NEWSLETTER No. 42 – WINTER 2023

Cumbria Vernacular Buildings Group

1. From the Chairman

2023 closed with members enjoying a Christmas Lunch at Dalemain, near Penrith, where a merry gathering of 35 savoured an excellent menu and admired the medieval hall. After 'battle' was won in the Christmas quiz, I encouraged members to await the programme for 2024 and lodge dates in their diaries for a fascinating year ahead; you will find the programme is included with this newsletter, on pages 10 and 11, mark the dates in your diaries!

One dark evening in February I will present by ZOOM my own appreciation of the Lyvennet Valley, its landscape, history, and buildings.
Spring will see visits to Hartsop village and a working water mill at Beetham. The recording enthusiasts will also get an opportunity to unravel the building phases of a 17th century farmhouse at High Stott.

Summer will see our study day at the charming village of Askham, near Penrith and include a talk from Dr. Caron Newman on the settlement of Cumbria during the medieval to late-medieval periods; other speakers will explore what the archaeological record can tell us of vernacular buildings from this time and a village walk will ensue.

Mid to late summer will include visits to a former bastle house, fortified church, a model farm, and a 1750 Georgian house. Differing approaches to the restoration of vernacular buildings will be explored, from 'light touch' to sensitive modernisation. Autumn has always been the traditional time for our Annual General Meeting and once details of date and venue are finalised, further notice will be published. We have also accepted an invitation from the History of Kirkby Group to explore their built vernacular heritage in Furness.

As the dark evenings approach once more, our own Helen Evans will present by ZOOM her understanding of the stratigraphy of a 17th century farmhouse.
2024 is going to be a busy and enjoyable year, please join us when you can. In the meantime, I wish you and yours a happy Christmas and joyful New Year.

Chairman

2. CVBG Visit to Harby Brow Tower and Old Allhallows Church Thursday, 20th July 2023.

(Editorial by Paul Lewis, all photography by John McDowell)

Members gather to admire the Harby Brow Tower

Surviving walls of the Tower.

Carved head to first floor fireplace.

Paul explained to members how the tower was built in 1465 by Alexander Highmore and developed through several phases, most notably when a Tudor Hall was built in 1550 and commemorated by a carved stone now built into the farmhouse. Franciscus Highmore later carried our alterations in 1594, as evidenced by a reclaimed datestone built into an annexe to the farmhouse. But Fransciscus died in 1609 without an heir and the estate passed to Squire Blencow. Members heard that by 1790 only a few stones of the hall remained standing, but the tower survived.

Whitehall, from a mid-19th C lithograph

The fortunes of Harby Brow and the nearby estate at Whitehall were linked through a border ballad, dating from the late 16th century. The ballad story was explored and recounted a Scottish raid on Cockermouth that ended with the capture of Rowland Maxwell, a relative of the Warden of the Scottish Marches, Lord Maxwell. The prisoner was evidently held at Harby Brow but planned to elope with Ellen, the daughter of Lancelot Salkeld at Whitehall. The pair were caught, and Alexander Highmore challenged him to a duel. Maxwell died and his body "then conveyed to Terregles Demesne whereby a monumental stone his peaceful ashes lie with heraldic symbols carved thereon – 'Thus should a Maxwell die'."

But Highmore suffered serious wounds in the duel and later died in 1586, one year before Salkeld built a chapel at Old Allhallows, as the ballad claimed, to assuage his heart-broken daughter, "and there her hallowed ashes (still) lie." A commemorative stone by Lancelot Salkeld "LS 1587" still exists, now relocated to the 19th century Church of Allhallows. Was there any truth in the ballad? It seems something more than a coincidence that a mortuary chapel was also built at Terregles Church, Dumfries and Galloway in the early 1580's. Perhaps young Maxwell lies there ▪

(L) Medieval timber, now a gatepost.
(Centre) Moore family vault.
(R) 12th century window, Old Allhallows

Taking in the special atmosphere of Old Allhallows

3. Crake Trees & Church of St. Lawrence, Crosby Ravensworth Wednesday, 16th August: Images & Text by John McDowell.

Crosby Ravensworth is five miles S.W. of Appleby. Twenty members attended the event there beginning with a well-illustrated talk by Paul Lewis in the village hall on the Lyvennet Valley, Crosby Ravensworth and Crake Trees. Paul covered the history of the landscape with the many Celtic & Iron Age scheduled monuments and burial mounds, also including Ewe Close and its Romano-British settlement.

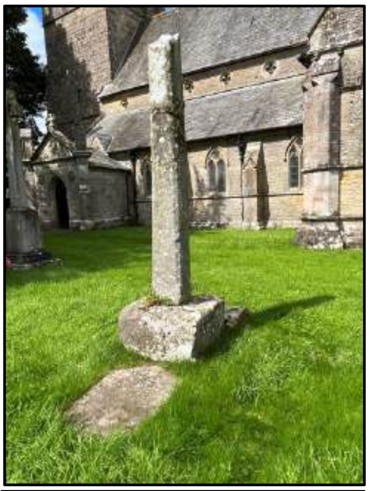
Urian of Rheged, was a late 6th century king of this early British Kingdom and with Owain mab Urian, his son, fought against the Angles of Bernicia (modern Northumbria). It was a time of Christian community origins but there is much folklore and associated Arthurian legend too. Urian was killed in Lindisfarne in 590 and Owain at the Battle of Catraeth c593 (Catterick) by Oswald, King of Northumbria, this led to the end of that dynasty.
King Oswy, younger brother of King Oswald, later chose to follow the Roman rather than Celtic form of Christianity and was rewarded with sacred relics including those of the Roman Archdeacon Laurentius, these were divided between the Appleby, Crosby Ravensworth & Morland Churches which all honour St. Lawrence. There is a Saxon window in Morland Church.
Irish Norse & Yorkshire Danes occupied marginal lands around the Anglo-Saxon settlement. In Crosby Ravensworth (Crosby means 'settlement by the cross'), a native sandstone 7th century early Saxon stone cross, the shaft only now, is in the churchyard of c800. An early probable wooden Saxo-Danish church was replaced by a stone-built church of local sandstone rubble, c1085 in cruciform layout. William Rufus annexed Westmorland & Cumberland in 1092 and the church was in the possession of Whitby Abbey from 1109. Despite damage from a Scotch raid the lower part of tower, nave arcade, late Norman clustered piers of the crossing and early English doorway remain. It was rebuilt in1254 (time of Henry II) & remodelled in 1487 by Sir Lancelot Threlkeld, the Lord of the Manor. His tomb is in the N. Chapel.

Crake Trees The name (also recorded as Craik Trees) originated from the 'cry of rooks,' the trees and rooks have gone. It is a 14th century ruined pele tower and hall which initially had timber frame chapel and hall attachments until these were replaced in late 16th century by a stone single storey hall range with a two-storey solar tower. In1591 Ambrose, 6th son of Lancelot de Lancaster, was living there. The Lancasters held Sockbridge Hall, near Penrith, from the 12th century until 1638 when it passed to Lowther by marriage (it too had a 14th century pele tower which was demolished in 1830).
Paul also discussed the history of other neighbouring pele towers of Maulds Meaburn and Crosby Halls. The latter hall can be seen near the church, originally a moated grange, by c1350 a pele tower and the 16th century manor house followed, the ruined tower was demolished in 1750.
After the mid-17th century Crake Trees was occupied by tenants, thereafter by farmers. The Pickerings of Crosby Hall resided there and had a late 18th century barn built nearby. Diarist George Williamson and local directories mention Edward Holme 1754, Edmund Atkinson 1760, Isaac Holme d. 1792, Jonathon Rigg 1829 & Thomas Whitehead 1849. It was disused by 1860, abandoned after 1881 but still partly slate roofed until 1930s. We saw a copy of a sketch of Crake Trees from the N.W. in 1866 drawn by J.S. Bland.
Paul brought along a range of books covering the locality which included a comprehensive report prepared for Mr & Mrs Tuer (current owners) on Crake Trees Tower House throughout the period of conservation works 2012-14.
Having seen some ground floor plans (also on p275, The Medieval Fortified Buildings of Cumbria, D.R. Perriam & J. Robinson) we then visited Crake Trees to interpret the ruin and elevations for ourselves.

The grade II listed building is found ½ mile N.W. of the Church & described as a semi-fortified late medieval house, from the 14th century, of sandstone rubble wall. At the south end there is an elliptical barrel-vaulted basement (with a cross wall) of a previous tower with a reset 14th century window head of one trefoiled ogee light in the S. wall. The tower was entered from the now also ruinous late14th/15th century central hall block via a doorway with chamfered jambs and shouldered head. The hall was a single storey link to the solar at the N. end and has a four-light window on the E. front and a fireplace with lintel to the north. A later inserted room to the north of the cross passage has a cobbled floor. There was a front porch and the main doorway within has a triangular arch in a square head. Conservation works c2013 included rebuilding the E. front of the solar; two windows were reinstated with new timber lintels. To the north of the front door is a reinstated 15th/early 16th century window with ogee-finialed head cut on the lintel and a rampant leopard carved on the tympanum – the Lancaster family's coat of arms. The N. wing also retains fireplace remains, the floor has been finely flagged, with sockets evident from a previous stud wall and there was a spiral stair in the N.W. angle to a first floor.

Horizontal sections of various elevations in the report by P.F. Ryder and A. Williams represent specific features identified including the chimney flue, position of fallen fireplace lintel and location of a former first floor fireplace of the N. wing; a phased

ground floor plan was based on a survey from 2011. Earthworks associated with the house included a fishpond and a number of rectilinear fields and enclosures.
We are grateful to Mr & Mrs Tuer for letting us visit and explore this romantic ruin, the group appreciated seeing the medieval fabric and architectural detail of a tower house that was extended in three phases.



(Above) Remains of Saxon stone cross. (Left) Church of St. Lawrence.

Church of St. Lawrence. Following the visit to Crake Trees we had a lunch break back in the village. A number of us then took the opportunity to visit the Parish Church of St Lawrence for Crosby Ravensworth, Maulds Meaburn + Reagill(18,000 acres). It became C of E after the Reformation, 1535 onwards. The lower two stages of the Tower are late15th century, a more modern top stage has seven gargoyles, three bells cast in 1823 on an oak frame dated 1687, the clock of 1842 was made in Carlisle. There is an octagonal stone font of 1662. The late Norman features mentioned earlier were evident despite major reconstruction (by Gibson & Dent) from 1809-16 adding two porches - the S. Priest's doorway was designed by Sir Robert Smirke. Further extensive restoration (by Canon Weston) 1860-72 under J.S. Crowther, a Manchester architect when the N. & S. Transepts were rebuilt; pointed arches of Chancel, a Clerestry & the Wilkinson organ were also added. The church was listed grade 1 in 1968.

Vaulted basement to tower.

It was a day full of historical timelines, architectural styles with many features and points of interest ▪

John McDowell

4. RECORDING DAY, GRADE II LISTED FARMHOUSE & BANK BARN LOW HOUSE, NEWLANDS, KESWICK - October 2023

(With the kind permission of Mr K & Mrs C Sears)

Images © Paul Lewis unless stated otherwise.

The three distinct phases of development are clearly evident in the front elevation.

A team of twelve members gathered in the Newlands Valley to record the development of this early 17th century farm with its 18th century later house and 19th century bank barn. Over recent years the owners, Ken and Catherine Sears had carefully restored and modernised the property using traditional techniques and materials. Sympathetic alterations were also added with Local Authority consent. A high standard of workmanship and authenticity has been achieved.
In the picture above, the three principal phases are shown with the earliest phase at the rear comprising a two-storey single bay structure with stables adjoining, now incorporated into the dwelling. A double-pile two-bay house was added in the 18th century and is shown with its later porch.

The early 19th century bank barn was created when an earlier range of outbuildings was taken down and a late example of this building type was erected to house around twenty cows with cart house, threshing floor, hay loft and sink mow (see plates 2, 3 and 4). A small group of shippons completed the group.
Of particular note was the survival of rare graffiti in plasterwork that recorded the names of earlier owners and workers on the farm (plate 5). The cow stalls in the barn have also been restored to their original authentic form (plate 6).

After enjoying splendid hospitality from Ken and Catherine, members called at the Newlands Church where a special display of local history recalled the families and events of the valley over the last 200 years and earlier. Some of the historical information gathered by the valley residents captured details of the daily lives of the farmers at Low House and the surrounding farms, completing a fascinating picture of farming and mining in the valley over the centuries ▪

Suggested further reading – " Historic Farmstead Preliminary Character Assessment, North West" by Historic England.
https://historicengland.org.uk/images-books/publications/historic-farmsteads-preliminary-character-statement-north-west/historic-farmstaeds-north-west-part3/

2.The front elevation of the bank barn showing the cart-house entrance and winnowing door above – a traditional relationship.

(L) 3.Evidence of 18th c farmhouse gable clearly visible. (Centre) 4.Signatures of previous owners survive in the plasterwork. (R) 5.Cow stores carefully restored to original condition. All © Jen Callis

The rear elevation of the bank barn with its modern pentice and 1930's steel window; the original doors to the threshing floor remain.

5. Christmas Lunch at Dalemain Mansion, near Penrith – 12th December.

Thirty-five members gathered in the very apt setting of the medieval hall at Dalemain, near Penrith. We were warmly welcomed by the staff and a roaring fire into the hall, festively decorated with seasonal foliage from the gardens.

Image © John McDowell

Once seated, CVBG member Keith Cooper, who has worked as a guide at Dalemain for many years, set the scene, sharing history of Dalemain and of the hall in particular. Members had chosen a two or three course meal from a delicious menu with a choice of roast turkey, venison casserole or lentil and vegetable lasagne as a main course.

The raffle was well supported with a range of prizes from vernacular architecture themed books through to edible and drinkable goodies. The quiz was also an enjoyable addition with Paul and Jackie Lewis and Sarah and Greg Nicholson behind the scenes. Expert knowledge was required in such Christmas themed areas as The Twelve Days of Christmas and the names of eight particular reindeer! The winning team was The Baroques, comprising Gillian Kendall, Norman Craik, Keith Cooper and Robin and Margaret Mason. (Below right)

The lunch concluded with votes of thanks by our Chair, Paul Lewis with some members taking the opportunity to purchase Dalemain produce on departure. It was a most enjoyable and festive occasion ▪

Stephanie Hewison.

Image © Justin Wood

The Winning Team © John McDowell

CVBG EVENTS PROGRAMME

EVENTS 2024

ZOOM Monday February – Presented by Paul Lewis
Buildings and history of the Lyvennet Valley


Upstream from Maulds Meaburn ©Google


© Mike Turner

Visit – Saturday 23rd March- Presented by Anna Gray
A tour of vernacular buildings in Patterdale.

Study Day - April Presented by Paul Lewis
Heron Corn Mill Grade II* Beetham –
Industrial vernacular building and modern reuse as visitor centre.


©Google Image

Recording Event – Friday 26th April TBC with Paul Lewis
Recording Event – High Stott Park House and Cottage - 17th century house and cottage; an exercise in establishing a phase plan.

Walkabout Askham. Saturday 18th May, Paul Lewis/Dr Caron Newman
Study day: Late and post medieval settlement of Cumbria – the origins of the Great Rebuilding. Followed by Askham walkabout - Askham and Hirst Community Centre (TBC)

Visit - Saturday June 22nd – Bank Beck House and Great Salkeld Church - Lead by Paul Lewis
Tower or bastle, origins of a multi-phase house?
A puzzle to be solved and a visit to a fortified church.


© Google Image

N.B. ***Times and dates may change, notifications will be given.***
Booking details, links, arrangements, sent shortly before event.

CVBG EVENTS PROGRAMME

EVENTS 2024

The Luham, Edenhall – 16th July, - Presented by Paul Lewis.
A linear farmstead that became a model farm;
a recent restoration project achieving a high standard.

© Creative Commons

Bank House, Lanercost – 15th August – Presented by Paul Lewis.
Restoration of 1750 square pile house – an artist's approach to authenticity

(Numbers limited to 30).

Walkabout in Kirkby in Furness – September 2-7 Presented by Paul Lewis. Beckside Mill and St Andrew's Church
An Invitation from the History of Kirkby Group.

© Pintrest

AGM – September - date/venue to be confirmed.

Zoom presentation by Helen Evans November, date TBA

Stratigraphy of a 17th century farmhouse

Christmas Lunch – December : Venue and date TBC

N.B. ***Times and dates may change, notifications will be given.***
Booking details, links, arrangements, sent shortly before event.

6. Craggs Barn, Dent and a sympathetic conversion Saturday, 18th November – by John McDowell

Paul Lewis arranged this visit; it is the first event on a theme of how to approach repair and restoration of an historic vernacular building. We met in Dent Memorial Hall where the twelve attendees had an illustrated presentation from James Woolgrove, the property owner since 2021, on the conversion work being conducted currently at his grade II listed barn in Dentdale. The talk included much technical detail on the problems and techniques entailed to make the alterations sympathetically and result in an energy efficient home. We then made our way to Craggs Barn for a guided tour, we are incredibly grateful to Mr & Mrs Woolgrove for allowing this and at this stage in the project.

Craggs Barn is 2.5 miles from Dent on the road from Sedburgh & adjacent to the house with which it was formerly associated. The north side of the barn is adjacent to the road and south side has views across the valley. The west gable is seen on travelling towards Dent. It is a large barn, 20m x 9m, of seven bays, originally a hay barn having ventilation holes all four sides and a former shippon (east end) plus an outrigger lean to, 20m x 5m, on the south side which has a catslide roof and Westmorland green slates. The main barn, thought to date from between 1750 and 1850, is of watershot coursed mixed rubble with evidence of lime pointing in the past and sandstone slates.
The listing details include: the central large segmental-headed wagon doorway with quoined jambs, rubble voissoirs and a floating dripcourse above, small square and slit breathers, three shippon doorways with continuous dripcourse above, square breathers and arched owl-hole of the east gable along with mention of windows in the outrigger.

Two structural stone walls divide the building: the original south wall of the barn and a wall (running north-south, two bays in from the east, presumed to separate stock from hay in the main barn. A slate stair leads upstairs.
A previous planning application resulted in a new window being inserted in the west gable by 2019

and unfortunately around 1994 the building had been plastered internally with hard cement render, floors replaced with new cement over a damp proof membrane. The main barn was also re-roofed with a non-breathable membrane beneath the slates along with insulation between rafters and plastic/foil backed plaster board under the rafters, risking moisture build up and potential timber decay. There are forty ventilation openings in all, five rooflights in main barn & one in the outrigger. The south elevation has double door vehicle access, two pedestrian doors and two large windows. The yard had been concreted and a stone-faced breeze block wall built on two sides.

James described how he is addressing these issues during conversion of this barn/industrial workshop into a single dwelling with local occupancy to include a home work office and domestic workshop. Full planning permission listed building consent and Yorkshire Dales National Park (YDNP) approval were granted by September 2022. He values the aesthetic and historical significance of the building in its location and seeks to minimise potential harm through the works and create a sustainable environment to live in the building whilst also providing wildlife habitats. The home workshop will remain in the main barn with the domestic accommodation being mainly in the outrigger with kitchen, living/dining room areas and office accommodation. In the eastern end of the main barn will be a snug & three ensuite bedrooms over two floors (one in a reversible mezzanine over workshop).

One of James's objects of the project is to include heritage skills training and to increase awareness of sustainability methods in traditional buildings.
The work in progress whilst living in caravans involves: -
Walls: internally **-** removal of vapour blocking cement plaster (this feels cold and hard), replace with insulated hot lime mix plaster (hemp, perlite, aggregate & quicklime) in two coats to depth of 50mm & a top coat of lime plaster (the finish feels warmer). Timber internal partitions wood fibre insulation, wood wool board each side & plastered in lime. The timbers of cattle byre stall have bases set into stone and will be left exposed in the snug wall. Wall/ceiling joints to be sealed with air tightness tape. Externally - full fill pointing using a hot lime mortar mix: quick lime, Cardumires, Appleton yellow (in 2,4,1 parts) from local supplier. Reinstate barn owl perch and nesting box and leave gaps for bees & bats.

Floors: original stone stair retained, the other wooden 1990's stair will be replaced. Concrete floors (122 sq. m) of east end of barn and outrigger to 420mm down (40-50 ton of hardcore) taken up with a lot of effort (1 sq. m per hour), an added foamglass layer, radon barrier, further insulation (water can't rise but can drain out), then lime-based screed and under floor heating by a pipework system in limecrete floor. The main barn/workshop floor will have a reversible layer (as the existing floor has some flags) of Eco underfloor insulation beneath painted chipboard. Services will be surface mounted (except where there are new partition walls) as will all trunking.

Windows & doors: East gable - one door will be retained as fire escape, obscured glazed windows, blocked up doors to have stonework set back by 50mm so doorways can still be read. Modern conservation rooflights: replacement of six and additional new one for the utility/WC in outrigger. New lintels at raised height and enlarged windows on south elevation to minimise need for lighting within and to suit a higher floor level due to insulation & be above ground level. Reglaze ventilation holes with double glazed units held in by lime render. Double glazed (not triple) windows as YDNP require and set back 200mm from wall face. One new upstairs bedroom window is to be inserted in E. gable. Double door on south wall will have a vertical board base, glazed above in keeping with boarded barn gates in the Dales. A new simple panel door on west gable, behind dry stone wall, either remove or modify modern inserted window that is visible from road to just one pane. Retain the large cart entrance doors to road and improve inner screen to minimise draught. There are remains of supports for a previous canopy over the cart door; this will not be reinstated due to adjacent road.

Roof & ceilings: flat ceilings above bedrooms for good ventilation in the roof area. Membrane removal and lime torching to the undersurface of slates in main barn, apply a mix of hemp, jute and wood fibre insulation above wood wool board which will be left raw (acoustic damping). Impressive trusses in the main barn have sets of marks at the joints; those in the main barn will remain visible.

Fire prevention, sustainable energy, and heating: three fire compartments, (plant room/engineering workshop, living area and workshop), fire doors/windows & a misting fire alarm system. A wood burning stove (a backup heat source) in living area with ceramic tile or stone floor, the flue passes through the green slate roof.

On site power generation from 30 solar photovoltaic panels in one neat section on the catslider roof, built in with green slate framing for less visual impact. Storage batteries in plant room, excess power stored for use after dark.

Ventilation is by a mechanical extract system using three central fans to take out moist air & balanced by air entry via inlets into living areas. Six controlled inlet vents and two outlets to the outside via slate louvers.

Heating – a 16W air source heat pump for all the heat demand and hot water for the building, the heat pump unit being sited on west gable, south side, 6m from road & in shelter of wall.

Drainage: rainwater goods upgraded & rainwater harvesting to tanks south of building for laundry and WC use. There are two sewer pipes, one is a spare. A French drain will be formed along the roadside.

Health and safety: James is an H&S consultant & mindful of the requirements e.g. risk of vibration white finger limited drilling to 45 minutes per day.

Natural materials are being used whenever possible to minimise composite materials and pollution risks. Ensure safe disposal of waste materials.

The conversion plans including sustainability factors, the sourcing of heat and electricity from renewable methods and a respect for the heritage skills of past generations, enlightening to those of us fortunate to be present. It would be great to see & hear more as the project nears completion.

After the visit and a return to Dent Town several attendees took an informal walkabout, finding quiet, narrow streets with much character and of vernacular interest. Refreshments were enjoyed by a group in Stone Close Cafe, originally a group of three C17th or 18th cottages, with a barn at the west end. Despite much rain that day we were fortunate that it was dry during our explorations ▪

John McDowell

7. The Historic Building Doctor - By Paul Lewis - Chairman, CVBG

Chapter 4 – The Scourge of Dampness
(What To Do (and Not To Do) About It)

We see so often in modern times where an old building, once dry and pleasant in its occupation, is adapted or modernised to another pattern of use. Its external fabric can often be draped in impervious cement materials and its roofing slates re-laid with impervious felt underlays. The building becomes a vapour-tight box when once, with traditional- lime based materials, the fabric would have been self-regulating in the transfer of moisture vapour to the exterior and readily drying out after rain.

The water vapour from washing machines and bathrooms creates extremely high humidity, and without frequent airing of the rooms and forced extraction, the building can become stressed. It is estimated that a family with two children can create 45 litres of water vapour every day. How that vapour moves through the fabric, or not as the case may be, is the driver for problems of condensation, mould, and dampness on general surfaces up through the structure and into roof voids.

Combined with poor ventilation in roof spaces, the Author has seen moisture levels in roof timbers sufficient to support timber decay, such as wet rots and wood-boring beetles from internal humidity alone.

Fortunately, there are some simple remedies to these sorts of problem. Installing humidity- controlled air input and extract fans can reduce humidity to controllable levels automatically; airing of rooms can also be effective, albeit this seems counter-intuitive in our energy conscious times.
Leaving chimney flues open also helps to create a natural flow of air through the interior; even disused flues can contribute with the use of plugs made from sheep's wool that allow some warmed air to move slowly up the chimney whilst stopping cold air falling into the room.

Of course, these measures may be insufficient for a building to return to a moisture-stable equilibrium. Even if ventilation is improved in the roof spaces, buildings can still suffer from the impact of other moistures sources, either through the ground floors or through the perimeter walls.

A common cause of dampness at low level in walls is the use of non-permeable plaster finishes when there is a hydraulic pressure in the masonry from ground water; some might call this rising damp. Traditional lime plasters can cope to some degree because their pore structure is open, and when salts from the stone migrate to the surface, there is little degradation when salt crystals form. Modern gypsum plasters on the other hand are intolerant of both moisture and salt so they gradually break down, as seen in the photograph below. When the salts crystallise on the surface, they continue to absorb moisture from the air, never drying out.

1. The effects of moisture and salt on gypsum plasters.

The preferred solution is to remove the source of moisture, rather than treating the symptoms with barrier forms of damp proofing, like waterproof renders and tanking systems. In these situations, the moisture continues to move around the barrier, finally making an appearance elsewhere after several of years.
Of course, lowering the moisture level at the base of walls requires patience as there can be a considerable level of retained moisture in the masonry that needs to gradually dissipate, sometimes over several years. To allow this to happen,

workable methods can include lowering external ground levels and installing land drains; replacing plaster, render and pointing mortar with lime-based materials helps considerably.

A method often employed by our vernacular builders was to construct air drains around the base of walls, covered with slate but with a drain beneath that allowed air to circulate to the perimeter. One of the best examples can be seen at the front of Acorn Bank, Temple Sowerby, owned by the National Trust.

Clearly, this can be time consuming and expensive, but experience has shown that it works as it restores the original moisture equilibrium that existed before inappropriate materials were employed as part of modernisation. An example often cited by the Author is Grade II* Old Mansion House, Eamont Bridge where walls one metre thick were wet after the intense rain and wind of Storm Desmond in 2015. After reinstating lime renders and plasters, the building dried out by the end of the summer following completion (see Plate 2 below).

2. Old Mansion House, Eamont Bridge Grade II*
dried out by using lime renders and plasters.

Of course, the correct materials need to be specified as sometimes they can be too porous for the exposure of the building to severe weather, as shown by the photograph at the head of this article; rather than protect the building they can contribute to penetrating dampness.

3. Townend, Troutbeck Grade I.

Ensuring that external walls can remain breathable also requires consideration of the decorative finishes. Modern masonry paints are manufactured with polymers that effectively seal the surface and render it non-permeable to water vapour, thereby restricting water from evaporating after rainfall, and stopping internal moisture from dissipating to the air. Breathable paint finishes include traditional limewash, like Townend shown above, and mineral paints that are made from naturally occurring silicates, as used at Old Mansion House.

The internal wall surfaces also require careful consideration; limewash can again be used, often with a little casein added to stop the surface dusting. Clay paints have been shown to work well too, creating a deeply pigmented matt finish that is particularly complementary to our old buildings whilst remaining breathable.

Our next article will explore decorative finishes in more detail and provide an insight into how these materials were originally employed around the home and how we might best use them again today ▪

Paul Lewis
Chairman CVBG
December 2023

8. Dalemain Christmas Lunch Montage

Images © Justin Wood/Stephanie Hewison/John McDowell

WISHING A HAPPY 2024 TO ALL CVBG MEMBERS