NEWSLETTER No. 44 – SUMMER 2024

Cumbria Vernacular Buildings Group

1. From the Chairman

Membership of CVBG has now broken the 200 'ceiling' and is growing steadily. The early summer was a busy and enjoyable time for members who ventured out to our Study Day at Askham when 45 members attended fascinating talks by Dr Caron Newman and Chris Craghill on the development of the Cumbrian landscape and Askham in particular. I am sure that you will enjoy reading the detailed report of this event in this quarter's newsletter, see Page 6.

Our programme of visits found 30 members enjoying a sunny day at Beckbank Farmhouse on Saturday 22 June when Jayne Potts and Robert Orr hosted CVBG in fine style whilst members studied their lovely home and grounds that boasted 16 C origins. A detailed report of the event will appear in the September newsletter.

Not to be missed on 16 July is a chance to view The Luham near Edenhall. This 17th C farm developed over 200 years to become a wonderful example of a Gentleman's Model Farm and it will offer a rare opportunity to see a complete set of working buildings with a farmhouse that has been tastefully restored.
For those with an interest in restoration, 15 August will take members to Banks Farmhouse at Lanercost where a Georgian farmhouse has been sympathetically renovated in authentic style.

7th September will find us at Acorn Bank, Temple Sowerby for our annual general meeting. Once a brisk meeting has been completed, we will be able to listen to Jeremy Lake from Historic England recount his study of vernacular farm buildings, setting our local examples into a national context. National Trust have also offered us a tour of the historic house.

On 9th October, our founder and President, June Hill will invite us to Alston where a study of the town's buildings will be enjoyed; a description of the day is included on the inside rear cover.

Our enthusiastic recording team have already gathered survey data for a pair of dwellings at High Stott near Windermere and will be producing a report for members shortly. Future opportunities will hopefully also include Thwaite at Troutbeck and Croglin Pele; notifications of these events will follow once details for access are agreed.

I hope you can join us on our busy summer and autumn round of events. Until then, enjoy the summer weather (as long as it may last!) ▪

Chairman

2. Heron Corn Mill, 11th April 2024 – John McDowell

This grade II* listed 18th century working watermill is on the Haverbrack side of the River Bela and one mile south of Milnthorpe on the A6. A group of 27 people attended and met initially at the repurposed threshing barn which is now an education, community, and arts space. There were mills in the area as early as 1096, the first documented reference to Heron Mill was in 1608 (a heronry is one mile north of the site). A manorial mill for Conishead Priory, the mill was rebuilt as seen today in 1740. In 1788 the corn mill opposite became a paper mill, now Billerud Beetham Mill, the factory there makes specialist paper and cardboard products. A weir runs between this paper mill and Heron Mill, a natural ledge of rock 3m high. An additional wooden dam on top has been replaced by a concrete barrier making a 4m high weir to obtain the head of water required. The Bela is a spate river flowing into the River Kent and flow can be as much as one-sixth of the winter rate in the drier summer months. Heron Corn Mill had an iron waterwheel installed in 1849 and by 1890 was grinding 80-90 tons of flour a week until 1927 when it ceased milling flour; animal feed was produced until it closed in 1958. The mill was used as an agricultural store until 1973 but fell into disrepair. It was then leased to the Beetham Trust who opened the mill to the public in 1975 and by 2009 it was restored to full working order under a traditional millwright and funded by a Heritage Lottery Grant. The launder and sluice were also overhauled; there are ongoing renovations to the fabric of the mill. Stuart Hobbs is the resident miller who supervises operation of the milling machinery and waterwheel of the mill as well as operating and monitoring the Kaplan hydro-powered turbine housed nearby. We divided into two groups for our tour.

Mill Exterior © John McDowell

The three-storey corn mill is a four-bay building with three pairs of upper-crucks supporting the Westmorland slate roof, there is a narrow extension to the Northwest with a drying kiln. The original cobbled access to a cart door had sloped down so that the doorway was level with the back of the cart. It has now been built up to form a level terrace for easier access, but the cobbles below are protected by a membrane. Several types of redundant mill stones are displayed here. Entering directly into the milling floor we saw the Lowder, a large free standing oak frame placed centrally, designed to withstand movement & vibration. The Lowder accommodates the great spur wheel, also taking the weight of four pairs of millstones; construction is comparable to a bell tower and is not linked to the walls.

The wooden 'stone furniture' above each pair of stones comprises tun casing, shoe, horse & hopper. An upright iron shaft passes through each pair of stones, the lower 'bed stone' of each pair does not move, the upper 'runner stone' revolves against it, the peg & lantern gearing being connected to this stone. The stones are regularly dressed using a 'mill bill' to keep the furrows or grooves in the grinding surface sharp. The four pairs are:

1. Riverside downstream - Derby gritstone from the Pennines & the only type in use before 1740.
2. Riverside upstream - French Burr, from riverbeds to the east of Paris, a crystallised flint & about five times more expensive than gritstone. Inferior quality imports are cut into polygonal panes and bound by iron hoops, backed, and dressed with furrows cut into the stone surface.
3. Bankside downstream - Derby grits
4. Bankside upstream - worn French Burrs which were faced with carborundum grit by the millwright in 1928.

There was a quarry at Quernmore near Lancaster for hand querns.
Gearing beneath the frame is connected to the waterwheel within the building on the floor below by a centrally wooden shaft turning the large spur gear, a horizontal great spur wheel. There are cast iron stone nuts with wooden (hornbeam and beech) cogs around this spur gear and cast-iron shafts rise to the four pairs of stones. Each stone nut sits on a 'bridge tree;' the miller can alter the gap between the millstones determining how finely the grain is ground. Stuart demonstrated how the stone nuts could be raised by using a loose wooden yoke placed on an upright inverted wooden fork.

The Kiln is integrated within the Heron Corn Mill building, we saw the drying floor: thick clay tiles with perforated holes which lie on a metal frame. Threshed oats would be spread over this floor and by means of a small fire in the basement the oats were dried, a metal baffle plate suspended below the floor disperses heat evenly. Drying is necessary in damp climates to enable removal of the hull from the groat inside; the oats were spread out, turned at intervals and then swept via chutes to a hopper below and bagged. We saw the clogs worn by the miller there and the walls stained by oils. The sacks were then hoisted to the grain store on the top floor, the dried oats tipped into a hopper for shelling via a pair of oat shelling stones and then a winnowing fan separates hull from groats. The cleaned groats pass up to the grain store by a grain elevator into sacks ready for milling. When the miller engages the stone nut with the spur gear then power is harnessed from the waterwheel, only two pairs of millstones can be driven at one time. Groats for milling enter the centre of the runner stone from a filled hopper and are ground to flour or meal. This passes to the edges of the stones along the furrows to be collected and bagged. Not a lot of milling is undertaken now to conserve the machinery but there are milling demonstrations on the first Friday of each month from March to December. Freshly milled flours including wholemeal rye, wheat and spelt varieties are available at the mill.

The ground floor is susceptible to flooding and most machinery is upstairs on the main milling floor with a grain floor in the attic above. The replacement 14-ft wooden waterwheel of 1849 with curved iron buckets (giving power of over 15hp) is in a compartment within the ground floor; this high breast-shot wheel is very efficient over a wide range of flow rates. The water lands at a 10 o'clock position turning the buckets in an anticlockwise direction; the gearing was also upgraded at that time to the latest cast iron technology. We saw the gearing on this floor: the pit wheel, wallower, wooden wheel axle and upright tree axle shaft on a cast-iron saddle as well as the winnowing fan. The kilnfire of the drying kiln is on this level, below the drying floor above, peat was the original fuel used but later coke which was smokeless.

Mill Stones & Milling Floor © John McDowell

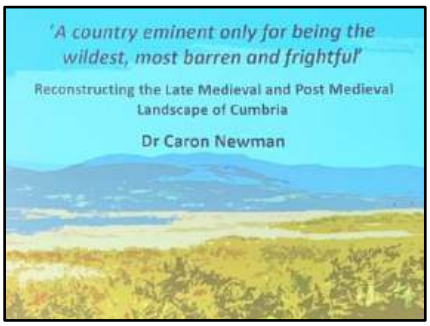
Outside we viewed the launder, the wooden channel to the waterwheel; an even flow is directed from the head race and controlled by a sluice gate close to the bank. A small external waterwheel, connected to a generator, powered lighting at the mill until 1974 and the remnants remain in situ adjacent to a fish pass. This pass was formed in 1990 and allows Sea Trout and Salmon to travel up the River Bela to breed, it flows through a natural limestone cave beneath the barn. The group also visited the turbine house by the weir where a 100kW Kaplan hydro-powered turbine was installed in 2010, it should have a lifespan of about 60 years. The electricity produced (up to 100 kW/hr) provides all that is required at Heron Mill and the surplus is sold to the paper mill opposite giving a sustainable income for the site. The highly efficient propeller type turbine uses adjustable stainless steel guide vanes and runner blades to maximise efficiency despite the variable water flow of the River Bela. Due to problems with debris especially at times of flood there are screens to catch this and smolt screens for fish and leaves.

We are grateful to Stuart, the management, and volunteers at Heron Corn Mill for a most informative guided tour and in maintaining this building which shows our heritage ▪

H E R O N – C O R N – M I L L

Top image: Bottom Floor Mill – *Lower Image* : Attic Grain Store © John McDowell

3. The Medieval Settlements and Landscapes of Cumbria and the Eden Valley.
The development of the landscape and settlement patterns
Dr Caron Edgerton Newman- Newcastle University



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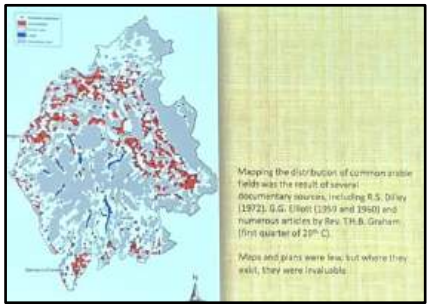
Dr Caron Newman was introduced by CVBG Chairman, Paul Lewis as a Landscape Archaeologist, a Medievalist and Post Medievalist, with knowledge dating from Palaeolithic times through to the C20.
Caron began by stressing that in the characterisation of historic Cumbria, large, rural and the second most sparsely populated county in England, the context of each building in the landscape needs to be considered. She described Cumbria as a county of huge contrasts and complex geology. C18 maps of Cumbria show the Lake Counties made up of Cumberland and Westmorland and Lancashire-over-Sands (physically separated from the rest of Lancashire by the sands of Morecambe Bay). In the early C18, Westmorland was described by Daniel Defoe as 'A country eminent only for being the wildest, most barren and frightful of any that I have passed over in England'….
This 'wildness' of some parts gradually began to change over many decades as the enclosure of parcels of land began to take place, initially in a piecemeal way. From the 1750s, Enclosure by Parliamentary Act became the norm, resulting in considerable changes to lives and the landscape from that time. Most of the Medieval common land of England was lost to enclosure. It ended rights such as mowing meadows for hay, grazing livestock on common land, collecting firewood or cutting turf for fuel.
Approximately half of Cumbria was enclosed, the remaining unenclosed parts usually being moorland and high fells and any land over 300m. This applied to a large area of the central Lake District and the Pennines and also to what had been the medieval forest of Inglewood. Approximately 56% of Westmorland was unenclosed (the least enclosed historic county), much of that land being over 200m but also including moorland in the Eden Valley and the Lune Valley.
Looking back for evidence of medieval and late medieval settlements, Caron applied the technique of HLC- Historic Landscape Characterisation (the identification and interpretation of an area and how it has been shaped by natural and human activities over time) and shared her findings with us. Aspects of this research referred to early maps, including estate maps (showing common arable fields, parks, and woodland) and documentary sources, using data where it could be validated. Early maps often included useful information such as field names or the names of tenants written on the fields.
The extent of evidence of earlier settlements varies and also the type of settlement, whether scattered, a string of buildings or nucleated (clustered round a central or focal point, e.g. a river crossing, a meeting of ways or an important building).
The giving of place names before the end of the C16 didn't always imply that a place existed in the exact location shown on post medieval maps, an example

being Ainstable in the Eden Valley. The village is now focused on the church, some 500m from the original site and the original location is now only a few scattered houses. Many settlements were however planned and laid out at the same time as their fields giving a good indication of medieval antiquity.



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Data mapping of late C18 showed there to be 2,545 settlements of all kinds…individual farms and cottages, small settlement clusters (2-5 dwellings) and larger nucleation's. The greatest number of settlements was around the fringes of the Lake District fells and around the Westward part of Inglewood Forest.

The medieval forest was protected by laws which preserved animals for hunting as well as greater control over the land. Forests were a royal institution under the protection of the king. Chases too also had rights to hunt but these were in the hands of private individuals. There was some blurring of the terms. This can be seen in the case of Inglewood, a true forest under royal control throughout the medieval period but is referred to as Inglewood Chase on a medieval map. It was considered to be one of the most wooded of the Cumbrian forests during medieval times. Deer parks too played a very important part in the medieval hunting landscape.

Caron went on to discuss the influence on the landscape of the vaccaries, monasteries, granges and in particular Furness Abbey. Vaccaries were cattle-rearing farms where the land was enclosed around the farm, examples include Wasdale Head and Gatesgarth. Monasteries such as Holme Cultram with its well-defined core estate held various landholdings including 19 granges. These were outlying farms belonging to a monastery or manor surrounded by identifiable fields. 134 granges have been identified with the most being held by Furness Abbey with 47. Furness Abbey was the largest and most powerful of the region's abbeys and monasteries, its estate covering 30,250ha. It was also a major driver for industrial exploitation through the early iron industry.

This is only a snapshot of an extremely detailed talk by Caron on this fascinating subject. For further reading, her thesis is available at the link below ▪ http://hdl.handle.net/10443/2556

The talk was then followed by a village walkabout round Askham.

© Stuart Harling

4. Ona Ash, Kirkoswald, A structural study by Peter Messenger

My conclusions on Ona Ash are based on the fabric and the dating and make a reasonable case for how it has developed.
The building was originally two buildings.
A two-unit cottage and a two-bay barn/byre.

There is a considerable amount of disturbance and rebuilding in the barn/byre, but the cottage is fairly straightforward, although the masonry shows at least four phases of construction.

The cottage crucks date a third phase of rebuilding with a gable entry (post 1535). The cruck blades (CT3) are not raised crucks but sit on an earlier boulder and cobble plinth. Sometime later a stone wall has been inserted adjacent to the crucks to support joists for a loft/bedroom above the parlour accessed by ladder from the house.

The barn/byre is now of three bays but was originally of two bays. Truss CT1 (post 1579). A loft was added with a beam set adjacent to the cruck truss to support the joists. The masonry walls have been altered significantly especially in the last century and phases of development are not clear, however the earliest dated cruck truss (CT2) provides dates of 1469 and 1526 but it is considered that these timbers are re-used when the two buildings were physically joined together. The reasons for this are as follows.

The location of the truss CT2 is set equidistant from Truss CT1 and the gable wall of the cottage. This would be reasonable if this was all of one build. The plan of Ona Ash shows that the front wall deviates from a straight line at the cross passage. This realignment would not be a problem if this part of the front wall was built at the same time. The construction of the dated doorway, however, shows the masonry is actually built up against the gable corner of the cottage and has had to be cut into the existing stonework. The date of 1693 would indicate the linking of the two buildings and the construction of the cross passage.
The stone staircase and the introduction of a first floor over the house may also have been part of this work. The stone fireplace introduced into the inglenook would also fit with this timescale.

(N.B. CVBG visited Ona Ash in October 2022 see Newsletter No.37)

(L) Front Elevation (R) Rear Elevation – 3D Images © Paul Lewis

5. A Brief History of the Moot Hall in Keswick and its Location

By Paul Lewis CVBG Chairman

1.The Moot Hall prior to recent restoration and resting upon the site of two earlier structures

In his book on pre-Civil War English Civic Halls, Robert Tittler examined Elizabethan municipal buildings in considerable detail. They were known by a variety of interchangeable names including Town Hall, Moot Hall, Courthouse and Market Hall. Whilst Tittler concentrated on the southern parts of England, he noted only one example from Cumberland in a brief reference to the Moot Hall at Keswick being built in 1571; whereas similar structures were common throughout Tudor England between 1500 and 1640, he noted only 25% had survived. Keswick was one which did not survive as it was replaced in 1813 by the current structure.

A transaction for the Cumberland and Westmorland Antiquarian and Archaeological Society written in 1995 by Blake Tyson BSc was entitled "Rebuilding the Medieval Court House in Keswick in 1571." It was identified that the current Moot Hall was the third building to be built on the site. Little is known of the earliest phase other than it is mentioned in the historical record associated with the Company of Mines Royal founded in 1564 by Queen Elizabeth I.
She empowered Thomas Thurland and Daniel Hechstetter to search for mines and smelt ores of copper gold, silver and quicksilver in Cumberland, Westmorland, and Lancashire. She appointed as superintendent Richard Dudley who lived at Yanwath Hall near Penrith.

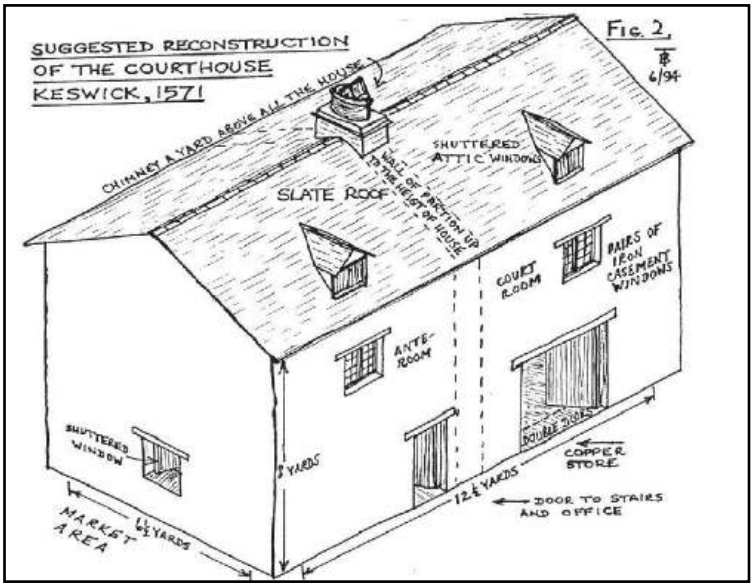
Earlier in 1570 Lady Radcliffe of the Isle of Derwentwater and the Trustees of his inheritance, Sir Henry Kirwin and John Dalston agreed with Richard Dudley who "requested one courthouse so called situate in the Market Place of the town of Keswick to serve as the storehouse to be made for the keeping of her Highness's copper and other commodities of her mines in those parts." The trustees agreed to lease an existing building for 8 years at 10 shillings a year from Whitsuntide in 1571. During the lease, building repairs were to be at the Queen's expense.

The building accounts for this work had lain unnoticed in a large bundle of unsorted miscellaneous documents of the Flemming family at Rydale. The building account by Richard Dudley included a reference "The charge of a new house made at Keswick for weighing and keeping of the Queen's majesty's portion of copper made by Richard Dudley Esquire by order … containing in height 8 yards and in length 10 yards deep and in breadth 6 yards." Here we have discreet dimensions for the building then erected. Of particular note is that the wallers' estimate included "pulling down the old house" which was probably the building in the Market Place mentioned in the initial rent agreement with Lady Radcliffe. Built entirely out of local stone from Blindcrake, and slate from under Skiddaw, the accounts rendered sufficient detail for Tyson to present an approximation of the reconstruction of the Court House in Keswick in 1571, as shown in Plate 1.

The initial lease from the Lords of the Manor, the Radcliffe's, was for 8 years only and when the ground floor was no longer used as a copper store house it probably became used for market stalls. While a date for this change has not been discovered, the initial 8-year lease would have expired in 1579 and seems to have coincided with a depression in copper production. The upper floor appears to have continued in use for the proceedings of the manorial court.

Substantial repairs and rebuilding were carried out in 1695. However, 81 years later in 1776 William Hutchinson wrote his book 'Excursion to the Lakes" and failed to appreciate the vernacular charm of the 200-year-old Court House, saying "There is a town house in the Market Place said to be erected out of the ruins of Lord Derwentwater's mansion, but of the most uncouth architecture."

Tyson noted that the library at Carlisle held a survey of the estates belonging to Greenwich Hospital made in Autumn 1805 by three of the hospital directors and contains the following entry, "Keswick shops and shambles, the use of the Moot Hall, together with the Tithe Barn and tolls, are let to Daniel Dover and others at £48 14 shillings and 0d per annum; the buildings are in good condition, except the Moot Hall, the ceiling of which, as well as the principal beams, are very much out of repair."



2. An approximation of the appearance of the original Court House by Blake Tyson 1995, based upon the building accounts of the Greenwich Hospitals

This seems to suggest that it was the state of the main timbers, perhaps especially those re-used in 1571, which was a crucial factor in the need to re-build in 1813.

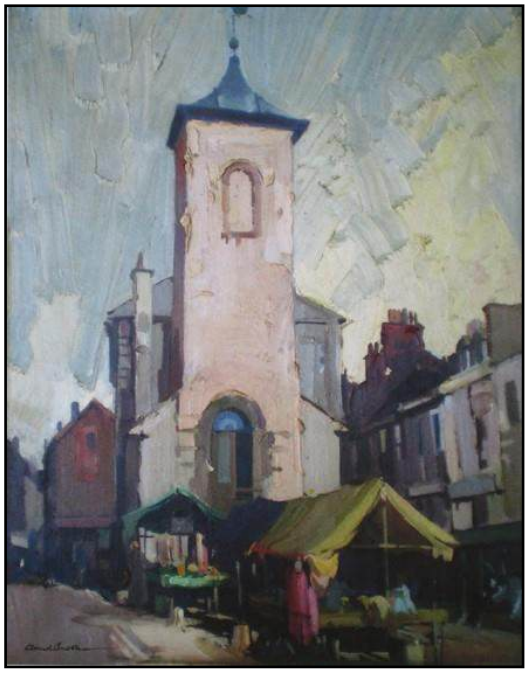
The current structure, built of slatestone, was commissioned by the Trustees of the Greenwich Hospital in 1813 following their acquisition of the Estates of James Radcliffe, 3rd Earl of Derwentwater who was executed for his involvement in the Jacobite rising of 1745; his property was seized by the Crown and passed to the Trustees of the Hospital thereafter.

It was designed with a square tower on the north end with a round-arched doorway and a double flight of steps inside. The Marshall family acquired the building from the Trustees at Greenwich Hospital in 1832 and it became home to the Keswick Museum of Local and Natural History; the Keswick Literary and Scientific Society was created there in 1873.

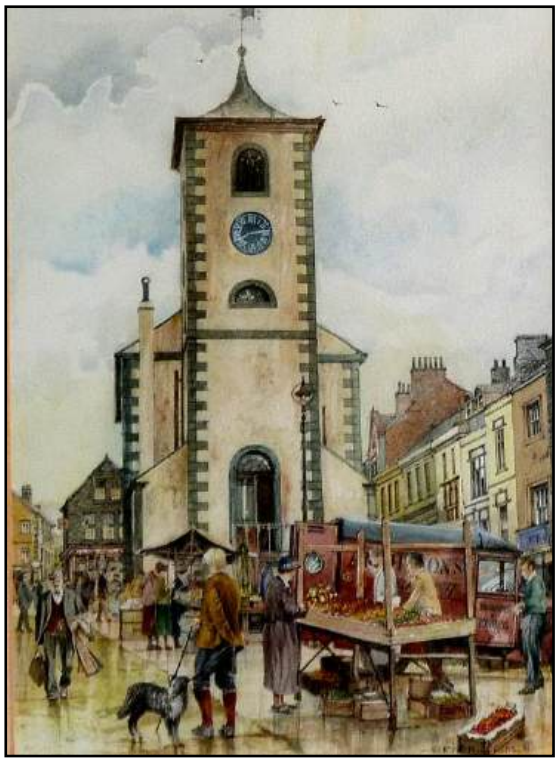
The first Ordnance Survey Map of 1862 (below) shows the Moot (Town) Hall as it approached its 50th anniversary.

3. Extract from the 1st Ordnance Survey Map 1862
(Reproduced under licence from the National Library of Scotland)

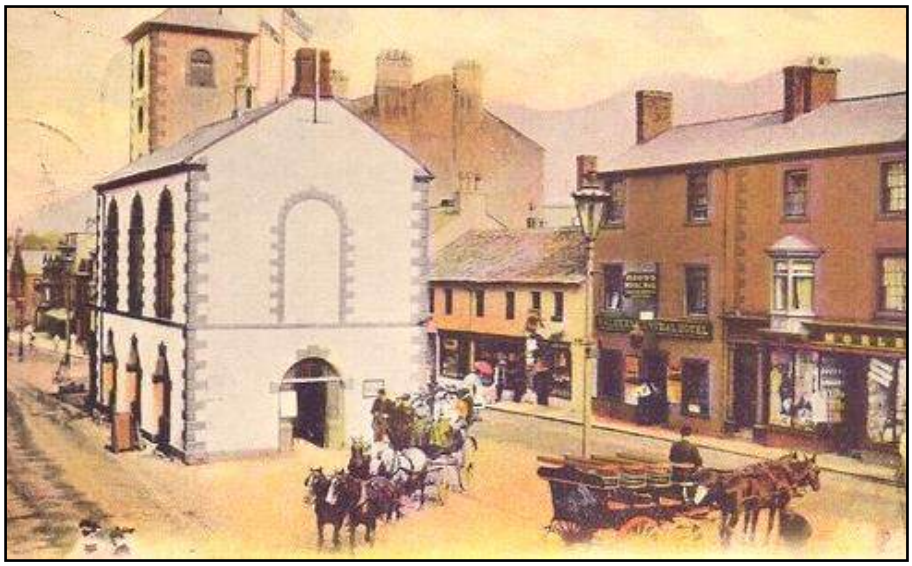
Much painted and photographed, history shows that the Hall has changed appearance in several phases from its original rendered walls to the Victorian and later fashions of painted masonry to accentuate the masonry features. By the mid-20th century, the original render was lost to expose the cobble and slate masonry. Plates 4 to 6 illustrate the successive changes in decorative style.
The Moot Hall is now owned by the Battersby Hall Trust and is tenanted by the Lake District National Park Authority ▪



4. An artist's rendition of the late 19th century showing the original render remained at that time with evidence of a chimney on the northern flank, now removed; the emphasis of masonry features is subdued.



5. At the turn of the 20th century the render finish is still present, but the quoins and other masonry features have been given more emphasis by painting in a contrasting colour.



6. In the early 20th century, the same theme of highlighted masonry elements continues but by 1960s the render finish has been lost.

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