay with her.

As well learning of the experiences of the writer, one also learns much about the processes of eighteenth-century life; how to forage successfully and safely (fresh roadkill could be seen as a twenty-first-century variation), to dry apples, to cook garlic paste and oatcakes, and to construct a leek bed. The book is packed with practical information: how to banish fleas, to dye cloth, to stuff a heather mattress, and to make soap, ink, and nettle string. This makes it an excellent volume to dip into, as well as to read from cover to cover. It is a beautiful book, with chapbook-style illustrations juxtaposed with Bewick and other contemporary artists, as well as photographs taken throughout the year. At times the presentation is a little over-fussy, but this is a minor qualm.

One takes from this book a thought that we should step away from the food industry and how it dominates our lives, and, topically, consider how our way of living impacts on the world. It is also uplifting to know that there are people like Fiona Houston, who are willing to carry out such work, and also the many experts who offered advice and the kind of skills that one worries may disappear. In all, this is a book well worth reading and from which lessons can be drawn.

Reviewed by Veronica Fraser

CONTRIBUTORS

John G Harrison is a graduate of the Universities of Glasgow and Stirling. He is a freelance historian with wide interests including landscape and land use history. He has researched many buildings, particularly concentrating on the archival evidence for buildings in and around Stirling, where he lives. He is a former chair of SVBWG.

Dave Hutchinson is a furniture historian specialising in the Scottish vernacular traditions. An expert on nineteenth-century tools and working practice, his research has taken him more and more into the wider use of timber in the vernacular home. He is currently collecting material for a publication on Scotland's rich heritage of wood craftsmen.

Ted Salthouse retired from the University of Durham in 1998 as Master of University College and Reader in Electrical Engineering Science. He served as secretary of the Scottish Industrial Heritage Society from 1998 to 2009. He now lives in the Scottish Borders.

Brian Wilkinson is the Interpretation Officer for the Scotland's Rural Past project at the Royal Commission on the Ancient and Historical Monuments of Scotland. An archaeologist and former Education Officer with National Museums Scotland at Kittochside, the National Museum of Rural Life, he now works with schools across Scotland to investigate abandoned farming townships and raise awareness of medieval or later rural settlements. He has a particular interest in turf buildings, their reconstruction and interpretation to the public.

Scottish Vernacular Buildings Working Group

The SVBWG was set up in 1972 to provide a focus for all those interested in Scotland's traditional buildings. To some, 'vernacular' may mean cottages, croft houses or farmsteads; to others its essence may be urban tenements or terraces, industrial water mills and smithies, or even older traditions of tower-house buildings. All – and more besides – find a place in SVBWG.

The group embraces those whose interests are centred on general settlements or social patterns as well as those who have a specialist interest in building techniques or function, or in traditional building crafts. The subject brings together architects, surveyors, archaeologists, historians, geographers, ethnologists and, above all, those who simply want to know how and why Scotland's traditional buildings have come to possess such variety and character. This refreshing blend of interests and attitudes is clearly evident in the Group's activities. Members are invited to attend annual conferences held at different venues, mainly in Scotland. SVBWG's publications include *Vernacular Building*, an annual miscellany of articles issued free to members, and a series of Regional and Thematic works.

For contributions to VB34, please contact the Editor, *Vernacular Building*, c/o Veronica Fraser, RCAHMS (address overleaf). An initial enquiry indicating the nature of the proposed piece would be helpful; we ask that original photographs or drawings are not sent in the first instance, although photocopies of these are useful at this stage. Articles for the main section of the journal should normally be between 1,500 and 3,500 words long, while more brief pieces can be included in the 'Shorter articles and notes' section. Any text submitted should be as far as possible in the style of this volume, and should be supplied in digital form on a CD or by email. Illustrations may be provided as professional prints or as digital files. Digital images should measure at least 1200 pixels across in order to be of publishable quality. Please save text and images as separate files, indicating the suggested position of illustrations by way of notes in the text rather than embedding images.

We also welcome publications for review. These should be sent to Veronica Fraser, SVBWG Reviews Editor (address overleaf).

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