VERNACULAR BUILDING 29

Scottish Vernacular Buildings Working Group

2005
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The Editor wishes to thank the following people for their generous advice and help with the preparation of this issue: Elizabeth Beaton, Veronica Fraser, Dr Miles Oglethorpe, Marion Wood.
We not only travel much of the length of the Scottish mainland in issue 29 of VB but journey south of the border, to Whitby in North Yorkshire. This was the setting for the 33rd Spring Conference of SVBWG and it is the topic of the opening article. Rosalin Barker outlines the development of this historic coastal settlement, placing emphasis on changes in shipping practice and their effect on the town’s buildings.

The buildings at Ewingston Farm, Humbie, East Lothian, have been the subject of a series of revealing studies by M Dalland, T G Holden and G F Geddes. In this issue we look at the old farmhouse, which has had radical changes to its structure and use carefully recorded by the authors.

William I Millan continues in the Lothians with his intimate study of brickmaking near Bathgate, West Lothian. In some respects the ‘Bathville Brick’ is a very ordinary Scottish industrial product but, as the author powerfully demonstrates, it is in no way less marvellous for that.

One can only marvel too at the story of Swiss Cottage, Fochabers, Moray. Geoffrey Stell examines a building which is truly remarkable not only in terms of its idiosyncratic charm but also because it is probably the oldest surviving structure of this type in Scotland. Moray too was the setting for Doors Open Day. Described by Elizabeth Beaton, this event is a unique opportunity for people to visit buildings in the area which are not normally accessible to the public.

Finally, Dave Hutchinson presents a picture of the use, alteration and decline of a crofthouse in the township of Rossal, Sutherland. It is a story no doubt similar to that of hundreds of cottages across the country, but here the story has been pieced together and made known, and this by a combination of investigation of documentary material and an unusually high degree of survival of physical evidence.

So in these five short essays we have an examination of Scottish and English, urban and rural, domestic, agricultural, industrial and recreational buildings, and much more besides. No mean feat!

The variety continues in the ‘Shorter Notes’ section which looks at building details and at a number of prominent buildings-related projects. It also records developments in SVBWG and recent and forthcoming events. The journal ends with a fascinating collection of reviews selected by Veronica Fraser.
WHITBY: CHANGES IN SHIPPING PRACTICE AND THEIR EFFECT ON THE TOWN

Rosalin Barker

When it is suggested that an industry has affected a townscape over a long period, the mind’s eye immediately conjures up a vision of industrial buildings, factory chimneys, smoke, mean terraced streets and associated deprivation. Yet Whitby, a thriving and growing port and ship building town during the seventeenth and eighteenth centuries, attracted travel writers and artists who admired its setting, its buildings and its principal industry.

The growth of the town and merchant sailing fleet

Whitby was a medieval town, founded c1128 by the Benedictine Abbey on the east headland, its principal streets following the curve of the estuary of the Yorkshire Esk which it straddled. The burgage area was of 48 acres [19.4ha], but half of those were of inter-tidal mud so that only about 24 acres [9.7ha] were viable for habitation. The burgage plots were approximately 15ft [4.6m] wide, in pairs, with a footway between them linking one street to its neighbour. Often, because of the narrow ravine in which the town was built, the footway was a flight of steps. The front of each plot would be a ‘shop’ for the occupant’s trade, with living accommodation behind and on a higher floor. There would also be a garth, containing working space and a plot for vegetables, herbs, chickens and even a goat, sheep or pig. It was therefore a typical English planted town, with a market charter and an annual fair.

During the medieval period Whitby was a thriving port and in 1301 it was probably the second richest town in Yorkshire. Its importance declined sharply after the Abbey was dissolved by Henry VIII in 1539. Around 1608 the discovery and the start of the processing of alum - of vital importance to the textile industry - reversed that decline. Whitby’s two known vessels in 1600 had become by the end of the century a fleet of about 120 vessels, 80 of them of over 100 tons burthen.

For the next century, and until the first half of the nineteenth century, Whitby’s merchant sailing fleet was to be one of the most important carrying fleets of the British Isles. At its height in 1783 there were up to 318 vessels in the fleet, carrying goods from one major port to another, although very little into the port of Whitby itself other than consumer goods for the immediate
population and raw materials for its expanding shipbuilding industry, of which the earliest record is in 1625.

The town, remote from other landward settlements because of the high plateau of the North York Moors and with only pastoral farming to drive its market, required little import and had little to export other than finished alum and the butter for which it was famous. Instead it became highly regarded for its stoutly built ships and well-trained seamen and mariners. It was the practices within the running of this nationally important merchant fleet which were to impinge so heavily on the development of the town.

The coming of the railway in 1836 brought visitors to Whitby’s spa waters and its sweeping sands, including writers such as Elizabeth Gaskell and Lewis Carroll and others of the Victorian intelligentsia. They soon filled the boarding houses erected for their use in the ‘new town’, on the west cliff. Yet until that expansion Whitby had continued to exist in its ever-increasingly overcrowded 24 viable acres.

The running of the fleet

In the seventeenth century marine insurance was little developed outside London and major continental ports. Risk in this dangerous business was shared by a system of ownership whereby a vessel was divided into shares, often as many as 64 shares, which is still the legal number today. The ships were held as tenancies in common and shares could be bought and sold without reference to any other shareholder. Indeed in bigger, more anonymous ports there could be ghost shares, so that instead of 64 people owning a 1/64th share, there might be 83 people each thinking he or she owned a 1/64th share. Only in tightly knit, neighbour-watching communities the size of Whitby was there any kind of effective social control in this regard.

The whole industry depended on trust. The master was entrusted with the valuable vessel (of which he might own a share) and with its cargo, and once the ship left port it was only his honesty and the goodwill of the crew, plus the success of the voyage, that brought it back again.

Maritime law had been codified in northern waters at the end of the twelfth century. It was administered by the High Court of Admiralty in London and locally through Admiralty Courts. These were under the aegis of the Vice-Admiral in each maritime county, but poor communications made attempts to obtain redress for offences, real or imagined, very slow and frustrating.
Whitby has an extraordinarily rich Maritime Archive and it is through this and other archives that it is possible to see how the system worked and how the town was affected. Whitby lacked something that a number of historians feel would have been an advantage. At the dissolution of the great religious houses many towns acquired an endowed grammar school, a conscience-salving exercise which educated boys (usually) in basic skills and the classics and offered religious education. Whitby was far too remote to trouble the conscience of the King and neither he nor the Cholmley family, who eventually bought the Abbey lands, did anything about it.

The lack of a grammar school, with its precise rules and prescriptive curriculum, was in fact a great benefit because as the town grew it soon attracted independent teachers who taught the skills that the seafaring community needed. By the eighteenth century Whitby had become a magnet for the training of sea officers and in 1747, when James Cook was a servant or apprentice, there were nearly 1,300 servants mustered in Whitby vessels. By the 1770s one Kitty Watt, daughter of Orcadian master mariner James Watt and his highly literate Whitby-born wife Elizabeth, was off to school, aged three. A town with a largely absent male population needed an educated female population. Indeed women were involved in both shipping and property owning, and two Whitby women became founding partners in banks.

Lionel Charlton, who published this map of Whitby in 1778 (fig. 1), was one of the teachers of mathematics and navigation in the town. A polymath of considerable intellect, he was also a historian and surveyor.

Figure 1. Map of Whitby in 1778 published by Lionel Charlton.
We know that when a Whitby vessel passed the town during the seventeenth century she came in for stores and orders, even if she had nothing to deliver there. This meant that a lively chandlery and victualling industry developed alongside the growing shipbuilding and ship-repair work that was going on. Then, at the end of the North-Sea sailing season - from early November to early March - the vessels came in to be ‘laid up’ and to have what was know as ‘winter work’ done. Sails and ropes were overhauled and stored in airy lofts to prevent rot. Carpentry and metalwork were undertaken, servants went to school and seamen took land-based jobs, perhaps labouring in the alum mines or in the shipyards and sail lofts. Inns and alehouses doubtless thrived. Stores of salt meat and ship’s biscuit would be prepared in advance of the spring and the return to sea.

The shareholding system spread ownership widely through the town since a relatively small investment could buy a share in a vessel, or even a boat. Thus the annual disbursement of profit was also spread widely and, together with the winter work, would provide a reasonable income. In the Hearth Tax returns of 1673, in which those householders too poor to pay were listed as well as the taxpayers, Whitby had an ‘excusal’ rate of less than 4 per cent. The towns affected by the collapse of the textile industry in East Anglia, many of them formerly major merchant ports, might have between 65 per cent and 90 per cent excusal rates. Even a thriving cutlery town like Sheffield, or a provincial capital like York, had excusal rates in double figures. Of course there would be disasters and losses in the industry, and old age and ill-health and poverty would sometimes be hidden within households and are therefore invisible to us now, but the same applied in inland towns. Whitby was a very well-to-do little town.

As far as we can tell from the shareholders’ lists of the early eighteenth century, about 90 per cent of the investment in Whitby shipping came from within the town itself, which implies a considerable build up of capital from the exponential growth of the seventeenth-century fleet. However, changes in shipping practices were already being seen. Whitby was becoming more and more a carrying fleet for other ports. If she passed Whitby on her voyages, a vessel would anchor in the roadstead and send in a boat for instructions or money. Victualling or chandlery were now carried out at the last port of call and as Whitby’s demand for goods for her some 3,000 inhabitants was still far below that of a port with a large river system or hinterland to swell demand, the victualling and chandlery side of the industry must have declined considerably.
The growing fleet still ‘laid up’ in its home port, so the winter-work money remained, and the shareholding continued to be widespread, but there had been subtle changes. There are no figures to show the town’s wealth in these early years of the eighteenth century, but as chandlery and victualling covered many tiny enterprises, these must have been increasingly squeezed out. On the other hand, shipbuilding and repair was on the rise and this would have brought more wage earning into the equation, as would the increasing number of seamen. But wages are a less substantial part of the economy than entrepreneurship and investment, however small. Both were fragile in early modern times, but wage earners were less independent than the owners of even tiny businesses.

During this century of expansion the population of Whitby trebled. Yet the town, its bounds controlled by the Cholmley lords of the manor, still occupied no more land than the 24 viable acres of the medieval township. Industry might encroach on the inter-tidal mud but housing could not do so. Quays might develop and piers and coal ‘staithes’ (or landing places) be built, but dwellings became more and more densely populated. In 1673 there would have been about 105 persons per acre, typical of a long-established urban community; by 1710 probably there were about 140, and by 1831 some 375 were squeezed into each of the 24 viable acres.

Ever-greater changes appeared in the middle of the eighteenth century when several developments took place more or less simultaneously. Vessels became much larger than they had been at the start of the century. A typical brig or ship engaged in the coal trade or the timber trade would measure 240 tons, more than twice the average tonnage of the previous century. Harbours throughout the land had improved and vessels of greater draught could enter most of the major ports. Insurance both through Lloyds of London and through the many smaller mutual societies of the busier ports had reduced the risk to individual shareholders considerably, so that investors were willing to risk acquiring a far larger number of shares in an individual vessel than before. There would still be a certain number of widow’s mites invested, often within the family, but on the whole, by the time of the first national registration of shipping in 1786, most vessels had as few as four shareholders and these were persons of considerable substance, given the high capital cost of shipping, especially during wartime. Thus the wealth from shipping was polarised, with most of the capital, and therefore the return on investment, in the hands of a wealthy few. The only returns which went into the wider population from the shipping industry were the wages of the crews.
The last great change in shipping practice was the loss of the winter work in all save the smaller vessels. Major repair work, such as dry docking or refitting, still happened in Whitby’s busy yards, which tended to be owned by the same substantial investors as the vessels themselves. However the routine laying-up, the lofting of sails and the renewing of ropes took place in the major seaports which were the ports of outset in Whitby’s principal trades - the coal trade, the timber trade from Norway and the general trade in sailcloth, hemp and timber from the Baltic. Vessels engaged in the coal trade lay up in the Tyne for example, while those in the Baltic trades, whose main port of departure was London, were laid up there. Even the whalers, whose season finished in August, might spend the following two months coaling before lying up in the Tyne and returning to Whitby in the spring to refit for the Arctic.

Thus Whitby’s income from seafaring fell largely into two categories: investment income, which went to the few principal shareholders; and wages, which went to the many engaged as seamen or as workers in the yards, sailcloth factories and roperies which had sprung up alongside the shipbuilding and major ship-repair industry in the town. Of course there were still small enterprises which served the needs of the townspeople, some of whom were very wealthy indeed, but the overwhelming part of the population was wage-earning.

How did the townscape change?
The town continued to be constrained within its medieval boundaries but slowly it changed to accommodate the growing workforce. Much of the burgage area had been bought from the ruling Cholmley family by the growing number of seventeenth-century entrepreneurs, the land sold primarily because the Cholmleys were heavily in debt. Some of it was used to change the small burgage houses into substantial townhouses for the richer ship-owners and there are several examples of fine Georgian townhouses in the narrow streets of Whitby. However this practice put huge pressure on the housing stock for ordinary townsfolk and as a consequence the garths were gradually filled in with smaller cottages, growing prosperity and better communications having long since done away with the need for self-sufficiency. When the process of infilling was complete, the only way to build was upwards and Whitby’s famous galleried houses were born; rows of tiny dwellings built on top of other homes. The footways were bridged to make extra rooms and cellars were excavated to house those people at the bottom of the housing ladder. A late nineteenth-century
photograph by Frank Meadow Sutcliffe of Argument’s Yard shows the result of all the infilling and building upwards and downwards in the old town (fig. 2).

Figure 2. Argument’s Yard, Whitby, by Frank Meadow Sutcliffe.
Eventually, driven out, one imagines, by the general smelliness of all this overcrowding, the wealthy abandoned their Georgian townhouses and bought land outside the town to build the fine rural mansions with which Whitby today is surrounded. In the early nineteenth century many of the townhouses became banks and counting houses or even inns. Others were subdivided to house ever-greater numbers of families.

New streets were laid out at the end of the eighteenth century, but they were for housing of the ‘better sort’ of household and outside the burgage boundary. Surprisingly, the desperate overcrowding within the boundary did not lead to the kind of death rates that one would have expected, for although the most overcrowded town in northern England Whitby had one other blessing up her sleeve. She had a ‘perched’ water table, and a spring line which ran along the cliffs on both side of the estuary, so that although there was no proper sewerage until the 1880s, the town’s detritus was washed down to the fast-flowing estuarine waters. There was always fresh water and on the whole the town was a comparatively healthy place.

Eventually the shipping industry fell away in Whitby, pushed out by the constraints of the narrow estuary and the development of larger steam ships. It was a slow process which took place over the bulk of a century, but it meant that there was little need for investment in housing stock within the burgage area. The lodging houses and hotels which catered for the visitors to the town were built on land released by owners no longer making their fortunes from shipping. The main ship-owning families had begun to move their businesses to the greater ports of Newcastle and London from the end of the eighteenth century onwards, leaving Whitby to smaller investors.

The result of the movement away of Whitby’s wealth was that the townscape changed less than that of larger towns. The population peaked in 1851 at something like 15,500 and since then has declined to 13,500. The least sanitary parts of the town were cleared and when the Local Government Act of 1894 created an Urban District Council the town could at last expand its boundaries. All that remains, statutorily, of the medieval burgage is the Parish of Whitby. The town’s suburbs are now in the parishes of Ruswarp and Hawsker. It is no longer the most densely populated town in the north of England, but the remaining vestiges of that town continue to attract great numbers of visitors each year, while current archaeological and historical studies are revealing the evidence of its former wealth and importance.
Bibliography
The old farmhouse at Ewingston, near Humbie in East Lothian (NT 492 648), is located on the lower slopes of the Lammermuir hills, surrounded by productive land and a regular water source, both key components in its development. When constructed in the late seventeenth or early eighteenth century the building must have been a relatively prestigious dwelling but, as the steading around it developed, it was eventually demoted to a cart shed and granary as the occupants moved into the newly built farmhouse sometime in the nineteenth century. The original building still provides evidence for its architectural merit and suggests that the farm-owning classes within Lothian society of the period were keen to display status through the use of architecture. It is a good example of a building type that has become increasingly threatened in recent decades and was surveyed in advance of its conversion from cart shed back to a dwelling.

Various spellings of the name Ewingston are associated with this site from at least the early seventeenth century, when it appears in Blaeus’ map of Lothian and Linlithgow. By 1802 William Forrest’s map of Haddingtonshire shows four separate ranges around a square courtyard, one of which is the old farmhouse (fig. 1).
The original building is approximately 22 ft [6.7m] wide by 57 ft [17.4m] long and is constructed principally of red-sandstone rubble, which was possibly originally harled. All the margins are of roughly dressed sandstone and the building is currently roofed with pantiles, although thack (thatch) stones at the base of the chimneys indicate that it was thatched in its original incarnation. Except where destroyed by the insertion of five cart ports, the bulk of the walls are part of the original rectangular build (fig. 2). The remains of six fireplaces on the ground and first floors are probably all original and suggest that the loft was used principally for storage, since it is unheated. Partitions between the rooms were probably timber stud walls, perhaps with a clay core, but it is difficult to be conclusive about the number and position of rooms since much has been covered by modern plaster and render. However, surviving evidence appears to show that the first floor was subdivided into four rooms (fig. 3). There is no indication to suggest that any part of the house was intended for uses other than domestic and it is therefore likely that at least one other agricultural building was contemporary with the original farmhouse build.

Figure 2. Ewingston Farm, Humbie: External elevations.
The fenestration on each floor is slightly irregular although in the first instance there appear to have been four lights on each floor in the principal elevations. Unfortunately no evidence for the original glazing exists but sash-and-case windows were available at the time of building and were probably used. It is likely that the original entrance opened centrally in the north-west wall and that, opposite this, at the back of the house, was the original staircase.

**Alterations**

At some point, probably in the late eighteenth or early nineteenth century, the original roofing was replaced by sawn-timber trusses supporting a pantile cover, possibly purchased from local suppliers such as the Musselburgh Tile Company. The beam filling associated with the introduction of new rafters can clearly be seen superimposed on the original wall head. Interestingly, the evidence for partitioning within the building seems to suggest that it continued in use as a farmhouse after this major alteration. It is unclear what instigated this apparent modification to the building, although the most obvious explanation is that it was simply a response to the increased wealth of the family and a desire for a larger and more imposing home.
Sometime between John Thomson's survey of the area, published in 1822, and Christopher Greenwood's, published in 1825, a new and grander house was built at Ewingstol, slightly to the south east. This reflects the general trend in nineteenth-century Lothian for farmhouses to be located apart from the steading, to include more blatant Classical references and perhaps to involve the employment of an architect. It was presumably at this time that the original farmhouse changed from domestic accommodation for the farmer's family to usage as a cart shed, probably with a granary above. The insertion of the five cart openings separated by dressed-stone pillars induced some degree of structural subsidence in the upper storey. Partly in response to this, and partly because the need for lighting had been negated by the change in function, many of the original window and fire openings were blocked in the nineteenth century. The subsuming of the original farmhouse into the farm buildings is a common process in nineteenth-century Lothian, as for example at Garvald Grange and Papple.

This building, although outwardly austere, represents an important phase in the history of vernacular architecture in Scotland. It incorporates traditional techniques such as thatching and local materials such as red sandstone in a building that, through the incorporation of subtle design elements such as dressed margins and aesthetic skew putts, facilitated an expression of the owners' wealth and aspirations. It is particularly interesting to note how, in the course of perhaps a single generation, the old farmhouse changed from the principle symbol of the family's wealth to a role as a largely utilitarian component of a larger steading complex.

(A full archive of survey data, photographs and evaluation trench reports are housed at the National Monuments Record of Scotland.)

**Acknowledgements**
The project was funded by Bankton Building Services. Illustrations are by Margaret Engl.

**Notes**
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The Bathville Brick

William I Millan

Introduction
For long Mother Nature struggled to come to terms with the shape and style of the future West Lothian. The volcanic features of Binnie Craig and The Knock were the products of forces which threw up the raw material for whinstin or whinstane (whinstone) blocks; beaches of sand and shingle were pressed into sandstane (sandstone) slabs then heaved this way and that, while the tranquil seabeds accumulated unimaginable millions of tiny sea creatures into layer upon layer of chalk and lime, until these strata were wrenched into the most unlikely situations as, for instance, the Bathgate Hills, lifted up far beyond any present-day seabeds. After more years of organisation and reorganisation the planet settled down but only for several Ice Ages to have the last word in shaping the local landscape. This chapter in the sculpting of West Lothian presents us with a kilometre-thick grinding machine which reduced the matter at its base to a sticky paste of clay or compressed it into rock-hard material. The former was laced with boulders large and small, tumbled, dragged and manipulated for so long that any jaggedness they might have possessed was reduced to benign rounded forms to be left behind in what would one day be fields.

The ingredients
So were laid down the whinstone, sandstone, limestone (limestone) and field boulders for the ingenuity and acquired knowledge of West Lothian’s inhabitants to manufacture into roads, buildings and monuments. This in a land of glacial beaches, drumlins and kaims, crag and tails and gouged-out valleys, the latter making travel in the Central Belt of Scotland easy from east to west but up-hill, down-dale north to south; all the result of the last Ice Age ten thousand years ago.

More pertinent to this study are the pastes of clays and the rock-hard boulder clays. This was the stuff of bricks. But before the brick took the upper hand, whinstone, sandstone, limestone and field boulders were the materials from which buildings were created. The fancier cuts were for the façades while humble random rubble and field boulders were used for the gable ends and back walls (the same practice would continue with the advent of the mass-produced brick). So, although subdued in appearance, often to the point of dullness, our
local edifices displayed the subtleties of the Earth’s colour - the light, unambiguous grey limestones, the greys and blacks of whinstone and field boulders, and the pinks, yellows and honey tones of sandstones. Variety of textures also prevailed - rough, jagged, rippled, smooth, striated, veined. None of these qualities would be lost when the Bathville brick came upon the scene.

Location and history

Bathville and Arrnadale are situated approximately two miles [3.2km] from Bathgate, 21 miles [33.8km] from Glasgow and Edinburgh in the Central Belt of Scotland. In 1797 the ‘Great Road’ was built to join Glasgow and Edinburgh. It cut across a drove road from Falkirk to Lanark. George Swan, an entrepreneur from Bathgate, saw the possibilities and set up a staging post-cum-inn at this junction. This was the Arrnadale Inn, named after Lord Arrnadale who lived nearby.

Prior to Bathville receiving its name, the area encompassed the lands and estate of Harestanes (a hare being a boundary stone). Harestanes was part of the Hopetoun Estate until, in 1797, it was sold to one William Davidson who changed the name to Bathville. The area was rich in ironstone, coal and clay and this gave Armadale and Bathville their raison d’etre. Bathville is shown on a map of 1820.

In June 1859 John Watson of Glasgow, one of the most prominent coal masters in Lanarkshire, bought the Bathville Estate for £10,500 and built brickworks to use the fireclay being mined with the coal. By 1862 there were six houses, named ‘Etna Cottages’, in Bathville and by 1868 there was also a firebrick works, plus several pits, clay mines and an oil works. 1874 saw Watson in financial difficulties and the Bathville works were sold to James Wood who, with his brother William, formed James Wood & Co Ltd. James Wood, from Paisley, was also a coal master and had been operating in the vicinity of Bathville since 1871. By 1893/94 Wood owned the Etna and Atlas brickworks which feature in a map of 1898. In 1895 Wood was in financial difficulties but recovered and, in 1897, joined Daniel Robertson, firebrick maker in Bathgate, to incorporate Robertson, Love & Co (fig. 1). United Collieries Ltd was formed in 1898 with the aim of amalgamating as many collieries as possible. In 1902 James Wood and the Robertson, Love & Co brickworks subsidiary amalgamated but in 1904 United Collieries Ltd took over ownership of the Etna and Atlas brickworks.
Figure 1. Bathville Brick and Fireclay Works Catalogue, c1900.

Figure 2. A ‘family’ portrait: Muir of Armadale, Etna, Bathville and Bar(bauch)law.

Figure 3. The Boghead brick ‘on the job’ in a rebuilt wall.
In 1916 Robertson, Love & Co were liquidated but continued to make bricks as part of United Collieries Ltd. When coal was nationalised in 1947 the brickworks was reorganised as United Fireclay Products Ltd, comprising Etna and Atlas brickworks and Bathville pipeworks. The latter closed in 1970. Atlas brickworks closed in 1973. Etna was still operating in the 1980s when it was recorded by RCAHMS. At that time it was operated by GISCOL (The Glasgow Iron and Steel Company). Previously it had been operated by Steetley Brick (c1981-83) and before that by Gibbons Dudley Ltd (c1971-81).

Other firms in the vicinity consisted of Barbauchlaw, a fireclay and common brickworks in East Main Street, Armadale, which was owned by Robert Muir & Co. Bricks were made with clay from the neighbouring mine. The brickworks operated from 1890s to the post-War period, when building bricks were made. Boghead was a fireclay works owned by the Gillies Brothers which was operating in 1889. It was bought by Robert Muir & Co in 1915 and continued in production until 1928 (figs. 2, 3 and 4).
Technical data

There is evidence of handmade bricks being used in West Lothian before the mass-produced variety. The author knocked down a washhouse and recycled the bricks into a herringbone patterned pathway; the bricks were unfrogged (fig. 5). Another example is to be seen in the relieving arch of terracotta wedges above a long sandstone lintel at a fireplace in Bennie Museum, Bathgate, the strong Indian-red colour of which contrasts decoratively with the pale honey of the adjoining sandstone (fig. 6).

Figure 5. Handmade, unfrogged bricks, estimated to be 140 years old.

Figure 6. Relieving arch above a fireplace lintel at Bennie Museum, Bathgate.
The central part of Central Scotland was blessed with some of the world's best deposits of millstone grit. These clays were formed from the earths which lay beneath coal-forming trees. The ancient tree roots leached out the alkalines from this soil resulting eventually in clays devoid of these - a characteristic of firebrick clays which fire between 1,300-1,400°C. By comparison, the soils which accumulated on the fallen coal-forming trees did not lose their alkaline concentration to any root system. So the clay below a seam of coal was good firebrick clay whereas the clay above was suitable for clay products not needing high heat resistance, such as common brick. Clay that fired red was reckoned to do so because it was found nearer the surface and had not been subjected to as much pressure. When clay-product recipes became a more exact science, the chance of 'above' and 'below' clays becoming intermingled became less likely. This, among other things, resulted - from the 1960s onwards - in the Bathville common brick changing from of near firebrick standard to a much softer product.

The Etna works made a number of bricks including, in the latter half of the twentieth century, composition bricks from 'pitt red' (colliery waste). Compared with the Etna common brick of the first half of the century, these were softer bricks, being fired at a lower temperature. The earlier product was nearer to a firebrick, being made with a clay recipe containing material with a higher alumina content which required a higher firing temperature. This would account for the resilience of the brick, a fact reflected in the 'cold crushing strength' of the fired Etna common brick of a hundred years ago being at least three times that of its descendant half a century later; that of the refractory (furnace) brick could be as much as twelve times greater. As well as the cold crushing test, a water-absorption test was also required by builders and architects in the second half of the twentieth century. Too high an absorption made the brick unsuitable for unharled walls. These technical factors helped in the demise of the Etna and other brands of common brick in Bathville, with commercial considerations also contributing.

The Bathville brick: A eulogy

The speed with which a brick wall could be put up, when it was matched with speed of production, was not to be lost on the business mind of the mid-nineteenth century. Britain was ripe for a mass-produced product which in the hands of a master bricklayer could raise buildings at a rate commensurate with a burgeoning Empire.
The businessmen who set up brickworks in Bathville and Armadale were not only ‘on to a good thing’ but they also produced a very good thing; the Etna brick. This, then, is a hymn of praise for a brick belonging to a family of products which for over one hundred years has graced the walls of Bathgate and district, supported its roofs and helped to house a rapidly expanding West Lothian population. Along with its family members, the Atlas, Muir of Armadale, the Barbauchlaw and the Boghead, the Etna was not deemed of sufficient quality to grace a façade or wall of substance but one to be covered over with smooth- or roughcast of a uniform and unglamorous grey or sandstone colour. Yet when financial restraints dictated that the brick remained uncovered, such a wall could be captivating. The Etna provided the inspiration for this study, the neatness of the brickmark and the fact that there were so many on the author’s property giving it a special appeal for him. Yet really there is nothing to choose between the members of the fine Bathville brick family.

The bricks made in Bathville, like the indigenous workforce that manufactured them, are sturdy, reliable, consistent, yet endowed with moods, scowls and smiles. They are full of character, individual yet homogeneous when alongside others, their rugged faces undaunted by the vagaries of Scottish weather. In complexion they can be fair-skinned, at a distance even smooth-skinned. They can be honey-coloured and sometimes a sickly yellow with a crackled craze not uncommon in clay-fired products (fig. 7). Sometimes a flourish of pinks and purples are brought out on their skin by the trauma of the kiln and the continuous batch firing operation. There may be warts and plooks (pimples). This is the result of the internal existence of little foreign bodies such as ironstone and coal, exploding or burning to the surface. Some of the bricks have a spatter of freckles; all have clean-cut edges. The ‘dark secret’ in the middle of a brick (figs. 9 and 8) is the result of it being flash fired. The outside of the brick was fired quickly to a point where oxygen could not penetrate the ‘cooked’ exterior to combust with the carbons and sulphur still inside. The occasional example will display a crack on its long dimension, the slit seared purple or even black and glazed on its ragged edge, reflecting in some ways similar ravages sometimes visited upon the workers who made the bricks. Yet such ‘wounds’ are not enough to have prevented the bricks from giving good service for one hundred years in a wall (fig. 10).

Putting all of these characteristics together in a brick wall, one has a variation of texture, an excitement of subdued colour and a repeated proportion that knocks its modern mono-coloured successors into a cocked hat! Part of the
Figure 7. A range of Etnas:
From the Nordic blond to the swarthy Mediterranean type.
Figure 8. The Bathville brick's 'dark secret' - a split Etna.

Figure 9. A split quarter.
Figure 10. A Bathville brick wall, at least one-hundred-years old and bounding the author’s house.

Figure 11. A pride of Etnas, completely restored and ready for action.
harmony exhibited by the Bathville bricks are their dimensions - 9 inches by 4½ inches by 3¼ inches [22.9cm by 11.4cm by 8.3cm] - which gives a five-course height of 18 inches [45.7cm]. This is the golden mean shared by all common bricks in the age of Imperial measures. Deviate even slightly from the formula the mundane replaces a particular type of perfection (fig. 12).

The brick, however, needs an ally. Unlike stone, which can be laid dry, bricks require a binding agent. The inseparable partner is a versatile lime mortar made from limestone which in West Lothian’s case is found in the Bathgate Hills. Limestone can be a building material in its own right and crushed into fertilizer it can sweeten the soil. Put into the furnace of the lime kil (kiln) it comes out as a binding yet elastic compound, one admirably suited to the art of building.

Conclusion

The personification of the Bathville brick can extend to religious overtones. There comes a point in time in every building’s life when it must die and down it comes. The author has often hung about a building like a vulture waiting for easy pickings, not for personal gain but to allow the bricks new life. These lime-coated corpses have been stored in his garden and left to weather so that frost and rain can remove most of the lime mortar, for although tough and resilient it can be coaxed off a surface by the elements (Portland cement, in contrast, is unyielding and will tear a surface off if removed). So from a dead building the brick can be resurrected to fulfil - in all its glory - a new purpose (fig. 11). Anyone wishing to take up this meritorious task need not be burdened for a couple of years with a pile of weathering bricks doing nothing more than that. They can be used as an edging, or a rampart supporting made-up garden earth, or as a temporary pathway, and when required they can be replaced by the next batch to be cleaned (figs. 13 and 14). That said, a bricklayer who helped the writer stack a few hundred of the bricks announced with relief that he was glad he did not need to work with these any more; something to do with the weight!

Why is lime mortar not widely used for more than just for re-pointing historic buildings? Why are our invaluable imperial-sized lime-built bricks not recycled? Is it not a scandalous waste to see landfill sights being crammed full of this valuable recyclable commodity, especially if the bricks come from internal walls where they can often be found in pristine condition? The brick was millions of years in preparation. In the scale of the universal clock we humans have only been here a few seconds. Yet within that time we have created a unique rectangular prism. Can we afford to throw it away in our next second?
Figure 12. This wall was knocked down in a storm and was rebuilt using the original, hand-cleaned brick.

Figure 13. A rustic brick edging showing many of the bricks in the process of losing their lime mortar. It is said a bricklayer could tell what the weather conditions were on the day a lime-coated brick was laid. If the lime came off easily the brick had been laid in dry weather. A dry brick would sponge up the wetness of the mortar immediately next to the frog thereby reducing to a certain extent the adhesive properties.
Figure 14. Give salvaged bricks a job to do while waiting for the lime mortar to fall off: A retaining wall for made-up garden soil, laid dry in a vegetable garden.

Glossary

**Brickmark:** The name of the firm, for example ‘Etna’, impressed in the frog of a brick.

**Clay:** A tenacious earth weathered from silicon rock and rich in felspar. It can shrink one ninth from wet to dry.

**Common brick:** The so-called less-prestigious brick.

**Frog:** A depression on the opposite largest faces of a brick which helps bonding.

**Square:** The name given to the standard brick shape.

Acknowledgements

The author would like to express his thanks to David Kerr, Armadale, and Sybil Cavanagh, Local History, West Lothian Library HQ.

Bibliography


At the Timber and the Built Environment Conference held at The Hub, Edinburgh, in October 2002, attention was drawn by Ivor Davies of the Centre for Timber Engineering, Napier University, to the special significance of Swiss Cottage, near Fochabers, Moray. Dating from 1834-5, this excellent and highly unusual specimen of ‘designer vernacular’ is almost certainly the oldest surviving timber-framed and timber-clad structure in Scotland built of native softwoods. This two-storeyed cottage is also unique as the only all-timber building of this idiosyncratic type in the country. Unoccupied since 1995 and now Listed Category A, the building remains in surprisingly sound condition, although the fact that conservation and rehabilitation plans are now actively in hand is welcome news.

Since autumn 2002, thanks largely to the efforts of Ivor Davies, the building has been the focus of much study and investigation. He commissioned Claudia Bölling to undertake research into its historical background, encouraged RCAHMS to carry out a detailed measured and photographic survey of the building and arranged for the author to present a synthesis of all this work to the External Timber Cladding: Design for Durability conference at Coylumbridge, Aviemore, Inverness-shire, in September 2005. These conference proceedings are due to be made available on the world-wide web and will be published in conventional form in due course. This brief digest is thus intended simply as a supplement to these fuller accounts, serving the specialist interests of SVBWG and further highlighting the interest and importance of a fascinating architectural gem.

Formerly part of the Gordon Castle Estate, the building occupies a site in a forest clearing on the north side of the A98 about 1.5 miles [2.4km] east of Fochabers (NJ 3697 5954) (figs. 1 and 2). It is associated with a timber-clad shed of later date, probably c1870, which stands in the same clearing some 38 yards [35m] to the north of the cottage. Until very recently the enclosed garden which surrounds the cottage featured the box hedges and descendants of the fruit trees which are known to have been originally supplied by Thomas Christie, ancestor of the present owner, in 1834-5.
The cottage stands at the entrance to a former carriageway into the policies and on the edge of what used to be a deer park. It is no coincidence that the deer-park keeper in 1836 - and almost certainly the first occupant of Swiss Cottage - was one Jean-Pierre Ansermet, Swiss employee since 1815 of George, 5th Duke of Gordon (1770-1836). Prior to his succession as 5th Duke in 1827, the Marquis of Huntly had pursued a successful military career in Europe where he developed particularly strong links with Switzerland, receiving the Freedom of the City of Geneva in 1815.

Although there is no known specific connection with Loudon’s *Encyclopaedia*, this near-contemporary publication, which first appeared in 1833, may well have reinforced or even prompted the idea of a Swiss chalet. Loudon illustrates and describes a larger design upon which this may have been loosely modelled (fig. 3). If so, however, it was erected against Loudon’s better judgement, for he concluded his account with a caution that ‘we..., by no means, recommend this style for any country’. Loudon’s criticisms notwithstanding, a second cottage of Swiss-chalet design appeared later, probably in the 1870s, in the uplands of Moray at Ballindalloch, although it has a stone-built ground floor.
The precise provenance of the timber used in the building of Swiss Cottage is not known, but the absence of any reference to timber supply in the building account clearly points to home-grown sources. Given that large areas to the east of Fochabers are known to have been planted in 1736 and c1762 with seeds of local origin or from Glenmore Forest, Gordon Castle Estate would have been particularly well-endowed with extensive plantations of usable Scots pine by the late 1820s. Indeed, a new sawmill was erected at Boghead Home Farm, Gordon Castle, in 1829, one of its first major products being the new (but relatively...
short-lived) arched timber bridge over the Spey in 1832. Significant amounts of sawn timber were also ordered by the head carpenter of the estate throughout 1834 and 1835, presumably in part for Swiss Cottage. 5

Detailed survey by RCAHMS 6 has shown that the structure bears evidence of at least two phases of alteration, possibly in the 1870s and 1950s, together with a series of minor additions, modifications and repairs. The late nineteenth-century alterations included the replacement of a roof covering of shingles, as specified in the original account, with tiles; tiles of decorative style adorn the roof on the side facing the public road while plain tiles cover the opposite flank. The greatest single change in the late nineteenth century appears to have been the creation of an enclosed stair and landing in place of an open forestair, an operation which involved a reconstruction and realignment of the lower treads, forming an ascending half-turn from the ground-floor porch (figs. 4-6). Cladding of a vertical plank and muntin (applied strips) form covers the stair and associated landing, similar to that which covers the walls of the shed but quite different from the lapped horizontal weatherboarding characteristic of the original work.

Figure 4. Perspective drawing from north: Conjectural reconstruction of original design with open stair. (Crown Copyright: RCAHMS)
Figure 5. Perspective drawing from north: Cottage as existing with enclosed stair. (Crown Copyright: RCAHMS)

Figure 6. North-west wall: Cladding and underside of stair. (Crown Copyright: RCAHMS 960288)
Externally, deep canopied eaves (see the front cover), a cantilevered balcony which runs around three sides of the building, angle and wall posts with applied decoration (fig. 7) and externally shuttered windows combine to create an amazingly rich and decorative effect, almost that of a fairytale Hansel and Gretel Alpine cottage. Internally, the ground floor consists of a single room which incorporates the frame of a former box bed and a fireplace with a cast-iron kitchen range. The first floor is sub-divided into a main room, heated by a fireplace with a basket grate, and a closet, which is set above the porches.

Structurally, a flue-bearing masonry wall rises through the full height of the building and the timber-clad walls are set on a low stone-built plinth. From the limited observations that have been possible with the use of a borescope, the main angle-posts of the timber box frame appear to be of full height, not jointed and framed separately at first-floor level, but other details of the timber framework, such as the arrangement and jointing of studs and braces, currently remain inaccessible and unknown. The structure of the single-storeyed, part-lofted shed, on the other hand, is clearly visible and comprises a braced post-and-rail timber frame set on a low stone plinth. Much of its floor is cobbled and the roof covering is made up of lapped or ventilated slates.

Figure 7. North-east gable wall: Posts with applied decoration. (Crown Copyright: RCAHMS 960095)
Notes


2 National Archives of Scotland (NAS), Gordon Castle Muniments, GD 44/53/25/12/3. ‘Expenses of building etc at Gordon Castle, 1834’, final bill of account for Swiss Cottage dated 1 December, 1835. This and other historical references are from Claudia Bölling per Ivor Davies.


5 NAS, Gordon Castle Muniments, GD 44/52/106.

6 The survey by RCAHMS was carried out under the author’s direction by John Borland, James Hepher, Alan Leith and Steve Wallace. A four-panel exhibition of the survey findings was designed by Oliver Brookes and was recently on display in RCAHMS.
Elizabeth Beaton

Most readers of VB will know of Doors Open Day, and many will have visited properties with hospitable and knowledgeable owners who open their doors on this annual event always held in September. Doors Open Day (DOD) is a Council of Europe initiative enabling people to see (mainly listed) buildings free of charge, many of which are not normally accessible to the public. In Scotland the event is co-ordinated by the Scottish Civic Trust and in Moray it is devised and organised by the Civic Committee of the Moray Society, a voluntary body responsible for a museum and activities including a winter lecture programme. The Civic Committee takes a special interest in the built heritage, both old and new.

In Moray DOD is held in varying locations and on 24 September 2005 the event was in and near the recently established Cairngorm National Park, mainly in Glenlivet and Strath A’an. The River Avon descends from the Cairngorms close to Tomintoul, broadening as it flows down Strath Avon or A’an, eventually joining the River Spey at Ballindalloch where the castle gate lodge (NJ183 359) was the first item on the programme. This dates from 1850 and was built to a Baronial Revival design by Thomas Mackenzie of Elgin.

Strath A’an is rolling upland farmland, the higher ground turning to heather-clad moorland. This is Gordon territory and many of the farms are historically associated with members of that large north-eastern family, some buildings retaining their original vernacular features.

At Drumin, by the confluence of the rivers Avon and Livet, fourteenth/fifteenth-century Drumin Castle stands on a bluff guarding the entrance to Speyside from the east. At the neighbouring farm is the Drumin Country Museum (NJ185 303), where the late Cathy Reid built up a vast collection of everyday objects relating to past life in the local countryside. This is a collection of garments, domestic artefacts, books, papers and so much else that it spilled out of her farmhouse and now overflows into the neighbouring steading.

Of note, bearing in mind the SVBWG meeting held 5 November 2005 devoted to vernacular furniture and fittings, is Ballantruan (NJ146 253), a mid-eighteenth-century, two-storeyed farmhouse. There is a suggestion of a ‘hanging
lum' in the former kitchen and fine panelling in the 'parlour' covering one wall to conceal former box beds. Two contemporary corner cupboards with similar raised-and-fielded panelling complete the original furnishings in this room. The ceilings throughout the ground floor are joisted with smoothed and shaped timbers and there are original panelled doors both in the ground- and first-floor rooms. The wood used came from the extensive timber resources of the Dukes of Gordon, who owned forests in Speyside from whence timber was floated down the Spey to Garmouth and Kingston-on-Spey where the river disgorges into the Moray Firth, this busy in the seventeenth, eighteenth and nineteenth centuries with an active timber trade and shipbuilding industry.²

Croughly (NJ174 212) nestles on a south-facing hillside in the small valley of the Conglass Water, soon to join the River Avon. The original farmhouse is a mid-eighteenth-century, single-storeyed-and-attic three-bay dwelling. It was built by James Gordon of Croughly c1760 to replace an earlier house further upstream. His son Robert (1780-1828) added a two-storeyed wing after he took over the building in 1812.³ The earlier portion, now let for holidays, was open to visitors for DOD. Here a short angled staircase rises in the centre of house, its arched entrance from the lobby flanked by narrow reeded pilasters. The same reeded detailing is repeated as a frieze between ceiling and mural panelling extending the length of the parlour wall abutting the party stairwell. There is a tapering, triangular void between the panelled wall and the curve of the stair, the widest portion originally accommodating a box bed, the narrower a cupboard. This is restrained but high-quality work.

At the rear of this older Croughly farmhouse there are two short, projecting parallel wings, each with paired flight holes for doos (doves). This suggests that the attic or loft formerly had pigeon accommodation.⁴

At Ballicorach (NJ156 266) the farm maintains a variety of animals including Soay sheep, wild boar, water buffalo and belted Galloway cattle. Here there is rare surviving 'horse mill', powered by a horse (or horses) treading a circular platform.

The former Catholic seminary at Scalan (NJ246 195), in the secluded Braes of Glenlivet, was established in 1716 as a recusant, isolated junior college designed to prepare boys for the Catholic priesthood. After a few years here they travelled on foot, by cart and boat to Rome to attend the Scots College and train for the priesthood. About seventy DOD visitors tramped the field path to the isolated site with its plain two-storeyed house, constructed in 1762 to replace a
single-storeyed cottage nearby. This was originally intended to accommodate six boys and a priest - who was also director of studies and schoolmaster - besides a housekeeper and handyman to cook, nurse the sick, fetch fuel and maintain and clean the house, etc. After 1793 Catholics could worship in public and in 1799 the seminary moved to a purpose-built college at Aquorthies, near Inverurie in Aberdeenshire. Scalan then housed a priest, who maintained the chapel serving the local Catholic population, but the building later became a farmhouse.5

The former seminary, where the kitchen hearth, box-bed locations and some eighteenth-century house carpentry still survive, was divided into two dwellings. Two steadings, each with a waterwheel to power farm machinery, were built on the site. One waterwheel remained in use until recently, charging batteries belonging to the cottage’s resident Sandy Matheson and powering his electricity until a couple of years ago when ill-health necessitated his move into care. The author has been at the site when the clear water of the lade was free of weeds and the wheel was turning, a satisfying clug, clug emanating from the lean-to wheelhouse. Sandy was the last surviving child of the ten children of Scalan farm.

The house is a plain two-storeyed dwelling with projecting single-storeyed wings each side enclosing a grassed courtyard, the site of an annual Mass in July. To the left is the former, now rootless, chapel and on the right is Sandy Matheson’s cottage. Both the seminary and the farm buildings are roofed with handsome, weighty, graded brown slates from the Cnoc Fergan quarries in Strath A’an.

While this report highlights the vernacular nature of some of the buildings open on 24 September last, there also were fine bridges, a modern whisky distillery constructed in Scots Revival manner and half a dozen churches. These included the Church of Scotland, Tomintoul (NJ166 190), a ‘Parliamentary’ church of 1827 built to a standard plan by Thomas Telford but much altered in 1900,6 and the Scottish Romanesque Catholic chapel at Chapeltown (NJ241 209) in the Braes, of 1896-7, designed by the Edinburgh architect John Kinross whose work reveals his affinity with Scottish building traditions.7 At Chapeltown the local pink granite exterior is sympathetic to its moorland setting and the glowing stencilled interior a revelation to all who visit.
Notes

1 National Monuments Record of Scotland, RCAHMS.
Rossal

Rossal is an ancient crofting township within the parish of Rogart in Strath Fleet, Sutherland. The River Fleet winds its way through the strath from The Mound and westwards towards Lairg. Rossal lies on the southern side of the strath 100ft [30.5m] above sea level at grid reference NC688 035.

The strath provides the main line of communication between the east coast and the central region of Sutherland and the roads to the west, north-west and northern parts of the county. The A839 and the railway’s Northern Line pass through and there is a railway station at Rogart.

The village previously known as Rogart has recently been re-signed as Pittentrail in the parish of Rogart, a more correct historical name, but the OS maps of the area still have it marked as Rogart. From this centre a number of minor roads and tracks give access to a host of small townships and Rossal is one of these, lying on the windswept and colder southern side of the strath.

The name Rossal derives from the Norse and is a combination of *hross*, meaning horse, and *vollr*, meaning field, which makes a combination of ‘horse-field’. There are many Rossals, Rosehalls and similar names in the Highlands and there is collective opinion that these coincide with what might have been the head of navigation of the local river. During their attempts at settlement in the far north the Vikings would have taken their boats as far inland as possible before transferring to horseback for further reconnaissance. Certainly Rossal on the Naver, Rosehall on the upper reaches of the Kyle of Sutherland and Rossal on the Fleet could well mark such a field or enclosure.

Rogart appears on many early maps, including the eighteenth-century maps of Herman Moll, but the Rossal in this parish seems to emerge for the first time on the maps William Forbes prepared between 1790 and 1826. An imprint of 1820 in the National Library of Scotland clearly shows Rossal and its surrounding townships in the parish of Rogart. A similar indication is made on the Atlas of Scotland prepared by John Thomson in 1832 which marks Rossal as one of a collection of townships along the River Fleet, lying on the high ground to the south of the road through to Lairg.
It is not until Gregory Burnett’s maps of Sutherland that we get any indication of the extent of the settlement at Rossal.⁴ These maps were prepared from the trigonometrical survey of Scotland undertaken in the early 1830s and here an attempt has been made for the first time to indicate buildings in the township. The boundaries of the townships are indistinct and it would be difficult to be precise about the number of properties in Rossal from the maps but the cluster does agree with other, documentary evidence.

Rossal was never cleared and it appears that some five families were initially allowed to continue in apportioned lots there from 1811. The male adults of five families were represented in the Militia List of 1824. Census records show that an average of eight households lived in the township from 1841 to 1901. The only variation from this figure is 1851, showing nine families, and 1901, showing seven. We have also the Crofting Returns for 1883 which record five working crofts with their individual acreage, rent and stock.⁵ The total holdings of the township amounted to 44 acres [17.8ha] of arable land and 18 acres [7.3ha] of pasture with an annual rent of £24 19s 9d.

**Croft 219**

The author’s first visit to the cottage at Croft 219 was made in 2001 at the invitation of Rev Leslie Goskirk, who was related to Christy Hamilton, née Leslie, the first tenant of the property. Christy, referred to as ‘Widow Hamilton’ on the first census of 1841, occupied the house with her daughter and son before one William Hamilton, a tailor, became tenant. The Hamiltons continued occupation through to Angus Hamilton who died in the house in 1938. The building has then remained unoccupied, save for occasional use as a bothy and seasonal use at lambing time. Today it is in a state of disrepair and ruin (fig. 1).

The cottage is typical of many built on the Sutherland Estate lands during the nineteenth century, having stone walls, chimneys at each gable end and a slate roof. The dwelling is south-facing. Internally it has a west room, an east room with a small bedroom off and a central staircase leading to the attic (fig. 2).

Although uninhabited for more than half a century, there is still plenty of evidence of the lives of the former residents (figs 3 and 4). This includes an unbelievable amount of printed material, some in the form of intact books, but mostly as scattered pages, generally of a Gaelic religious nature. The dresser and the tables bear the remnants of domestic life, including rusting food containers, cutlery, butter pats, a clock, a teapot and the contents of a bag of flour, the paper
Figure 1. Croft 219, Rossal. Spring 2005.

Figure 2. Croft 219: Floor plan.

...bag long since gone leaving the flour cast in its shape. There are endless buttons and cotton and needles strewn throughout the home as well as shirts, collars, a number of shoemaker’s lasts and bellows for the fire. In the attic are tools and equipment for crofting, with scythe blades in the rafters and nails, halter ropes and harness on the attic floor, together with a pair of leather gaiters, boots and seed catalogues.

The furnishings and improvements to the building might indicate that at the end of the nineteenth century the Hamilton’s were far from poor, but as the
twentieth century unfolded that was less the case and by Angus Hamilton’s demise the house was clearly inhabited by someone in fairly impoverished circumstances. This reduction in wealth, although a great misfortune to the Hamiltons, helped to preserve the building and its contents in a turn-of-the-century time warp. Contributing to the degree of preservation was the collapse of one gable end, which although disastrous for the structure in the long term, with the exposure to the elements damaging some items, allowed ventilation of the building which may well have helped to preserve others of the contents.

Figure 3 and Figure 4. The east room of the cottage on the author’s first visit in 2001. Note the Glasgow pattern chairs and Lowland-style dresser, all made from local pine.
The improvements

Documents in the Sutherland Estate papers imply that the croft house was built in or around 1820. From his offices at Dunrobin Castle, the factor, Donald McLean, agreed to a petition by Christina Hamilton for improvements to her croft on 20 April 1886. The condition of the property was acknowledged and letters ensued which instructed both the Rogart ground officer, James Alexander, and the carpenter. Documentory evidence indicates that the carpenter was Donald Mackay and this was seemingly confirmed when a broken two-foot, four-fold boxwood rule, with brass arch joint and tips, was found beneath broken floor boards in the east room. After cleaning, the rule was clearly of the right period and the carpenter’s name stamp ‘MACKAY’ was revealed (fig. 5).

The correspondence contains some enriching comments in the letter margins. In a footnote Alexander writes that ‘this body (who came in person) is not badly off, has a daughter living with her & a well to do son, “he thinks” in Glasgow, her rent £6’ (fig. 6). The son was Angus Hamilton, who at the time was an excise officer for HMS Custom and Excise working in Glasgow. His occupation is supported by many of the finds found in the cottage including a rusty tin that, once opened, revealed a full set of brass Custom-and-Excise buttons as bright as when Angus had last removed them from his uniform. There were also copies of the Handbook of Members of the Glasgow Sutherland Association, listing him as ‘A Hamilton, Custom House, Glasgow’, and a number of notebooks containing entries relating to his work.

A voucher from Dunrobin sawmills includes a cutting list of timbers which match those ordered by McLean (fig. 7). The timber list is headed ‘renew house, 70 years old’, implying the stone structure is of 1820. Study of the fallen gable end revealed only earth mortar, which supports this idea. Eight boils of lime were also supplied and these were used to coat the internal walls and increase the height of the exterior walls to accommodate the roof timbers.
Figure 6. Letter from J Alexander (Rogart Ground Officer) to D McLean (Factor at Dunrobin Castle), 15 August 1894.

Figure 7. Timber list for Widow Hamilton, enclosed with the letter from J Alexander to D McLean, 15 August 1894.
It should be noted that not all tenants had success in securing improvements and the renovations of a neighbour, ‘Widow William Munro’ (218 Rossal), were thought more expensive than the value of the croft and thus refused. The croft was absorbed into another holding.

The cottage

Stonework

The cottage is some 37 feet [11.3m] long and 17 feet [5.2m] wide on the outside (figs. 8 and 9) and there is a small but discernable taper in the wall width from base to top; this is traditional and is necessary with what is essentially a dry-stone structure.

The stones are local granite and are dressed and vary in size. Many are substantial and provide through bonds within the wall, which are two-feet [0.61m] thick and rubble- and earth-filled. Corners and openings are made using in-and-out bands of stone.

Sills and lintels are of dressed granite also. The sills are large flat stones which cover the full width of the wall, the lintels the outer course. There are no dates or masons’ marks on any stonework. However, the stones have been well dressed and the lintels are particularly well worked. The top courses, which include and surround the lintels and the roof timbers, were bonded with lime mortar when the improvements of 1894 were undertaken.

Parts of the outer walls have been pointed with lime mortar and there is harling on some exposed sections. The east gable, in which there is no evidence of lime mortar, has collapsed leaving rubble inside and out (fig. 10). The west gable has taken damage in recent storms and the chimney is now leaning towards the roof, with the outer wall bulging. It seems that this gable might also go in the near future. The ends of the gables are raised above the slated roof and topped with granite skews.
Window and door openings
There are two window openings on the front elevation, each 27 inches [68.6cm] wide at the outside and expanding to 40 inches [101.6cm] at the inside (fig. 11). The west lintel is 48 inches [121.9cm] wide and 5 inches [12.7cm] thick; the east, 44 inches [111.8cm] wide and 7 inches [17.8cm] thick. The rear of the building, the north side, has one small window which lets light into the closet bedroom. The size of some of the field stones which have been dressed to create the door opening is impressive.

The roof
The roof is of Welsh slate fixed with handmade nails to pine sarking of close-fit sawn boards on 19 pairs of pine rafters (fig. 12). Each of the lower corners has a skew putt at the wall joint (fig. 13). At the west end the skews are intact and at the east end only the skew putt on the south face remains. The roof has two cast-iron roof lights on the south side.

Carpentry and woodwork

Roof timbers
The roof frame is made of 19 pairs of rafters 12 feet [3.7m] long, 6 inches [15.2cm] wide and 2 1/2 [6.4cm] inches thick. Saw marks indicate they were cut on a mill with a circular saw. These dimensions and quantities correspond exactly to the Dunrobin sawmill voucher. The rafters are set at a pitch of 45° (fig. 14).
Figure 11. West window, with granite lintel, dressed granite frame and stone sill. The window opening was redressed to accept new a sash window.
Figure 12. Roof of Welsh slates held with handmade nails in pine sarking.

Figure 13. Dressed skew putt from the south-east corner.
Figure 14. Pine rafters with high collars to give ample attic space. Timber supplied by Dunrobin sawmill.

Figure 15. Collars fixed with shallow housing joints and hand-cut nails.
Two rafters are marked in blue, the first with ‘12 x 6 x 2 1/2’ and the second bears the word ‘Counted’. It is highly likely that these marks were made at the sawmill as the job was made ready. The thicknesses of the rafters are nominal and vary slightly.

The rafters are joined at the apex by lap joints and the boards are nailed, two in each joint, with large cut nails. Nails of the same style and dimensions were found in open wooden boxes in the attic. The collars are also checked with angle-lap joints and nailed with four nails in each end. They are placed 18 inches [45.7cm] below the apex (fig. 15). The joints vary in depth to allow for the offset in the rafters.

The structure is sound and the joints well cut - the work of a skilled and experienced team.

**Sarking**
The sawmill supplied 900 square feet [83.6m²] of 3/4 inch [1.9cm] sarking, all in sawn local pine and in random widths, including boards of 5, 7, 7 1/4, 7 3/4, 9 3/4 and 10 inches [12.7cm, 17.8cm, 18.4cm, 19.7cm, 24.8cm and 25.4cm]. The 3/4 inch thickness was also nominal, with slight variation amongst the boards. These measurements are of course today’s and cannot account for shrinkage since fitting. The spaces between some boards would suggest that there were variations in seasoning and that shrinkage may have occurred.

The hand-cut nails securing the slates are clearly visible through the sarking.

**Joists**
When the cottage was improved, and the new roof added, the wall was raised in height to accommodate the joists on which the rafters would rest and the flooring for the attic was laid. These joists were set on a thin course of stone and the spaces between them were filled with stone and lime mortar to their top.

**Wall plate**
The fallen gable end revealed a wall plate housed in the joist and onto which the cut end of the rafter was also housed. 72 linear feet [21.9m] of wall plate was included in the sawmill details and this would be the required length for two such plates.

This wall plate was concealed in the beam fill of small stones and mortar (figs. 16 - 19).
The attic floor

The joists measure 8 by 2 1/2 inches [20.3cm x 6.4cm], a measurement also written in blue on one joist and confirmed by the Dunrobin sawmill voucher. The floorboards are close-fit sawn boards of various widths. The section running north to south has boards of the following dimensions: 13 3/4, 8 1/2, 12, 9, 10, 8 1/2, 8 1/2, 9, 11 1/2, 11 1/2, 9, 9, 9, 9, 9, 8, 2 1/4 inches [34.9cm, 21.6cm, 30.5cm, 22.8cm, 25.4cm, 21.6cm, 21.6cm, 22.8cm, 29.2cm, 29.2cm, 22.8cm, 22.8cm, 22.8cm, 22.8cm, 20.3cm, 5.7cm]. The total of these dimensions is 157 1/2 inches [400cm]. The overall width of the floor is 160 inches [406.4cm], giving an average gap of one eighth of an inch [3mm], a measurement that could easily be accounted for by shrinkage. Floor-board thickness varies slightly but is of a nominal 1 inch [2.5cm].

The boards were laid starting at the north edge and the final thin board varied to fit the remaining space. The boards clearly have been fitted after the beam infill.

Two bridling joists have been used to create the stairwell and the division between the stair and the closet bedroom (fig. 20).
The lining boards
The walls are lined with good-quality redwood in three main areas. The west room has a central wall lined entirely with red pine boards, the tops which have been left at random lengths but finish above the lower level of the joists (fig. 21). There would seem to have been an intention to fit a ceiling to the room which would have covered these random ends. Each board is nailed with cut nails to the top, bottom and middle cross bars which make the stud frame.

The same cladding is carried up the staircase where the top edge is trimmed cleanly and then finished with a strip of ogee moulding. This face is nailed to a bridling joist (fig. 22).

The cladding continues on the west face of the east room. Here each doorway is finished with bevelled architrave and precisely mitred corners. The top is neatly set to the lower edge of the joist above.

The lining boards have a common profile, planed on one side and the reverse left as a sawn face. Each board has a machined tongue and groove along each edge and a central V routered along the length to create the impression of two joined boards (fig. 23). The lining boards vary in width but most commonly are 7, 8 1/2 and 10 inches wide [17.8cm, 21.6cm and 25.4cm].
Figure 21. West room panelling with uneven ends. (Top)
Figure 22. Staircase and 'newall' posts. (Left)
Figure 23. Cross section of the red-pine panelling. (Above)
Figure 24. Sash window catch in the east room.

Figure 25. Door lock and key.
The windows and doors
The two front windows were replaced in the 1894 improvements when ‘wood for two sash windows’ was included in the carpenter’s wood list. These two windows are traditionally constructed and in such a way that allows for the raising and lowering of the lower section; the upper section is fixed. The window frame in the east window is intact while the frame and sash for the west window were found within the house. The two front windows have fine brass catches secured by four screws in each part and with white glazed ceramic knobs (fig. 24).

The single rear window is clearly earlier and may be original. It is a casement window, simply hinged on the vertical edge and with joints secured by pegs.

The internal doors are of tongue-and-groove construction nailed with three horizontal straps. The timber is of the same quality as that used in the lining boards and milled in the same manner with a vertical V groove, but on both sides of the boards. The doors are hung with two hinges, top and bottom. The catches are steel, the handles hollow brass.

The external door and doorframe are recent replacements. The traditional pair of croffthouse front doors had been removed and was found in the west room, while the lock was found in the east room. This is of simple steel
construction and is set into a wooden box (fig. 25). Amongst the soil and debris against the south wall the key was found close to the lock as was a brass letterbox with ‘A Hamilton’ painted on it. Fig. 26 shows a letter found in the cottage addressed to Angus Hamilton.

The house carpenter
In remote areas in the Highlands, of which Sutherland is a prime example, the house carpenter was a core member of the rural community.\(^8\) He often provided ‘from the cradle to the coffin’ and the remnants of this tradition can still be seen in the number of carpentry and joinery businesses which also operate as local undertakers.

In terms of the creation of dwellings, house carpenters were almost always the last craftsmen on site whilst also being involved in the greater part of the project; that is, roof, internal walls and linings, staircases, floors, doors and windows. Because they spent so much time on site they were often, in today’s terms, ‘the project manager’. The evidence from many cottages in the far north shows that they varied widely in skills and in the quality of their work. However, the carpenter responsible for the improvements to Croft 219, most probably Donald Mackay, was clearly highly skilled. In the west room in particular the lining had been laid into surrounds and the door mouldings were perfectly mitred. Perhaps the greatest testament to his work is the staircase, as the treads and risers are as solid today as they would have been on construction over a hundred years ago.

The ongoing project
This study is a community project by Rogart Heritage Society, which the author has had the privilege to lead. There are a number of other remains and traces of buildings on the site which are the subject of ongoing study. An interim report is available and it is anticipated that after the finds have been fully recorded, the furniture conserved and the other buildings recorded, a travelling exhibition and a book will be created. Associated lectures will also be available. (Further details are available from www.davehutchinson.org.uk.)

Acknowledgements
The author would like to acknowledge the considerable enthusiasm and work of the members of Rogart Heritage Society in this project and also the invaluable help and counsel of Malcolm Bangor-Jones.
Notes

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Whitby Abbey Boundary Walls, Fylingdales, North Yorkshire
About two miles [3.2km] south of Fylingdales Church, and the same distance SSW of Robin Hoods Bay (NZ933 029-930 030), is land bounded by dry-stone walls, now partly ruined, which once belonged to Whitby Abbey. At intervals along these walls their construction includes large stones arranged to form crosses, no doubt a reminder of ownership.

Robin Callander
Broch Build, Strathyre, Stirlingshire

Under the supervision of master craftsman Irwin Campbell, a team of 20 volunteers from the Dry-Stone Walling Association constructed a section of broch at Strathyre, near Loch Lubnaig, Stirlingshire. The second phase was built in the summer 2005 and includes the entrance passageway and guard cell.

The aim of the project is to show how, using traditional tools and methods, it is possible to build a broch. The build has been recorded on DVD by Stewart Campbell of Tigershark Ltd for the purpose of preserving the knowledge and skills gained for future generations. For more information see www.brochbuild.co.uk.

The Deliberately Concealed Garments Project

The Deliberately Concealed Garments Project is operated by the Textile Conservation Centre, now based at the University of Southampton in Winchester. It records items of clothing which were purposefully hidden within buildings, often it seems for reasons of spiritual protection. Visit www.concealedgarments.org. (For some other types of hidden object see the article by Andrew M Sherriff on ‘21 Shore Street, Anstruther, Fife’ in VB 28.)


Doocots have been a familiar part of the Scottish landscape for more than 600 hundred years and are amongst the oldest farm buildings in Scotland, yet they have been relatively overlooked by scholars. Now, however, interest is growing in these varied structures. Elizabeth Beaton reported that it was a race against time to record the buildings. (Two photographs and a diagram included in the report.)


National Trust for Scotland archaeologists excavated the remains of an early medieval house at Kiltyrie, on Ben Lawyers, Perthshire. The structure was built of turf and had rounded ends. Radiocarbon dating of charcoal from the central fire in the house showed that it was occupied between 1190 and 1300. Very few finds were discovered at the site, indicating that the inhabitants were poor. Another building, dated between 1300 and 1440, was discovered nearby. Excavation of both sites was on-going.

A leading architect and an Aberdeenshire timber company are together developing a prototype cottage which will be self-built, affordable and produce minimal environmental impact. Scottish timber processed for durability will be used and the design will echo traditional Scottish architecture. It is envisaged that one model will go into mass production this summer. (One photograph included in the report.)

SVBWG
CONFERENCES AND MEETINGS
2005 Autumn Meeting
Furniture and Fittings in the Vernacular Home

Held in the Augustine Church Centre, Edinburgh, on 5 November, this SVBWG day conference provided a wealth of information about the furniture and fittings of vernacular Scottish homes. 55 delegates heard a number of exceptional papers, the importance of which we hope to highlight by their publication within the next, special colour issue of Vernacular Building. For just now enough to say that the speakers were David Jones, School of Art History, University of St Andrews (‘Surveying the Landscape’ - an overview of vernacular furniture in Scotland), Elizabeth Hancock, Department of History of Art, University of Glasgow (‘Collecting and Display in Museums: Vernacular Furniture in Glasgow, 1900-1950’), Ross Noble, former Curator, Highland Folk Museum (‘Highland Furniture and Fittings’), Chris McGregor, Historic Scotland (‘Fittings of the Vernacular Home’ - with special reference to Sunnybrae Cottage, Pitlochry, Perthshire), Stephen Jackson, National Museums of Scotland (‘Recent Fieldwork in Argyll’) and Caroline Hirst, School of Art History, University of St Andrews (‘Bothy to Box Bed: The relationship between furniture, the interior and architecture of traditional dwellings in the Northern and western Isles of Scotland’). Sessions were chaired by Marion Wood and Margaret Mackay and were followed by extremely informative and enjoyable discussion.

2006 Spring Conference
Loch Lomond and the Trossachs National Park

The 2006 Spring Conference will be held on 21-23 April in Loch Lomond and the Trossachs National Park. Based at the Buchanan Arms Hotel, Drymen, Stirlingshire, it will include talks by Sarah Parkinson (see the article by Sarah on ‘Vernacular Buildings in Scotland’s First National Park’ in VB 28), Mike Davis
and park rangers, as well as visits to Killin, Perthshire, early farm settlements and cruck-framed buildings in and around Glen Ogle, Stirlingshire, and the vernacular architecture of the western shores of Loch Lomond, including the village of Luss, Dunbartonshire.

PUBLICATIONS
Regional and Thematic Series: SVBWG monographs - an update
Besides the annual journal *Vernacular Building*, SVBWG publish monographs in its Regional and Thematic Series. These publications arise out of our group meetings and conferences. Examples include the (very wet!) day spent recording remains of the Craibstone Limkilns, near Cullen, Banffshire, in 1995, or *The Hearth*, which arose from a conference of the same name, the papers of which ranged from investigations of central hearths in vernacular cottages to smart chimneypieces in Edinburgh New Town. Currently some members of the group are concentrating on recording dovecotes, amongst the oldest of our farm buildings and evincing considerable variety of local building materials and styles.

The first of the doocot publications was *Doocots of Scotland: Moray* by N A Brown, launched in Cullen in 2004. The next, due sometime in early 2006, will be devoted to Lanarkshire and is written by Munro Dunn. In the pipeline are Highlands and Islands, Fife (2 volumes) and East Lothian, while Dumfries and Galloway is being prepared by students attending the Scottish Centre for Conservation Studies, Edinburgh College of Art.

Stocks of SVBWG publications are held in the Group’s store in the cellar at Glasite House, 33 Barony Street, Edinburgh (Architectural Heritage Society of Scotland), where they are managed by Frances and Munro Dunn who attend to all mail orders. Publications are priced between £4.50 and £7.50 each for non-members/wholesale, with a one-third reduction for SVBWG members. There is a charge for postage. The SVBWG Publications List is on our website, www.svbwg.org.uk, and sales come in through this channel, besides reviews. Sales are also facilitated by members who approach local bookshops. We would welcome more involvement here!

Enquiries to Frances and Munro Dunn, 6 Hillview Road, Edinburgh EH12 8QN.

Elizabeth Beaton
Publications Co-ordinator, SVBWG
This is an extremely well-researched volume which examines the industrial windmill in Britain and demonstrates the highly versatile nature of this mechanical structure. Putting aside the best-known function of the windmill, that of flour manufacture, Gregory sets out the mechanical involvement of the windmill in the processes relating to the manufacturing and extraction of many products and substances. The versatility of the windmill is demonstrated through examples where the power of the wind could be used in conjunction with, or instead of, steam or water power, depending on conditions and requirements. Above all Gregory stresses the flexibility of wind power and that of the structures used to harness it.

The author has compiled an impressive range of processes associated with the industrial windmill and treats each one in turn, examining structures and procedures, while describing many examples in detail. The broad headings range from oil seed, pottery manufacture, paint manufacture, crushing stone and clay, processing organic materials, brass making, mines and quarries, paper making, timber manufacture and water supply. Gregory demonstrates a thorough knowledge of each of these processes, creating a fascinating view of British manufacturing in, particularly, the eighteenth and nineteenth centuries. The technical development of the windmill as greater control was gained over a natural force is detailed, with one name, John Smeaton (1724-92) being particularly prominent. One could say that the windmill encapsulates British industrial development, an idea demonstrated by a mill at New Normanton, Derby. First built in 1792 and associated with works where lead carbonate was ground to supply paint manufacture, the windmill was converted first to steam power, and later to electric power, finally closing in the 1960s having been in continuous operation for almost two hundred years.

Throughout, one is struck by the multitude of actions that a windmill's machinery could be adapted to perform, namely crushing Fuller's earth, or
tobacco leaves for snuff; pumping water from clay pits and mines; scotching (separating) hemp fibres for rope production; carding wool into slivers for spinning; grinding bones for fertiliser; stamping rags for the manufacture of paper; lifting logs as part of timber transportation; and possibly drawing slate wagons from a mine and powering saw tables for the slate on the Isle of Man. A particularly versatile example stands out: a mill at Manea in East Anglia built c1829 which drove a ‘circular saw, a lathe, a grindstone, a pump to de-water an adjacent clay pit, a set of brushes for cleaning boots and shoes, and an apparatus for cleaning knives and forks’. Also, in a relevant precursor to today’s debate on sustainable energy generation, in 1887 Professor James Blyth of Glasgow designed a horizontal windmill to generate electricity, particularly for isolated places. The people of Marykirk, Kincardineshire, refused his offer to light the village, but a mill was constructed at Sunnyside Asylum near Montrose, Angus, with the generator working until 1906.

As well as the versatility of the industrial processes associated with the windmill, the author also stresses the convenience of wind power, demonstrating its potential superiority over both water and, later, steam. During the Industrial Revolution demand was high for the sites most convenient for the supply of water for power. Windmills were more flexible in their positioning in not requiring a water source and if well-designed they could be situated in positions convenient for either the extraction or the transportation of material. Wind and water could be used in conjunction, for example at Unwin’s cotton mill, Sutton-in-Ashfield, Nottinghamshire, where wind was used in the 1770s to pump water from the tail race into the mill pond. At Welsh lead mines, in the early days of steam power in the 1730s, windmills may have been retained to work in conjunction with the Newcomen-type steam engine, and at Parys Mountain copper mine, Anglesey, steam was replaced by wind in the 1870s as the transportation of coal proved too problematic and expensive, thus prolonging the working of the mine until 1905. Often, wind power would be used to establish a site of extraction or manufacture, with steam being introduced when it became a viable economic option.

Various examples of industrial windmills in Scotland are cited, for example those for de-watering coal mines in the Firth of Forth area in the first half of the eighteenth century, including a mill at Bo’ness, West Lothian, constructed in c1750 and converted to a dwelling in 1915. Elsewhere, John Young of Montrose was sent to Holland at the expense of the town to inspect the mills of that country in 1708. The Scottish use of wind power associated with both coal mining and
salt extraction, as St Monans, Fife, of 1772/3, is also detailed. Scottish pumping engines are described as much more solid than their English counterparts, partly to accommodate two rocking beams. Wind power would be used to pump water for breweries, for example the pre-1768 Boroughloch Brewery in Edinburgh. A rare example is that of the possible cider mill in Cannee, Kirkcudbrightshire, visited by SVBWG in 1994. Another Scottish speciality was the Orkney threshing mill, powered by the not-inconsiderable wind supplies on the islands, with one at Sanquhar Farm, Westray, continuing in use until 1950. These mills, and mills used to de-water flagstone quarries near Thurso, used flagstones in their construction, responding to the availability of local materials. This is true of all areas; mills were designed to suit the materials available locally, the prevalent conditions and the processes required.

Gregory has extracted the maximum amount of information from contemporary sources, examining references to recreate in words structures, forces and procedures; he also reproduces fascinating historic illustrations, advertisements and photographs, augmenting these images with modern reconstruction drawings. The book is essential reading for those interested in any aspect of the history of British industry and all will be impressed by the variety and versatility of wind power.

Tin Tabernacles: Corrugated-iron mission halls, churches and chapels of Britain


This volume comprises a collection of excellent illustrations of corrugated-iron religious and other buildings, including historic views, with a useful introduction discussing the use of the material and the religious and social background of the buildings. Its appearance is most timely as this is a building type which can quickly deteriorate through neglect or vandalism and then be demolished on grounds of safety; indeed since the publication of the volume Our Lady of Mercy in Aberfeldy, Perthshire, has been demolished. Many of the buildings featured are objects of local preservation campaigns and it is to be hoped that this book is representative of a wave of interest in the building type which may assist in its survival. Although some of these buildings may be considered ‘unglamorous’
they represent a distinctive way of life and worship, and should be preserved.

The construction of churches and other buildings in corrugated iron flourished from 1855 to the 1930s. The material was first mass produced in about 1830; corrugating the metal added strength and it was often galvanised for extra longevity. It was soon recognised that a need existed for cheap, quickly erected buildings and builders' merchants supplied kits which could be built to a variety of sizes and designs. There were several reasons for this need. The movement of populations from the country to towns necessitated the building of churches, particularly when there was the view that these working populations needed to be kept away from the evils of drink and other distractions by a firm religious hand. If a distinct religious group moved between areas, for example Plymouth Brethren travelling to work in the dockyards of Pembroke, a place of worship would be required and in this case a mission was opened in 1913. Furthermore, this was the time of church schisms, when even a small rural settlement might need two or more churches to cater for the requirements of its inhabitants. Evangelical and temperance missions also required housing for their works in towns. Educational reforms necessitated the construction of new schools and a tin schoolhouse would be built before a permanent building was constructed. This was also the age of Empire; kits for churches and houses would be shipped throughout the world, with regiments often taking the church from their home barracks to a posting overseas. Other uses included servants' dwellings, hospitals, railway buildings, cricket pavilions and agricultural and estate buildings.

Churches would usually be paid for by subscription by the congregation, or would be gifted through charity. The construction might be a social occasion. A simple foundation would be built and the corrugated-iron sheets assembled around a bolted wooden frame. The interior would be lined with tongue-and-groove boarding and the floor might be of bare beaten earth, flagstones or boarding. Depending upon the resources available to the congregation there would be a range of interior fittings and furniture. Simple chairs might in time be replaced by pews and heating and lighting could be introduced. In due course the corrugated-iron church might be replaced by a more permanent stone or brick building, with many iron buildings being retained to serve as the church hall. Others might be moved elsewhere to serve a new population which urgently required a building. In recent years the ease with which corrugated-iron buildings can be transported has assisted in their preservation; the Highland Folk Park at Newtonmore, Inverness-shire, now houses both a church from Leanach, Inverness-shire, and a schoolhouse.
While illustrating examples of the different types of corrugated-iron buildings, the book naturally focuses on religious buildings. After introductory chapters outlining the background, the volume examines England, Scotland, Wales and Ireland in turn, with a short introduction being followed by a lavish collection of photographs with extensive captions. Most photographs are by the author, with others collected under the auspices of the Tin Tabernacles Project. The two final chapters include overseas buildings; those in Iceland are particularly distinctive. Contemporary photographs are augmented by a fascinating collection of historic photographs, sometimes creating a poignant contrast between past and present conditions. Of particular interest are the reproductions of advertisements, some quoting prices for the kit and transportation.

Upon viewing the photographs the sheer range of building types becomes apparent. Some of the churches are sizeable buildings, featuring all the motifs that one would associate with a more permanent structure - spires, bellcotes, porches, arch-headed or round windows and side aisles. Other buildings are much smaller, some being extremely basic, but a number nevertheless feature religious or decorative motifs such as finely worked barge boarding. Further variants on the basic structure include thatched roofs, as at St Felix Chapel on the Sandringham estate in Norfolk. Although mass-produced, each building featured has an air of individuality, particularly promoted by the range of colours in which they have been painted. For example, in Sutherland, a mission hall at Kinbrace features green walls and a bright red roof; the excellently preserved Syre Church has a red roof, white walls and black window surrounds, while Dalswinton Mission, Dumfriesshire, is a dramatic rich red.

Scotland receives praise for its preservation efforts, as at Newtonmore mentioned above, and a wide variety of churches and other corrugated-iron buildings are featured. All are in rural locations, mainly in the Highlands and Dumfries and Galloway; in future editions it would be interesting to see examples of those built to serve urban populations. Some corrugated-iron churches still serve their original purpose, such as those at Dalswinton, Syre, St Fillan’s at Killin, Perthshire, and St Columba’s at Brora, Sutherland, and there are several now serving as church halls. Others have been converted to commercial uses. For example, St Mary the Virgin, Connel, Argyll, is now a shop. Sadly, though, a large proportion of the buildings are disused. That at Elphin, Sutherland, is considered dangerous and, as mentioned, the example at Aberfeldy has now gone.
One looks forward to more work on the subject by the author, perhaps with more analysis of the different types of structure and distribution of works by the different makers. While at times one wishes that a firmer editorial hand had been employed, nothing can detract from the enthusiasm of the author for his subject and the excellence of the photographs which record this building type without which our towns and rural landscapes would be poorer.

A small exhibition about tin tabernacles, recently seen at the Architecture Centre in Bristol, is available for loan to interested bodies. More information about this and the Tin Tabernacles Project is available from Ian Smith at www.tintabernacles.com

**Traditional Buildings in Ireland: Homeowners' handbook, featuring the Mourne Homesteads Experience**


The aim of this book is to provide information and a practical guide for those undertaking projects relating to traditional buildings throughout Ireland, giving advice on maintaining, repairing, restoring, altering or extending traditional buildings, while considering heritage and planning issues. In addition to fulfilling this remit it also serves as an interesting introduction to the subject for those with a more theoretical interest and reproduces (many tantalisingly uncaptioned) images of attractive houses and other structures and some of their individual features.

The volume divides into sections beginning with the historical background to the subject, examining building types representative of distinct areas and giving reasons for diversity. Partly as a description, and partly as a guide to gain information from the evidence present, individual aspects of traditional buildings are discussed including walls, roofs, roof coverings, chimneys, gutters, doors, windows and internal finishes. This is followed by a practical chapter on the treatment of traditional buildings today, particularly looking at how to extend, alter and, very importantly, treat the surroundings of the structures. It also examines the threats to the resource and how legislation and directives such as the resolutions of the International Council on Monuments and Sites [ICOMOS]
can address these threats in general. The following two chapters offer step by step advice on a programme of work, first of all on the individual aspects of a building, namely doors, windows, paintwork and services, then on assistance, permissions and advice on VAT and building regulations, and general sources of guidance.

The volume then moves to the Mourne Heritage Trust, formed in 1997 to preserve and enhance the Mourne area, most of which is an Area of Outstanding Natural Beauty. The Mourne Homesteads Scheme was launched in May 2000 to select five vacant traditional dwellings for transformation into viable modern homes (not holiday dwellings) while retaining their important traditional characteristics. The case studies of the five buildings worked upon are presented with before and after illustrations and the reproduction of alternative plans. One of the aims of the project was to foster traditional skills and details are given of the work upon lime, timber, dry-stone walls, hedges, stone masonry and cutting and thatching. Short descriptions are given of each project, all of which produced successful buildings and provided useful lessons for future works, perhaps most importantly that irregularities and quirks should be retained and acknowledged. As a final note, useful contacts, addresses and references are given.

For anyone with an interest in the vernacular buildings of Ireland this volume is a useful and attractive introduction; for anyone contemplating work upon such a building, it is essential!

**Timber Cladding in Scotland**


This publication seeks to promote the use of timber cladding in Scottish buildings by two means, the first an analysis of the historical evidence to show that the use of timber cladding was more widespread than is commonly thought, and the second a practical guide to the use of timber cladding, culminating in several case studies of recent high-profile projects. The authors express the hope that the publication will prompt further discussion and research into the subject
and indeed, in September 2005, a conference devoted to External Timber Cladding: Design for durability was held in Aviemore. Observation of many new building projects also finds a burgeoning use of the material for large areas of wall covering and also inventive detailing.

The material immediately associated with building in Scotland is stone, but the authors demonstrate through references and historical illustrations the common use of timber in a wide variety of buildings in both towns and countryside. The presence of timber cladding in towns is often overlooked as timber-clad buildings have often been encased in masonry structures and many illustrations date from a later period when timber cladding was concealed by lime rendering. This impression is corrected by the reproduction of fascinating illustrations of examples of timber-clad buildings in Edinburgh’s Old Town and in Glasgow, and drawing upon the evidence of contemporary accounts such as the Statistical Account of 1793 which recorded no more than four stone houses in the centre of Dundee. Evidence of other uses of timber cladding is also called upon, for example, in conjecture, the wooden superstructure which may have encased such castles as Threave, Dumfriesshire. With a more humble building type, the cruck-framed cottage, standing structures still show timber cladding between the masonry base and eaves.

Following the Industrial Revolution timber could be produced in greater quantities to a more uniform standard and improved transport allowed for greater ease of movement. These factors, coupled with the use of pattern books for designs, made for even greater use of timber in particular building types such as shooting lodges, fishing-industry buildings, railway buildings, servants’ housing, recreation halls, agricultural buildings, churches, schools and porches. One of the most significant uses was for temporary and low-cost dwellings, which had particular repercussions for the reputation of timber cladding. Following the First World War, when housing was urgently required, the Scottish Special Housing Association built thousands of timber-clad houses throughout the country. Scepticism in some parts of the architectural and building professions regarding the durability of timber cladding and its degree of suitability to the Scottish climate, coupled with an association with lower-grade structures, coloured the perception of timber-clad buildings until the later years of the twentieth century.

It is this perception that the second half of this publication seeks to address. By quoting research by the Timber Research and Development Association (TRADA), and the discussion of case studies of several recent projects, the case
is made for the suitability and durability of timber cladding and its place in high-quality architecture. Comparisons are made with conditions in areas comparable to Scotland in western Norway and British Columbia in western Canada. Through analysis in hot, cold and humid conditions, performance is measured against the action of rainwater and fungal and insect attack. The conclusion is drawn that, through the selection of the correct type of wood, high-specification design to eliminate any points of water ingress, treatment to assist the natural properties of wood and the appropriate level of maintenance throughout a building’s lifetime, timber cladding is highly appropriate for the Scottish climate. Indeed, in certain conditions, even in the challenging climate of Shetland, timber cladding can be more cost-effective and durable than conventional blockwork (Housing at Gremista, Richard Gibson Architects).

These findings have been instrumental in provoking an increased use of timber cladding, which has the further attraction of offering, when the correct sourcing is carried out, a highly sustainable alternative to other building materials, a factor which is increasing relevant today. These are some of the aspects which are making timber cladding highly desirable and fashionable in current Scottish architecture.

The TRADA findings regarding the most durable timber types, and also some aspects of building detailing, are given to stress the importance of design in producing a durable building. The expertise employed and lessons learnt in some recent projects are also stressed. For example, the Scottish Seabird Centre, North Berwick, East Lothian, accepts the potential for natural timbers to warp and twist and the building has been detailed accordingly. Considerable effort was expended on selecting the correct nails for the Birnam Institute, Perthshire. The raising of the visitor centre at Glencoe, Argyll, onto a steel framework allows ventilation and minimal ground disturbance. A house by Gokay Devici Architects at Robert Gordon University, Aberdeen, demonstrates the sustainability and cost-effectiveness of a timber house on a light frame. As well as producing durable and cost-effective results, the projects featured have produced high-quality buildings which use the natural properties of timber, accepting where relevant an attractive natural silverying of wood, thus creating a genre of architecture which can be described as a ‘new vernacular’ which, from all the evidence, will grow in popularity.
Be it a rural parish or an urban housing scheme, every community possesses a graveyard or a cemetery. A retreat for contemplation and remembrance, each is a well from which we can draw upon the past, a place of rendezvous across the generations. Scotland’s burial grounds are an invaluable element of our heritage, yet their very ubiquity can also render them invisible and undervalued and consequently vulnerable. Since its first publication in 1985, Understanding Scottish Graveyards, now in its third edition, has worked to redress this.

The volume, and Willsher’s numerous other publications, have played a major part in the reinvigoration of the recording and study of Scotland’s burial grounds. Understanding Scottish Graveyards has established itself as a standard work of reference, both for casual visitors and those actively engaged in recording or conservation. It provides a basic, practical introduction to the subject, describing the range of monuments likely to be encountered, from medieval recumbent slabs, through the elaborate sculpture of eighteenth-century headstones, to the mass-produced diversity of angels and obelisks of the nineteenth and twentieth centuries. From a vernacular point of view the earlier stones are perhaps of greatest interest, each a unique hand-carved creation, a piece of folk art, yet the later stones too are worthy of study and increasingly valued. The volume explores the diversity of the stones’ symbolism and investigates the changing attitudes to death and religious belief that this reveals.

‘Graveyards’ aims to encourage an appreciation and understanding of the subject, suggesting the potential of burial grounds as sources for a wide range of research, from genealogy to demographics and from art history to natural history. A recurrent theme, however, is their vulnerability. Graveyards and cemeteries face a potent alliance of threats. Not simply the irresistible worm of time itself, but also vandalism, theft, excessive tidiness and the commercial pressures of development. The warzone-like devastation that is Glasgow’s Southern Necropolis is an extreme case but also a graphic illustration of the fragility of our graveyard heritage. There is an irony that the practice of erecting permanent markers to commemorate burials itself ultimately brings with it a threat to the monument’s survival. A few months ago the media carried the report
that in order to square the continual pressure for burial places with the shortage of available land, local authorities were considering reusing existing burial lairs. The implications for graveyard monuments have yet to be fully explored.

One volume cannot hope to cover comprehensively such a vast field, but the major revisions of this edition, the provision of detailed notes at the end of each chapter and an extended bibliography bring it up-to-date with references to recent research, publications and the diversity of resources now available on the Internet. One of the most significant and encouraging developments in recent years has been official recognition of the importance of the subject as expressed in a series of publications by Historic Scotland’s Technical Conservation, Research and Education Department, offering detailed guidance on a wide range of issues relating to the recording and conservation of graveyard monuments. A major initiative, the Carved Stones Adviser Project, has co-ordinated local and national efforts, working to raise the profile of graveyard heritage and the diversity of associated issues.

We cannot hope to preserve every stone or indeed every burial ground. Even the more limited objective of recording graveyards is too great a task for any single institution or group. Local enthusiasts and volunteers must take the lead role in this and largely on their own resources. National and regional societies and institutions can, however, provide a valuable, indeed key, role in offering support, advice on best practice and standards, co-ordination of effort and the preservation and dissemination of their results. It must be hoped that the interest built up by Willsher’s books, and the momentum gained over the last few years by the co-operation of institutions and individuals through the Carved Stones Adviser Project, will be maintained.

Reviewed by Iain Fraser

Clyne Heritage Society Journal, Issue no 1


Edited by Dave Hutchinson, contributor to this number of VB, this is the first issue of what promises to be a remarkable journal and one which will be of
interest to many, not just those with an interest in vernacular building and landscape studies or those with a fondness for this particular part of Sutherland. Exquisitely presented, the contents include an article by Jacqui Aitken on ‘The Salt Pans on Brora Back Beach: Archaeological survey - June 2004’. This looks at the history of salt making in Brora and presents the results of a survey of the buildings’ remains, which are now very much under threat from the sea. ‘The Carpenter’s Kist’ by Dave Hutchinson is a piece which will be of particular interest to those who attended the 2005 Autumn Meeting on Furniture and Fittings in the Vernacular Home but will also appeal to anyone with an interest in the work of house carpenters, in woodworking tools and in the use of wood in both buildings and items of furniture. Norman Gibson writes on ‘Visibly Moderate: To see or not to see in archaeology and art’ while Nick Lindsay investigates ‘Placenames of Clyne: Sources, origin and history’. The remaining two articles - ‘Truth in Fiction: Land and stories on the edge of Europe’ by Niamh Conlan and Wendy Sutherland’s ‘Bare Branches Set Out, Pulled Out of Their Context Become Maps, Paths of Human Existence’ - look at forms of the oral and visual arts entwined with the local landscape.

Although the focus is not always on the built environment this theme has a prominent role within the journal and the articles together come close to creating a holistic study of the area which reveals buildings in their full context - physical, historical, cultural, societal, intellectual and emotional. As such it is an exciting addition to the material available on buildings in the far north and a very fine achievement on behalf of a small but clearly extremely talented and energetic local community.

Reviewed by Susan Storrier
CONTRIBUTORS

Rosalin Barker spent more than a quarter of a century in university adult education. She has now retired but is still an Honorary Fellow of the University of Hull, undertaking research into Whitby’s seventeenth- and eighteenth-century merchant shipping and the community which supported it.

Elizabeth Beaton is a long-standing member of SVBWG with a particular interest in rural and coastal buildings. She served as an Assistant Inspector, Historic Scotland, 1979-89, in the Highlands and north-east Scotland.

Robin Callander has been a member of SVBWG for many years. A retired chartered accountant, he has been involved since the 1970s in archaeological excavations and has carried out much field-survey work in Argyll and the Lothians.

M Dalland, T G Holden and G F Geddes are all members of the historic buildings survey team of Headland Archaeology Ltd. M Dalland has twenty years’ experience of surveying and large-scale excavation. His special interests include Norse archaeology and survey. T G Holden is an archaeobotanist and Director at Headland and recently authored the Historic Scotland Technical Advice Notes on the archaeology of thatch. G F Geddes is Headland’s principal building surveyor and has particular interests in vernacular buildings and continuity and change within architectural traditions.

Dave Hutchinson is a sculptor and furniture historian, specialising in the vernacular traditions of the northern Highlands. He is currently researching the variations in Caithness chairs and the role of the house carpenter in creating the Highland home. An expert on the tools and practices involved in vernacular furniture construction, he regularly lectures throughout the far north.

William I Millan MBE was trained at Edinburgh College of Art and taught in West Lothian. For more than twenty-five years he has been actively promoting the community and heritage of the town of Bathgate. His many and varied roles in this regard include Founder of the Bennie Museum in Bathgate.

Geoffrey Stell is Founder-Secretary and onetime Chairman of SVBWG. He is Honorary Lecturer in History at the University of Stirling and Visiting Lecturer at Edinburgh College of Art. In 1969 he joined the Royal Commission on the Ancient and Historical Monuments of Scotland where he was Head of Architecture from 1991 until his retirement in 2004.
Scottish Vernacular Buildings Working Group

The Group was set up in 1972 to provide a focus for all those interested in Scotland's traditional buildings.

To some 'vernacular' may mean cottages, crofthouses or farmsteads; to others its essence may be urban tenements or terraces, industrial watermills 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 settlement 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 the traditional buildings of Scotland have come to have such variety and character. And 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, in the spring of each year. The 33rd Conference, in 2005, was held in Whitby, North Yorkshire, and the annual Autumn Meeting, on the topic of Furniture and Fittings in the Vernacular Home, took place in Edinburgh.

Publications include Vernacular Building, an annual miscellany of articles issued free to members, and a series of Regional and Thematic works. For contributions to VB 30 and VB 31 please contact Susan Storrier, Editor, Vernacular Building, c/o Veronica Fraser, RCAHMS, John Sinclair House, 16 Bernard Terrace, Edinburgh EH8 9NX, or by email to mwal@wanadoo.es. A preliminary letter or enquiry would be helpful, indicating the size and nature of the proposed piece, but we request that original photographs or drawings are not sent in the first instance. Photocopies of these are useful at this early stage. (Please note that some photographs taken by digital camera are not of sufficiently high resolution to be used in VB). Any text submitted should be as far as possible in the style of this volume. It should be typed, double spaced with wide margins, on one side of the paper only, and ideally accompanied by a disk copy. Alternatively hardcopy text can be supported by an email attachment version, sent to the above email address.

We also welcome publications for review. These should be sent to Veronica Fraser, Reviews Editor, SVBWG, c/o RCAHMS at the address above.
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