TRANSACTIONS
of the
WOOLHOPE NATURALISTS' FIELD CLUB
HEREFORDSHIRE

"HOPE ON"  "HOPE EVER"

ESTABLISHED 1851
VOLUME 67

2019

Woolhope Naturalists' Field Club 2019

Registered Charity No.
521000 website:
www.woolhopeclub.org.uk

TABLE OF CONTENTS

Transactions Extra

Extra papers and illustrations which could not be included in the paper versions of the *Transactions* can be found in Transactions Extra, which is on the Club website https://www.woolhopeclub.org.uk.

LIST OF COLOURED PLATES

The decline and fall of Butchers' Row, Hereford *by John C. Eisel*

Archaeology, 2019 *by Keith Ray*

Botany, 2019 *by Peter Garner*

Buildings, 2019 *by Duncan James*

10.5 Duppa's Almshouse (Duppa Cottages), Bridge Street, Pembridge, looking north
10.6 The rear elevation of the Duppa Cottages range showing the three large chimney stacks
10.7 Wormbridge Court Farmhouse seen from the north

Geology, 2019 *by Moira Jenkins*

Plate
11.1 Volunteers receiving training from Prof. Ian Fairchild and Beth Andrews by the side of a kettle-hole pond
11.2 Coring which successfully collected peat from an area near a pond
11.3a A core containing peat at the base
11.3b A specimen of peat collected
11.4a Walkers on the ridge of the Malvern Hills, part of the Geopark Way
11.4b A Malvern U3A group walking on Oyster Hill
11.5 Coppet Hill, Goodrich: Upper Devonian Quartz Conglomerate crag
11.6 Avon Group formerly Lower Limestone Shales, showing a channel formed in shallow water
11.7 Wormbridge Court Farmhouse seen from the north
11.8 Layer with haematite coating at boundary between Precambrian and Silurian, Gullet Top Quarry
11.9 Gullet Quarry Specimen
11.10 Gullet Quarry Specimen (alternate view)
11.11 Mud clasts were torn from stream bed; some still in place, some weathered out because mudstone is more easily eroded
11.12 Unsorted sandstone with pebbles
11.13 Coarse sandstone with red areas which have been oxidised and pale areas which have been reduced
11.14 Brownstones Formation with reduction spheroids
11.15 Onion skin weathering
11.16 Fossil coral, Little Doward
11.17 Fossil coral, Little Doward
11.18 Barite crystals
11.19 Barite and Limonite
11.20 Barite and Manganese Oxide
11.21 Bright colours of iron oxides

Mycology, 2019 *by Jo Weightman*

Plate
12.1 *Nectria punicea* var. *ilicis* shown emerging in tight clusters through the bark of a live holly at Docklow
12.2 *Lepiota lilacea.* A collected specimen showing the scaly cap and lilaceous pink tinge of the underlying flesh
12.3 *Lepiota lilacea.* A collected specimen showing the brown underside of the ring
12.4 *Leucocoprinus birnbaumii* growing in a plant pot kept in the house
12.5 The Scarlet Berry Fungus *Paurocotylis pila* in habitat, Bishops Castle, Shropshire
12.6 *Paurocotylis pila,* a collected specimen showing the white flesh inside
12.7 *Podoscypha multizonata.* A characteristic large rosette. Croft Castle 2015
12.8 *Geopora sumneriana.* The typical half-submerged fruitbodies growing under cedar in March in a garden in Ross-on-Wye

Ornithology, 2019 ***by Rachel Jenkins***

LIST OF FIGURES

Obituary: Muriel Tonkin, 1918-2019

Soon after mid-day on Thursday 2 May 2019 around 80 people gathered in the church of St James at Wigmore for the funeral of Muriel Tonkin. Many of those present were friends and neighbours from the locality but there was also a strong contingent from the Woolhope Club. We were all acutely conscious that the church stood just a few yards from her home, aptly named by Muriel and Jim in Cornish as Chy-an-Whyloryon 'The house of the seekers'. David Whitehead, who had replaced Jim, as Hon. Secretary of the Woolhope Club in 2009, was asked to say a few words. He noted that a full tribute to the couple had already been written by Rosalind Lowe, as a forward to the *Essays in Honour of Jim and Muriel Tonkin*, published by the Woolhope Club in 2011 and a further obituary for Jim Tonkin, written by Joe Hillaby and Jean O' Donnell had appeared in the Club's *Transactions* for 2010, published in 2011.

For the benefit of those friends of Muriel who may not have been members of the Club, David gave a short summary of Muriel's life, her marriage to Jim and their early antiquarian endeavours in Cornwall. David's personal contact with Muriel began in 1970 when he became a member of the Woolhope Club and attended the talks and, especially, the field meetings, mostly organised by Muriel. The latter were strictly managed and very well attended. David recalled an occasion in the summer of 1975 when he was asked to prepare a brief talk on the Civil War battle of Copredy Bridge in Oxfordshire (1644). It was raining, so Muriel, thinking quickly, ushered *c*.50 Woolhopians into the parish church and installed David in the pulpit to continue his discourse. Unfortunately, the incumbent arrived and was very cross on finding his church being used as a lecture-theatre, without consent, by some muddy antiquarians who had just walked over the fields at Edge Hill. He was unmoved by Muriel's emphatic challenge that: 'We are the Woolhope Club of Herefordshire'! The tale of Cropedy Bridge remains untold to this day. Notwithstanding careful rehearsals, assisted by the doughty Roy and Vera Perry, there was always an occasion on these adventures in distant shires when the coach ended up in a very narrow lane where the driver's reversing skills were severely tested.

Guest speakers often had a hard time since the burgeoning crowds of Woolhopians, gathered at an exposed monument expected perfect clarity from their guides. A chorus of 'speak-up!' from the back of the audience was very unnerving and Muriel or Jim often had to step in to act as moderators—Muriel's Cornish burr was unmistakable and pleasantly reassuring. One of the great rituals on field days was the reading of the minutes of the last meeting, always hand-written by Muriel in a bound foolscap. This usually occurred in a quiet lay-by with the engine of the coach turned off. Muriel reminded us that as a serious field-club, our endeavours needed to be recorded accurately so future generations of antiquarians could learn from our insights. David reminded those present of the many days Jim and Muriel held court in the Record Office in Harold Street. Ostensibly Jim was working on his great project transcribing the early probate records of the diocese, whilst Muriel, if not researching one of her many articles, was answering genealogical queries. These occasions were notable for many diversions, consultations and problem-solving interludes, inaugurated by other researchers. If you had a query relating to the history of Herefordshire and its sources, this was the moment of clarification. Muriel's comprehensive knowledge of the archives and her excellent recall, saved many hours of pointless research.

Finally, David recalled his visit to Chy-an-Whyloryon with the President of the Club, Janet Cooper, on Muriel's 100th birthday in January 2018, bringing gifts and well-wishes from

the Club. Albeit very deaf—an issue that we faced at many committee meetings in the 1990s—Muriel was fully aware of the occasion and proudly directed us to her card from the Queen. She was surrounded by letters written by Jim and an album of photographs. She was very well looked after by her professional carers, Stacey, Sally and Nicola, and one of her neighbours, Richard Blackburn, who read to her regularly and helped to sort out Jim's papers. Her general welfare was orchestrated by Selina and Richard Bailey who promised Muriel that they would ensure that she remained at home—a commitment they fulfilled.

List of Officers
2019/20

President	Professor R. JENKINS
Vice-presidents	Dr P. OLVER, Dr J. COOPER, Mrs R. LOWE, Miss J.R. JONSON
Central Committee	Mr J.G. CALDERBANK, Mr J. COMBER, Mrs J. GRUNDY, Mrs M. JENKINS (*to retire 2020*), Mr I. L. BASS, Mrs R. E. SKELTON, Mrs M. PERCIVAL, Mrs J. O'DONNELL (resigned Nov. 2019) (*to retire 2021*), Dr J. ADAMS, Dr J.C. EISEL, Mr J. HILLABY, Mr D. LOVELACE (*to retire 2022*)

Hon. Secretary	Mr D. A. WHITEHEAD
Hon. Membership Secretary	Mr I. K. PORTER
Hon. Treasurer	Mr I. K. PORTER
Hon. Librarians	Miss J. R. JONSON & Mrs M. PERCIVAL
Hon Field Secretary	Mrs S. OLVER
Hon. Editor	Vacant

SECTIONAL RECORDERS

Archaeology	Dr K. RAY
Botany	Mr P. GARNER
Buildings	Mr D. JAMES
Geology	Mrs M. JENKINS
Herefordshire Field-Names	Mrs R. E. RICHARDSON
Industrial Archaeology	Mr J. G. CALDERBANK
Medieval Settlements	Mrs R. E. SKELTON
Mycology	Mrs J. WEIGHTMAN
Ornithology	Prof. R. JENKINS

Hon. Secretary:	*Hon. Treasurer*	*Hon. Editor:*
Mr D. A. WHITEHEAD	Mr I. K. PORTER	*Vacant*
60, Hafod Road	Greening's Acre	c/o 10 Lugg View
HEREFORD	Little Birch	Close
HR1 1SQ	HEREFORD	HEREFORD
	HR2 8BD	HR1 1JF

Preliminary enquiries about proposed articles intended for inclusion in futures issues of the Woolhope Club *Transactions* should be made to the acting editor via the website. Please request a copy of the *Notes for Contributors to the Transactions* or see the website: www.woolhopeclub.org.uk.

List of sub-committees

2019/20

GEOFFREY WALTER SMITH FUND

Chairman	Dr J. C. EISEL
Members	Dr J. COOPER, Miss J. JONSON, Mr D. A. WHITEHEAD

PUBLICATIONS COMMITTEE

Chairman	Dr J. C. EISEL
Members	Mrs R. LOWE, Dr P. OLVER, Mr D. A. WHITEHEAD

Proceedings, 2019

Held in the Assembly Room, Shire Hall, unless otherwise stated

SPRING MEETINGS

FIRST MEETING: 5 January 2019; Dr Paul Olver, president, in the Chair.
David Whitehead gave an illustrated talk on 'War, Rebellion and Philanthropy: Thomas Coningsby (1550-1625) and his hospital in Widemarsh Street, Hereford'. This paper was printed in *TWNFC* 66, (2018) pp. 109-116.

SECOND MEETING: 26 January 2019: Dr Paul Olver, president, in the Chair.
Rhys Griffith, Herefordshire County Archivist, gave an illustrated talk entitled ''Well and soundly built': The Burghill Mental Hospital.'

Mr Griffith explained that the story of mental health in Herefordshire was a microcosm of the national picture. The records of the Justices of the Peace from the Restoration, show a developing consciousness of 'lunaticks'. Madness was regarded as a public order issue and thus individuals were put in prison. By the mid eighteenth century there were private mad-houses for the better off but an Act of 1774 confirmed that the issue remained the responsibility of the J.Ps. Herefordshire appears to have been behind in these matters until in the 1790s the architect John Nash, working on the new County Gaol, was asked to design a purpose-built asylum, next to the General Hospital, adjoining Castle Green. It was to cost £1,295 and was equipped with 20 'cells' for lunatics who also enjoyed a common drawing room and a courtyard for exercise. It was one of four to be found in Britain at this time. In 1801 it was privatised and rented to a local surgeon who was to admit both private and aided inmates. They were registered and the institution was subject to regular inspection. As the need in the county was regarded as minimal, inmates were received from Wales.

Treatment was often harsh and a report on the asylum in 1839 indicates that violence was common and inspection irregular. Moreover, males and females were often mixed together. In 1845 the liberal Whig government passed a Mental Health Act and asylums were made the responsibility of the Home Office and high-status visitors were appointed to inspect plans and ensure that a good environment prevailed. Treatment was now carried out by qualified and resident physicians. All counties had to have asylums and they were to be paid for out of the rates, which in some cases led to protests. Under the act an asylum was provided in 1847 for Herefordshire at Abergavenny. It also served the adjoining Welsh counties. It was built in an open setting, surrounded by gardens in which the inmates worked.

The Abergavenny Asylum filled very quickly and by 1864 there were nearly 400 patients. Fire was regarded as a major hazard and in 1868 the *Hereford Journal* spearheaded a campaign to build an asylum in Herefordshire and £7000 was raised by appeal. A site was found at Tillington, on the northern fringes of the city. It was conceived as a working farm and designed by William Griffiths, who had a good track record for other asylums. Messrs Clutterbuck of Gloucester offered to build it at an estimated cost of £41,000. It was completed in 1871. The purpose of the new institution was recovery, which was to be brought about with compassion. In general patients were carefully vetted as a deterrent to stop families getting rid

of unwanted relations. Very full statistics were kept, identifying mental health issues by physical as well as internal characteristics. The building itself was very forward looking and designed to appear like a country house, set in parkland. It was also lit by gas.

Very full annual reports were published, which have an optimistic tone. The institution was run by professionals, with a mission to do the best by their inmates. The interior was well furnished and decorated; bathing facilities were provided, and the inmates were expected to contribute to the running of the institution. Women helped with cleaning whilst men did carpentry, brewing and gardening. Contemporary photographs show it was clean and tidy and populated with neatly-clothed nurses. Various recreational activities were provided: billiards for men and music for women. Richer patients could pay for private accommodation. There was a large chapel and a permanent chaplain who provided services three times a week and on Sunday over 100 inmates regularly attended. He also played a social role e.g. organising dances. There was also a library and a qualified librarian. The principle burden for the running of the institution fell upon the housekeeper who was responsible for sanitary arrangements and food, and managed the large number of female staff. Working in parallel with her was a medical officer who organised in-house surgery and minor operations. The female staff were paid less than the average domestic servant but enjoyed more security. Working hours extended from 6.00am to 10.00pm. There was also a body of administrative staff who kept very full records for each patient. With such a well-run establishment there was a constant danger that patients would become institutionalised and reluctant to re-engage with the world outside. During World War I many injured soldiers were brought to the hospital.

Burghill closed in 1996. By this time there had developed an image problem with mental institutions. Moreover, as the twentieth century progressed the building was frequently over full and the acceptance of psychology as a medical discipline, which began to categorize patients, undermined the traditional treatment applied in mental institutions. Many problems began to be identified as educational, rather than genetic. In 1932 Holme Lacy House was annexed as an outpost of Burghill and the more relaxed atmosphere here acted as a bridge to the outside world. Consequently, after World War II Burghill was seen as an anachronism albeit most inmates when interviewed by Bill Laws for *Herefordshire Lore* spoke warmly about their experiences there.

There were many questions and contributions, following which the chairman, Dr Olver, proposed a vote of thanks.

THIRD MEETING: 23 February 2019: Dr Paul Olver, President in the chair.

Bill Laws of ‘Herefordshire Lore’ gave an illustrated talk on ‘Herefordshire Lore—Forty-Five Minutes of Living local History’.

Bill Laws provided the commentary for a series of glimpses of the city of Hereford in the recent past as reflected in photographs and reminiscences. He emphasised that each vignette often reflects complex social issues, which the society ‘Herefordshire Lore’ tries to capture from elderly people who lived at the time. These have regularly been published in the society’s quarterly journal *Age to Age*, founded 14 years ago. He provided in quick succession a number of photographic images, illuminated by contemporary voices: children on a cart in the depression with fathers just laid off; a picture of Eastnor school that elicited fond memories of the head teacher; Dinmore Café without the backdrop of trees, felled for the war effort; Scutt Mill on the Ledbury Road in the 1930s stimulated biographical details of the last miller, Mr Marsh, and a view of the houses at the west end of the Cathedral Close—demolished in the

1930s—which when shown to the late Percy Pritchard brought forth the name of every family who lived there at that time.

Oral history provides evidence for the immense diversity of the trading structure of Hereford in the early twentieth century and the many characters it nurtured, who have disappeared in time. Titch Rowberry, who owned the Lichfield Vaults in Church Street, was one, who provided solace for soldiers who returned home in 1945 after being prisoners of war. As Mr Laws pointed out, oral history preserves the lives of ordinary people whose experiences were often far from ordinary. Of special interest to the members of Herefordshire Lore were the munitions workers from both wars. The 'Canary Girls' of Rotherwas have justifiably become famous but much was learned from one source, Nelly Lambeth, who later worked in the butter market. Her stories were unique and today there is only one survivor from this key episode in Hereford's history.

A recent study by the society, entitled *River Voices*, was devoted entirely to memories of the part played by the river Wye in the city's recent history. For example, the daughter of one of the legendary Jordan brothers recounted the story of her father's experiences during World War II in Bomber Command. Many of the stories were more mundane but now remote, like the swimming galas in the river. This book was a bestseller and 1000 copies were sold in three weeks. A more recent Lottery-funded project focussed upon the Cattle Market, now moved out of the town. The retail market on Wednesday and Saturday was a much-loved event, and old photographs and film provided a link and helped people to anchor old memories, and sometimes revived new ones. The results of all this research is added to the collections in HARC. Lost public places such as the Cattle Market Café encourage people to recall detailed events. The Deanery Café and the Milk Bar in Commercial Street have been similar catalysts, producing a rich seam of memories. Some pictures seem distinct today but can fall on stony ground e.g. a picture of a group of cowboys, have hitherto found little response. On the other hand, the Horse Chestnut trees cut down in the Cattle Market in the 1980s always find a response.

Photographs of World War II also produce a crop of vivid memories e.g. summer musical events on Castle Green—otherwise a place of ill-repute in this era—produce many personal memories. Foxley Camp, used by Polish refugees after 1945, and the Red Hill Hostel bring forth their own crop of memories. A more interesting sub-plot concerns the evacuees who came to live in Herefordshire during the last war. Their experiences were, apparently, generally good. Mr Laws made the important point that, because of the necessity for secrecy, the *Hereford Times* is uninformative about Hereford between 1939-45, whereas there is copious detail in the same paper for the 1914-18 war. Thus the reminiscences of the Second Word War are a key source of information. One mystery solved by Mr Laws's close questioning concerns the fate of the World War I tank given to Hereford by the government. Apparently, according to the late Sid Wright and confirmed by Tony Priestly, the city fathers turned it down and thus it never arrived in Hereford.

The President, Dr Olver, thanked the speaker for his interesting talk and provided an opportunity for questions.

SPRING ANNUAL MEETING: 16 March 2019. Dr Paul Olver, president, in the chair.
The hon. treasurer, Mr. Ian Porter, presented the accounts for 2018, making suitable comments, and these were approved, with thanks, by the members present. These accounts were published in the volume of *Transactions* for 2018.

As membership secretary Mr. Porter reported that as at 31st December 2018 there were a total of 552 members a decrease of 20 compared to the previous year together with 33 Institutional members. There were 19 new members during the year, 24 had resigned or deceased and 15 memberships lapsed due to the non-payment of subscription.

Dr Paul Olver then made a short report on the activities of the Club during the preceding year, and thanked the officers of the Club for their support and all their work for the Club during that time, after which he gave his presidential address 'The Wonder of Woolhope', the full text of which is printed in this volume. He then installed Prof. Rachel Jenkins as his successor.

After this meeting the amended Club rules came into effect. These had previously been circulated to all members and approved at the Winter Annual Meeting on 24 November 2018. They are given on the Club website and will be printed next in the *Transactions* for 2020 as a part of the usual three-year cycle.

FIELD MEETINGS

FIRST FIELD MEETING: Thursday 16 May 2019. A study of the route of the planned Southern Relief Road, Hereford, with David Whitehead.
Due to lack of support this planned field meeting had to be cancelled.

SECOND FIELD MEETING: Saturday 1 June 2019. A circular walk on the Woolhope Dome, led by Rowland Eustace.
Ever since the first Club Field Meeting on 18 May 1852, the Woolhope Dome area has held a special place in the Club's geological memory. Surprisingly, despite it being the first location for a field visit and its adoption by the Club as its name, there have been relatively few organised visits.

This was corrected on 1 June when Club member, Rowland Eustace, organised a circular walk to the central (and oldest) strata in the area whose anticlinal or arch-like structure features on the Club badge. We gathered in the Haugh Wood Car Park, located on the earliest Silurian sandstones and siltstones of Upper Llandovery age. Our initial route took us north-west towards the fault-controlled Pentaloe Brook when the succeeding Woolhope Limestone of early Wenlock age outcrops. The limestone is characterised by a fauna of colonial tabulate corals, rarer solitary rugose corals, and a range of small brachiopods, which are often fragmented, suggesting that this debris was washed down into the shallow tropical lagoons during occasional storm events. Four thin yellow clays also occur within the sequence identified as bentonite, a product of the breakdown of fine-grained volcanic ash layers from major eruptions to the south and west of Herefordshire.

On our way through Haugh Wood we came across a two-foot high wood ant nest as well as interesting flora. A picnic was taken in an adjacent meadow. Revived by our lunch, we continued along the Pentaloe Brook to examine the Coalbrookdale Formation, formerly the Wenlock Shales. These thick, olive-green mudstones and siltstones contain further bentonite layers and form a prominent vale running around the core of the Woolhope Dome below the village of Woolhope, which sits on the older Woolhope Limestone. Geological faults and minor folding were observed later on the walk, cutting through the Haugh Wood Formation which were formed when the whole area was uplifted.

Seventeen members and their friends enjoyed the walk on what was a very warm day, and many thanks are due to Rowland for his expert planning and expertise.

THIRD FIELD MEETING: Saturday 8 June 2019. The president, Prof. Rachel Jenkins, led a study day based on Bredwardine church and bridge, and Moccas Deer Park.

Our President, Rachel Jenkins started our field trip at Bredwardine Bridge, where John Eisel told our members the history of this elegant bridge. It was completed in 1764 to replace a ferry, and for at least three periods a toll was charged to help maintain it. In 1894 the bridge was taken over by the County Council after it had been repaired.

Afterwards the members moved to view St Andrew's Church at Bredwardine which was the site of the Early Christian monastery of *Lann Iunabui* mentioned in early-twelfth-century Llandaff versions of British charters. It has twelfth-century fabric and has tufa blocks, rounded recessed doorways and tympana. Its oddity resides in the late tower, and the changes in orientation of nave and chancel. Paul Olver pointed out the font and outside the various gravestones, as well as the tufa which was seen again in Moccas Church. The grave of the Rev. Francis Kilvert, who died in 1879, was also seen.

After lunch we drove to St Michael's Church, Moccas where David Whitehead stepped in for Prof. Keith Ray. The Romanesque church has the same proportions as Kilpeck and the site has strong associations with St Dubricius, a Celtic saint. The church has been almost totally built of calcareous tufa as had been identified earlier in Bredwardine Church.

The party then gathered at Moccas Park, a medieval deer-park, where Francis Chester Master, land owner, and Alice James (Ecological Management of Natural England) met us to show us around the park. The history of the deer park and the ongoing management of the deer park were explained. Bronze Age field clearance and field lynchets have been found as well as Romano-British rabbit warrens. Between 1776 and 1819, the estate owner, Sir George Cornewall, funded an extravagant landscaping scheme stretching from east of the River Wye all the way westwards up to Woodbury Hill on the ridge between the Wye and Dore valleys. Unfortunately the party found that the 'Woolhope Oak', measured in 1871 and photographed in 2008 (26ft $8^1/_2$in in girth), had died.

Rachel Jenkins explained the migration of Pied Flycatchers who migrate every year from west Africa to breed in western area, especially in Herefordshire. The deer park is the British Trust for Ornithology's longest running Retrapping Adults for Survival project since Peter McDougall (Rachel's father) put up the first nest boxes in 1963. There are now 127 nest boxes.

We then gathered round Will Watson (NNR) for the results of pond dipping which was very lively with various beetles, newt larvae and frogs as well as microscopic animals. The four ponds were formed by glaciations in late Devensian stage (25,000 – 23,000BP) of the last Ice Age: these 'kettle-holes' were formed as the ice sheets retreated, and the largest, the 4.4 hectares Lawn Pool, has been studied for its biology and paleoecology. Afterwards Alice James of Natural England stood on top of a 'warren' to explain her role and to explain the ecological management of this unique habitat in all its aspects from ancient trees to the Moccas 'Beetle'.

Afterwards the members drove to have tea at Rachel's house, where Duncan James informed the party that New House Farm is a timber-framed house of two storeys with attics that is the surviving crosswing of a lost two-storey ceiled hall range. The timber remains of this hall date the building of the property to 1585. The property also has a pond thought to be another remnant of a kettle-hole.

Lastly, the members went to Arthur's Stone to see the Early Neolithic monument (early fourth millennium BC) where there will be more investigations to be done this year. A very enjoyable day!

[Editorial note: An analysis of New House Farm can be found in *TWNFC* (2013), pp.135-8. The papers on Bredwardine Bridge and Moccas church are printed in this volume.]

STUDY DAY: Wed. 11 September 2019. Dr. Paul Olver acted as tutor for a beginners' day studying local fossil groups at the Resource Centre Friars Street.
The Hereford Museum Resource and Learning Centre in Friars Street has always prided itself on its collections including its excellent fossil collection which is understandably strong in local specimens from the marine Silurian limestones and the Devonian Old Red Sandstone. These specimens were used extensively on a special Club beginners' course on Wednesday 11 September to introduce two fascinating local fossil groups namely trilobites and graptolites. Supported by specimens collected by the tutor, Dr Paul Olver, the intricate lifestyles of extinct trilobites were explained by using their particular features such as eyes. genal spines, and the number of thoracic segments to work out whether they were swimmers, burrowers or seabed crawlers. Also tackled were the equally challenging graptolites whose floating oceanic colonies characterised the Palaeozoic seas and also allowed correlation between separate continents. This morning session was well attended and further similar day schools are planned.

AUTUMN MEETINGS
FIRST MEETING: 21 September 2019: Prof. Rachel Jenkins, president, in the chair.
Dr Howard Tomlinson, a member of the Club, spoke on '100 years ago: Hereford in 1919'. This paper is printed in full in this volume.

SECOND MEETING: 5 October 2019. Prof. Rachel Jenkins, president, in the chair.The F.C. Morgan lecture was given by Dr Nigel Saul, Emeritus Professor of Medieval History, Royal Holloway, the University of London. He presented an illustrated address entitled 'Decorated in Glory: Herefordshire Church Architecture in the Fourteenth Century'.

Dr Saul reminded his audience that the twelfth-century Herefordshire School of Sculpture is regarded as one of the high points of English architectural history but to-day he was proposing that the Decorated period of the fourteenth century had an equal claim to fame. He provided illustrations of several notable examples: the south aisle of Leominster Priory, 'dripping with ball-flower'; the languid dress of Blanche Mortimer at Much Marcle and the timber roof of King's Pyon. He referred to Richard K. Morris's work in these *Transactions*, which was built upon his PhD thesis of 1971 and first drew attention to the architecture of Herefordshire in the 14th century. Dr Morris's account began with the Cathedral and Swinfield's rebuilding of the 1290s, which proceeded with the inner porch, the nave and choir aisles, the transepts and the central tower (1320). Morris believed that this large project 'sucked in workmen' who subsequently moved on to other local churches in Herefordshire such as Leominster, Weobley and Ledbury, and Ludlow in Shropshire, where ball-flower is the defining feature. By the 1330s other masons were present in Herefordshire whose work can be seen at Madley, Eaton Bishop and Allensmore. At Kingsland the 'funny door' was executed by a Bristol craftsman who worked at St Mary Radcliffe. The key evidence for all this work, as Morris pointed out, was the V-shaped moulding.

Dr Saul was particularly interested in the patrons of this work—the high churchmen, the Mortimers, the gentry and townsmen. Another landmark in the propagation of this style was the Cantilupe tomb (*c*.1320). Cantilupe was a cult figure and the first and only great saint of

Hereford Cathedral. Swinfield rebuilt the Cathedral on his fame and the gentry and burgesses who experienced miracles went home to re-build their churches and erect chantry chapels. The latter resulted from the new cult of purgatory, which required places of continuous prayer and resulted in the architectural expansion of many churches e.g. at Clehonger and Westhide—where the chantry dominates the small church—Stretton Grandison and Dilwyn, which all contain chantries in the Decorated style. Other Decorated features, paid for by pious benefactors in this period include the 'wonderful' window in the chancel of Eaton Bishop; the Becket/Cantilupe window at Credenhill *c.*1305-10 given by the rector Philip Talbot, a canon of Hereford, and the impressive Chilston aisle at Madley, the result of the patronage of the Dunre family, who were related to Swinfield.

The Mortimers, who were not especially pious, founded a chantry at Leintwardine; a new chapel in the bailey of Ludlow Castle and a fine spacious nave at Pembridge—to name but three examples of their patronage. There are many other churches up and down the borderland which are the 'show places of their power'. Other members of the gentry also made their mark on parish churches e.g. at Fownhope and Little Hereford, in the form of tomb niches in the chancel, whilst at Sarnsfield we find it in the nave roof. When did the Decorated period end? At the old church at Richard's Castle there is ball flower of the 1320s but nearby an arcade of the 1340s moving towards the Perpendicular. Like much else, the Black Death brought the style to an end; but this also coincided with the decline of the Cantilupe cult and pilgrims that sustained it. Equally interesting from a local point of view is the failure of church re-building in the fifteenth century. There was no revival in Herefordshire to match that in East Anglia. Dr Saul's theory was that Herefordshire did not participate in the cloth trade with Flanders and Italy. The high-quality wool of Herefordshire was too good for the light clothing made in East Anglia. There was little manufacturing in Herefordshire and therefore no Perpendicular to speak of.

After a number of questions had been answered and comments made, a vote of thanks was proposed by the President.

THIRD MEETING: 16 November 2019: Prof. Rachel Jenkins, president, in the chair.
This event celebrated the interests of the Woolhope Club, in its clubroom at the City Library, Broad Street, Hereford. Prof. Jenkins welcomed around 50 members and friends to the historic clubroom, which had recently been restored after being damaged by water penetration. This was the first time the Club held a general meeting in the room since the late 1990s as a result of the fire regulations being recently adjusted to increase the capacity of the room to fifty.

1. Prof. Jenkins introduced Dr Paul Olver who spoke about 'The Early Geologists of the Woolhope Club'.
Dr Olver drew attention to the Club's badge, which depicts the Woolhope Dome and explained the importance of this arch-like (anticlinal) structure, made up of alternating limestones and shales, in the early activities of the Club. He added that its importance has just been enhanced by its recent inclusion in the Abberley and Malvern Hills Geopark which extends southwards on the west side of the Severn from Bridgnorth through to Gloucester. He explained that early geologists were generally practical men, involved in mining or canal construction and thus it was not until 1830s that the limestones of the Welsh Border were noticed by Sir Roderick Murchison (1792-1871) who was taking a geological tour in the Upper Wye Valley. Working closely with local enthusiasts who had already developed an order for the local rock types and

had collected diagnostic fossils, he subsequently published *The Silurian System* (1832), which adopted the name of the early Romano-British inhabitants of south-east Wales where he had first noticed the distinctive rock types outcropping beneath the Old Red Sandstone. Much of his information was therefore provided by local antiquaries and scholars, who were subsequently early members of the Club. Murchison himself became an honorary member of the Club and one of his informants, Thomas Taylor Lewis, vicar of Aymestrey, was an early President. The early field meetings of the club with Murchison present were devoted to geological investigation and have recently been commemorated in a DVD starring members of the Club.

The Woolhope Hills were easily accessible for the Club. Thus, in 1852, the first indoor meeting was held at the Foley Arms, Tarrington, after which the members of the Club, with Muchison's book in their hands, crossed over the Woolhope dome, in the rain, to Fownhope. The excitement in searching for fossils of sea-lilies and corals—found growing on tropical reefs—plus the occasional trilobite kept the Club engaged despite the weather until 8.00 pm. Trips to the Woolhope area have been made regularly since 1852 and as a result the Club has assembled a great body of knowledge on the Silurian system, much of which has been published in its *Transactions.*

2. Prof. Jenkins introduced Michael Colquhoun and Robert Taylor from the Herefordshire Ornithological Society who spoke on the changing status of Herefordshire's wetland warblers. They reminded Club members of Henry Graves Bull's enthusiasm for ornithology; working on his *Notes on the Birds of Herefordshire* when he died in 1885. From this publication until the present day, a great deal of information has been collected on these 'little brown jobs'. The four warblers—Sedge, Reed, Marsh and Cetti—are all summer visitors and require reed-beds as a habitat. Because they look very similar, the easiest way of identifying them is via their call. We were treated to a series of recordings.

Bull's *Birds* (1888) mentions the status of the four warblers. He was very concerned about the impact of agricultural improvement e.g. wetland drainage near Berrington but felt confident that the Wye remained a safe environment. He found the Sedge Warbler common on the river; the Reed Warbler less so but no sign of Cetti's Warbler or the Marsh Warbler. Bull's observations were not updated until 1954 when Gilbert and Walker noted that the Reed Warbler was extremely rare but breeding was taking place at Shobdon; the Sedge Warbler was still common; the Marsh Warbler had been observed in 1936 but had a specialised breeding habitat i.e. close to water but dry ground nearby. Walker observed a nest site in 1954, which was abandoned because of heavy rain. Its demise in a withy bed near the Lugg was described with some emotion by this serious ornithologist.

Walker updated his observations in 1975. The Reed Warbler was still breeding at Shobdon with 20-30 pairs present but the Sedge Warbler had declined. In 1981 the Reed Warbler at Shobdon was studied in depth and it seemed that the population had remained fairly stable, principally because it was capable of having several broods in a season. *The County Atlas* (2007) indicated that the decline of the Sedge Warbler had been reversed with gravel pits becoming a substitute habitat for the over-managed river banks. The Reed Warbler was also breeding at more places than Shobdon but there were no Marsh Warblers. However, in 2002 the first Cetti's Warbler was observed at Berrington Pool and subsequently has been seen at six other locations. They seem to be spreading from adjacent counties and join the burgeoning population of Reed and Sedge Warblers,

Looking to the future, it seems that the Marsh Warbler is unlikely to return, since it is moving north. The Cetti's Warbler is increasing but is vulnerable to hard winters and subject to crashes and booms. Sedge Warbler numbers are stable but it needs encouragement with better habitat; as does the Reed Warbler—hence the new reed beds at Bodenham Lakes. On a positive note: the Grasshopper Warbler is increasingly being heard in Herefordshire.

Questions were taken at the end of both talks and the Chairman, Prof. Jenkins, thanked the speakers for their excellent presentations. The meeting was adjourned for lunch.

3. Following lunch David Whitehead took the chair, with apologies from Prof. Jenkins, and Dr John Eisel gave an illustrated talk on 'The Woolhope Club: Origins and Evolution'.
In this talk he took as his theme how knowledge reached Hereford, which until comparatively recent times was a remote city with poor communications with the rest of the country, more concerned with earning a living than intellectual development. However, it was not completely out of touch with the rest of the country, and from the seventeenth century onwards there were booksellers plying their trade in Hereford, but whose stock was out of reach to most of the population. More direct information came through newspapers such as *Berrow's Worcester Journal*, which began publication as the *Worcester Post Man* in the early 1700s (a claim for 1690 cannot be substantiated), then there was a short-lived *Hereford Journal* in 1713, and the *Gloucester Journal* which began publication in 1722. It was not until 1770 that *Pugh's Hereford Journal* was established by the printer Charles Pugh, who a few years previously had established the first permanent printing press in Hereford.

Books were expensive and thus limited to those who were well-to-do, but the scope was increased by the setting up of circulating, or subscription, libraries, such as that of John Allen, a bookseller who came from London in 1779 and set up in business in High town. The first permanent library in Hereford was set up in Hereford in 1815, initially by the Widemarsh Street entrance to the Market Hall, but moving in 1817/18 to premises in St John Street. This was a subscription library, and not designed for the working man, whose wants and aspirations were met, at least partly, by the St Peter's Literary Association, promoted by the Rev. John Venn, the premises of which were opened on 2 January 1837.Then in 1840 the Hereford Mechanics' Institute opened, whose remit overlapped to some extent with that of the St Peter's Literary Association. The Mechanics' Institute had a varied existence, and finally closed in 1858, while the St Peter's Literary Association kept going.

These latter two institutions were designed for the improvement of the common man, and do not reflect the strong 'Literary and Philosophical' movement of the late eighteenth century and the beginning of the nineteenth century, when various bodies were being established across the country, with an emphasis on natural philosophy, the study of scientific subjects. Here the emphasis was on enquiry, whereas the two institutions mentioned previously discussed were for improvement. The Hereford Literary and Philosophical Society was established at a meeting on 2 December 1836, and during its existence met in various places, and, from 1849, had various excursions to places of interest. However, the Philosophical Society was essentially receptive and social, and excursions were of a social nature. In the middle of the nineteenth century there was tremendous interest in geology and natural history, and the state of knowledge was such that the well-informed amateur could still make significant contributions to scientific knowledge, and several field clubs were formed to make such investigations. It is therefore not really surprising that there was a proposal to form such a club for Hereford. From very early days the Club has always claimed that it was founded in the

winter months of 1851, and while there is no contemporary record, there is no reason to doubt it. It is said that the geologist the Rev. W. S. Symonds suggested the formation of such a field club at a meeting of the Philosophical Society in 1851 when he was giving a lecture: unfortunately, there is no minute book for the Philosophical Society, the main record at that period being a scrapbook of news-cuttings, none of which mention a lecture by Symonds. However, it is clear that others were also interested in a field club for scientific research, and as a result of subsequent discussions the first meeting of the Woolhope Naturalists' Field Club was held on 13 April 1852. A set of rules had previously been drawn up, and there were 30 members with seven honorary members. The main object of the club was the practical study of the natural history of Herefordshire and the districts immediately adjoining. As it was—and is—a field club, the rules, stated that the club should hold three field meetings each year for the investigation of the natural history of the district. From the beginning sites of archaeological and architectural interest were visited, but it was not until 1893 that the study of archaeology was added to the rules.

The Woolhope Club is held in high regard for the quality of its *Transactions* which bring the knowledge gained by the Club to a wider audience. This was first mooted at the annual meeting on 23 January 1855, when a proposal was made to print a volume of papers, but was discussed at the annual meeting the following year, and as a consequence a small section was published the following year, covering the activities in 1856. Five further parts were issued, spasmodically, until 1865, after which annual volumes of *Transactions* were—and still are—published. A full volume of *Transactions*, covering the period 1852-65 and based on the six shorter instalments augmented by newspaper reports, was published retrospectively in 1907.

In order to store its collection of specimens, in 1862 the Club rented a room from the Philosophical Society at its premises in Castle Green, but this only lasted two years. The problem was solved when Mr. (later Sir) James Rankin put up £4,000 for a library and museum. The resulting building was opened in 1874, and part of the provision was for a room to house the Woolhope Club, where it has been based ever since. Meanwhile, the Philosophical Society had quietly expired in the early 1870s.

In 1874, the year that the library was opened in Broad Street, the Club commissioned *The Herefordshire Pomona*, which was published in seven parts between 1878 and 1885. It was illustrated by many remarkable chromolithographic plates, taken from drawings made by Alice Ellis and Edith Bull. The latter was the daughter of Dr Bull, the general editor of the work and a great name in the Woolhope Club, while the technical editor was Dr Robert Hogg.

The speaker then explained how the Club had developed since, and how the winter programme of lectures developed from 1920. He also mentioned many of the prominent members of the Woolhope Club, which included such great names as Alfred Watkins and George Marshall.

4. With the afternoon passing quickly, Mr Whitehead introduced himself and embarked upon his presentation on 'Alfred Watkins: a Herefordshire Polymath'.

Mr Whitehead began his talk by showing the warm tribute, made by George Marshal, President of the Woolhope Club in the *Transactions* for 1935. Watkins had died at Harley Court on 7 April 1935 and Marshall generously acknowledged that 'It is impossible to assess too highly the debt members owe to Alfred Watkins for his contributions to, and support of, the Woolhope Club during a period of nearly half a century'. He recalled that he acquired 'a more intimate knowledge of the by-ways and remote regions of the county than anyone had or has

since obtained'. Watkins made many contributions to the *Transactions* and Marshall estimated that this included 90% of the illustrations used between 1900 and his death. They remain an amazing resource, pillaged by scholars from all over the world. This interest in Watkins has been fuelled more recently by Ron and Jennifer Shoesmith's excellent modern books, which have brought his achievement to a new generation.

Watkins was born into a thriving entrepreneurial family, founded by his father Charles Watkins, who established the Hereford Brewery which included an outlet, the Imperial Hotel, in Widemarsh Street, where Alfred was born in 1855. By the time he was fifteen he was working in his father's business, distributing beers to remote locations. This gave him his unparalleled knowledge of the Herefordshire countryside. His father set an example of antiquarian connoisseurship when he saved a significant piece of the Old Town Hall of Hereford and erected it as an aviary behind his new house, Holmer Hall, the entrance to which was also embellished by the second-hand iron palisade from St Paul's in London. He also invested in iconic historic houses, such as Wistaston Court at Marden, which, no doubt, nurtured Alfred's antiquarian outlook. He married in 1886 and established his family in what remains the best Arts and Crafts house at Hampton Park, on the eastern edge of Hereford. The new house was called Vineyard Croft, after the medieval vineyard established here by the monks of St Guthlac's. His wife, Marion, was a great admirer of William Morris.

Watkins eventually sold his stake in the brewery but continued to produce malted barley for the Tredegar Brewery at his mills in Friars Street. By the 1890s he was fascinated with photography and established a workshop at the mills to make his famous Bee Meter—the first inexpensive exposure meter, used by thousands of amateur photographers keen to capture scenes in difficult light conditions e.g. interiors of churches etc. Watkins took his camera into the villages and countryside at a crucial moment. Prosperity in the countryside had evaporated in the late nineteenth century and left it in a time-warp, mechanisation had hardly begun and poverty and senescence produced a unique moment for landscape artists and photographers with a picturesque eye. Watkins was able to capture the vernacular before it was polished away by middle class affectations.

Photography also informed Watkins' antiquarianism and made him look carefully at what survived in Hereford and from this he produced a framework for the early history of the city, which was proven correct by the new discipline of archaeology in the 1960s. Watkins was not just a casual recorder but took up the cause of fragile and passing monuments. By recording dovecotes he made them significant and in an age before listing, this protected them. He was a natural member of the Society for the Protection of Ancient Buildings and with their help saved many buildings including the late fifteenth-century Booth Hall in Hereford.

Archaeology began to figure more strongly among Watkins' investigative techniques. He was present at all stages of C.J. Lilwall's excavation of the Grandmontaine Priory at Craswall in 1904 and notwithstanding modern criticisms of this 'dig-over' of a precious monument, Watkins' photographs are a comprehensive record. Like many reflective people in the years after World War I, Watkins was looking for a new key to unlock the past for the present. *Early British Trackways* (1922) was unveiled in 1921 for the benefit of the Woolhope Club in the field at Holmer and later on the same day with lantern slides in the Club Room. Many Woolhope members were unimpressed but his ideas struck a common chord and appealed to the new rambling generation of the 1920s and 30s who with the help of the bicycle and the Ordnance Survey maps were escaping to the countryside. Thousands of years of history were laid out before them and Watkins provided a simple key to understanding its complexity.

Albeit his ideas were rejected by many serious scholars at the time, today writers on the countryside like Robert Macfarlane are showing us how Watkins was the father of the modern counter-culture generation who are keen to sanctify the countryside in ways he would have appreciated.

WINTER ANNUAL MEETING: 30 November 2019. Held in the Council Chamber at the Town Hall, Dr Janet Cooper, senior vice-president, in the chair.
The officers of the Club for 2020-21 were appointed, to take office after the Spring Annual Meeting, 2020. Then Dr John Eisel read a paper on 'The Decline and Fall of Butchers' Row, Hereford' which is printed in full in this volume.

WOOLHOPE NATURALISTS' FIELD CLUB

RECEIPTS AND PAYMENTS ACCOUNT
for the year ended 31st December 2019

2018						
		RECEIPTS				
32		Interest on investments	Subs Reserve	61		
11			GW Smith Reserve	25		
2360			Charity Bonds	2141		
452			National Savings	503		
	2855				2729	
6559		General Subscriptions		6559		
134		Sale of Transactions and other books		183		
35		Publishers Licensing Society (Royalties)		67		
1616		Gift Aid Tax Reclaim		1248		
2618		Archaeology Closing Funds				
1439		Geology Closing Funds				
100		Bank of Cyprus Compensation				
47		United Trust Bank Capital Reduction				
13		Sundries		374		
	12560				8430	
	15415				11159	
		PAYMENTS				
37		Insurance		37		
10469		Stationery, Printing & Binding		6346		
198		Meeting Expenses		340		
2644		Postage & Telephone		1694		
259		Subscriptions & Donations		359		
190		Materials		77		
400		Honoraria		200		
2000		Scan of Transactions (GW Smith Fund)		5084		
10800		Website		849		
111		Miscellaneous		440		
	27107				15426	
47		United Trust Bank Capital Reduction				
166		Field Meetings	Net Deficit	15		
2488		Archaeological Research	Net Deficit			
1653		Geology Section	Net Deficit			
	4354				15	
	31461				15441	
Deficit	16046		Deficit		4282	

BALANCE SHEET AS AT 31st DECEMBER 2019

2018				
		ASSETS		
62830		National Savings Investments		63333
85000		United Trust Bank Charity Bond		85000
33000		Cynergy Bank		33000
		Bank accounts:		
4464		General	1594	
3148		Subscriptions	4107	
4487		GW Smith Account	1069	
30229		Subscriptions Reserve	30289	
12500		GW Smith Reserve	13000	
1176		Field Meetings	1161	
0		Archaeological Research Section		
0		Geology Section		
	56004			51220
	236835			232553

Note that the following assets of fluctuation or indeterminate value are not included in this balance sheet:
The contents of the library and stock of publications
Photographic and computer equipment etc.

		CAPITAL		
		General Funds		
252881		Balance brought forward	236835	
		Add surplus in year		
16046	236835	Deduct deficit in year	4282	232553
	236835			232553

Editorial Message

In her final editorial message last year Jane Adams thanked everyone for the support she had received during her five years as editor. Unfortunately a replacement editor has yet to be found, but the work of preparing the next volume of the *Transactions* has had to go on. To enable this to happen the work has been divided between the members of the Publications Committee, who have all played their part. However, I should especially like to acknowledge the amount of work that has been carried out by Rosalind Lowe, who has worked tirelessly to this end, using her very considerable talents in preparing the material, acting as picture editor, and laying out the text. Without her work the publication of this volume would have been very much delayed.

Because of the length of last year's volume, it had been anticipated that this would be a shorter volume, but this is not the case, due to the number of papers published. It has always been the Club custom that, if a research paper is read to the Club, it is published in the appropriate volume. There are eight papers published in this volume, five of which were read to the Club during 2019, including the Presidential address, and a sixth which follows up the discovery, when the Club visited Moccas in June 2019, of the death of the Club oak in Moccas Park. Because of this the volume was always going to be lengthy. However, one does not have to talk to the Club in order to get a paper published, and there are two other papers in this volume. We welcome enquiries about possible papers, and in the first instance contact should be made through the website.

In a wider context, our *Transactions* are well known and held in high regard. Last year Jane Adams reported that there was a project in hand to digitise the past *Transactions* and make them freely available. During 2019 this project was completed, and the full run of *Transactions*, up to the present, is now available on the Club website—see www.woolhopeclub.org.uk. However, the ten most recent volumes are only available in this way to Club members. The technical work of putting the digitised *Transactions* online has been carried out by Rosalind Lowe, and we extend our thanks for all the time she has spent on this. The work of digitising the *Transactions* was funded by the G.W. Smith Fund out of accumulated income and the cost is included in the annual accounts which are printed in this volume.

Here I must thank everyone who has contributed in any way to the *Transactions*, whether in submitting papers, acting as a sectional recorder or indeed writing up our Proceedings, and preparing material for the press. It is a cooperative effort, and long may it continue.

Finally, if anyone is interested in helping on the editorial side of the preparation of the *Transactions*, please contact me through the website.

John Eisel Chairman, Publications Committee

Errata TWNFC, 64 (2016)

Page 178. In the review of the book *Miniature Baptismal Fonts*, Dr. Julian Weaver (Fircone Books, 2016), the name of the author was incorrectly given, and is correctly given above. We express our apologies for this.

Errata TWNFC, 66 (2018)

Please that on page 14, the List of sub-committees is given as 2017/18 instead of 2018/19.

Biographical Details of Contributors.

Biographical details of the following authors have appeared in previous issues of the Club's *Transactions* as indicated; John Eisel (2005 & 2017), Paul Olver (2015), Edward Peters (2013), and David Whitehead (2015).

Harley Thomas has a B.A.(Hons) in archaeology and an M.A. in museum studies. He became involved in the conservation of historic buildings in 1980, while working for Hampshire County Council, but gradually moved into more general environmental management. He retired in 2003 from the post of Head of Natural and Historic Environment with Shropshire County Council. His research interest is in the landscape of the forest of Deerfold, including the so-called Deerfold pottery industry.

Howard Tomlinson was educated at Ashville College, Harrogate and the Universities of London and Reading, where he completed his doctorate. As a postgraduate student, he won both the Julian Corbett prize in naval history, awarded by the Institute of Historical Research, and the Royal Historical Society's prestigious Alexander prize. Following his University of Wales research fellowship, he was Head of History and Housemaster at Wellington College, before his appointment at Hereford Cathedral School, where he was Headmaster, 1987-2005. He is the author of several books and articles on modern English History including the post-Restoration chapter in the millennium History of Hereford Cathedral and his acclaimed *Hereford Cathedral School: A History Over 800 Years* (Logaston, 2018).

Tom Wall retired in 2010 after 35 years managing National Nature Reserves (NNRs) in Cheshire, Shropshire and Herefordshire for the Nature Conservancy Council and its successor bodies. From 1986 to 2010 his responsibilities included Downton Gorge NNR in north Herefordshire, and over the years 1991 to 1998, The Flits and Moccas Park NNRs further south in the county. He is the part-author and, with Paul Harding, co-editor of *Moccas: an English Deer Park* (2000). In 2014 he published *The Singular Stiperstones* (2014) which celebrates a Shropshire NNR, followed in 2019 by two books about Rostherne Mere, an NNR in north Cheshire. In 2011 he edited a review of Downton Gorge NNR which was published by the Woolhope Club and he is currently editing a comprehensive volume about this exceptional and multi-faceted site.

Presidential Address, 2019
The Wonder of Woolhope

By PAUL A. OLVER

The Woolhope Dome to the east of Hereford takes its name from a rather isolated village enclosed within a distinctive ring of hills. Free from main roads, it is an ideal area for walking and for the study of natural sciences. The Club's first geology-based field meeting was held in this area on 18 May 1852[1] and since then the Club's activities have paralleled the development of geology as a science. I hope in this address to introduce some of these new ideas on the Silurian strata of the area. Last summer, Rowland Eustace led a very successful field walk on the Dome and another is planned. It seems a good time to revisit one of the Club's favourite field locations.

The Club badge prominently proclaims the interests of the earliest members of the Woolhope Club with its focus on the arch-like structure of the Woolhope area above a flowing River Wye and a geological hammer/collecting bag for use during field excursions (Plate 1.1). In fact, it was these early field meetings which marked out the Club as a progressive body of members keen on observing nature and the natural landscape. Although the Club had formed during the winter of 1851, its first field meeting was not until 18 May 1852 in the area around Woolhope village to the east of Hereford which was then adopted as the name for the new Field Club.

Herefordshire was, and still is, a predominantly agricultural county dominated by the river Wye and its tributaries. The rivers pass through a gently-contoured landscape of broad valleys fringed by low wood-capped hills set in a varied agricultural setting of cornfields, orchards and parkland studded with small villages and market towns. Its centrally-placed county town of Hereford sits astride the Wye while the margins of the county form the highest land and include the ancient Malvern Hills to the east making a prominent division from Worcestershire and the midlands. An extension of these eastern hills is the Woolhope Dome, an important geological feature, and the site of the first field trip not only for the Woolhope Club but also one of the first of its kind in the world. The Woolhope Dome today is still recognised as containing many sites of especial geological interest and indeed has just been added to the area covered by the Malvern & Abberley Hills Geopark whose key feature is its wide spectrum of geological ages contained in a relatively small area of the rural West Midlands.

PICTURESQUE MOVEMENT

What was the basis for this sudden interest in geology amongst the rural elite of Herefordshire? Its origins can be seen in the 18th century when the Agricultural Revolution had totally changed mankind's relationship with the land and the later Industrial Revolution when the search for both coal and ironstone became important for the maintenance of their extensive estates. These national movements were augmented by a very local movement which espoused landscape for its aesthetic value—the so-called Picturesque movement[2]—whereby wild landscapes were places to be cherished rather than feared. Popular sites were the high hills and

gorges of the Lower Wye and the valley of the Teme, west of Ludlow, where it enters the spectacular Downton gorge. These areas became places of pilgrimage for the first geo-tourists either by boat or on foot along recognised footpaths. This 'Eye for the Land'[3] was encouraged through the works of Uvedale Price of Foxley (1747–1829) and Richard Payne Knight of Downton (1751–1824) which fed this rising interest in the natural landscape—a complete contrast to the 'engineered' landscapes of Lancelot 'Capability' Brown.

This Picturesque movement also engendered a keen interest in the components of the landscape with its bare crags, river rapids, verdant woods and pastures with their abundant wild flowers. The collection not only of fossils but also of wild flowers for later pressing became popular as did the regular Club excursions into the wilder parts of the county. Another parallel development was the rise of the parson-naturalist led by the observations in Hampshire of the Revd Gilbert White (1720–1793) in his *Natural History of Selborne* published in 1789 and continued by notable early Woolhope Club members such as the Revd Thomas Taylor Lewis of Aymestrey (1801–1855) whose work on the local geology was so important for the development of the Silurian System.

These new field activities meant that members had to travel into the rural areas of the county and beyond into neighbouring Shropshire and Worcestershire. Travel for individuals was either by horse or by foot whereas groups were often moved by horse-drawn brake, a very uncomfortable journey given the state of the Herefordshire roads at the time. However, the rapid rise of the railways in the 1840s and the arrival in particular of the Shrewsbury & Hereford Railway[4] on 5 December 1853, albeit to a temporary station, gave the newly enthusiastic geologists the means to travel further in less time and certainly in more comfort. The arrival of the Hereford, Ross and Gloucester broad-gauge line on 1 June 1855 then allowed travel both north and south from a common station completed in December 1855 at Barrs Court (Plate 1.2). This is still in use today but without the inconvenience of a gauge-changing operation!

FORMATION OF THE WOOLHOPE CLUB

All these changes together with cultural and economic developments underpinned the formation of an active field club, the Woolhope Naturalists' Field Club (WNFC). The first membership list (1852) features three notable parson-naturalists namely Revd T.T. Lewis (Aymestrey), Revd William Symonds (Pendock near Tewkesbury) and the (Revd) W.H. Purchas, ordained later in 1857, from Ross-on-Wye together with border squires such as Richard W. Banks of Ridgebourne near Kington and local general practitioner, Dr. Henry G. Bull, a keen natural historian and mycologist. These Herefordshire stalwarts were joined by an eminent group of seven honorary members, including Sir Roderick Murchison, whose active encouragement inspired the local community to form a field club.

Murchison's work since his retirement from military service from 1831 had been focussed on the so-called Transition Series or *Grauwacke* sequences which underlay the Old Red Sandstone of Wales. East of Builth Wells on the north bank of the river Wye at Cavansham Ferry, now known as Trericket Mill,[5] he located sequences similar to that at Ludlow dipping conformably beneath the Old Red Sandstone. He was later to record in his notebooks that '*...this was the first true Silurian...*', a name to be later designated as the age of this particular rock sequence.

From 1831 through to 1835 Murchison, often accompanied by his wife Charlotte, made numerous forays to and fro across the English and Welsh border as far north as the Cheshire

Plain. He depended greatly on the work of others, including local enthusiasts such as the Revd T.T. Lewis, curate of Aymestrey, who had already determined the succession in his local area and recognised its key fossil faunas. The results of these investigations were reported to the world in 1836 and Murchison's reputation was made across Europe by the publication of the *Silurian System* in 1839.[6] Knighted in 1846, he was at the pinnacle of his geological career when he became an honorary member of the emergent WNFC along with other notable geologists of the day including Sir Charles Lyell and the Revd Prof. Adam Sedgwick of Cambridge.

THE FIRST FIELD MEETING

The first field meeting of the Club, which started at 9 am with breakfast at the Tarrington Arms, reflected much of this work with the Revd Symonds speaking on the legacy of Sir Roderick Murchison and how the Woolhope Dome represented an excellent example of his Silurian successions in the Welsh borders. Starting just after lunch, when the heavy rain had abated, the party visited Dormington Wood[7] and its famous landslip of 1844 as well as both Littlehope and Scutwardine quarries. Heavy thunderstorms and continuous monsoonal rainfall terminated the trip prematurely and the party retreated to 'The Green Man' at Fownhope.

The overall structure of the Woolhope Dome is an upwarp or anticline of Silurian strata which exposes the older rocks from beneath the younger, conformable sequence of Old Red Sandstone (Plate 1.3). The cross-section seen in the diagram clearly displays the three main limestone units and their intervening shales. It is the contrasting resistance to erosion of these two main rock types which produce the characteristic ring structure seen in aerial photographs (Plate 1.4). The oldest rocks are sandstones of Lower Silurian or Llandovery age, which are seen in the core of the structure in Haugh Wood. At a time when structural geology was in its infancy, this confused the early Woolhopians as this comment suggests '*In ascending the hill, however paradoxical as it may sound, we had geologically speaking penetrated deeper into the Earth's crust'*.[8]

However, the production of a detailed map (Plate 1.5) soon explained the structure and also that of the nearby Shucknall Hill to the north, a smaller anticlinal structure separated from the main Dome by a major fault line, the Vale of Neath Disturbance. We now know from seismic sections, available through the UK Onshore Geophysical Library (UKOGL) and through BGS borehole data such as at Fownhope, that the Woolhope Dome is underlain by both Lower Ordovician (Tremadocian) and Cambrian successions sitting unconformably on a Precambrian basement. However at Shucknall, the Silurian sequence sits unconformably on the basement without any intervening strata.

The Woolhope Dome's limestones are described in the first field trip report as containing *'myriads of encrinital, molluscous and conchiferous remains, the beautiful corals are in such abundance that, to the mind's eye a modern tropical reef seems realised'*.[9] The fauna is dominated by solitary (Plate 1.6) and colonial reef corals which together with stromatoporoids, bryozoa and crinoidal debris make up most of the limestone. Trilobites and brachiopods together with the major predators in the shallow seas, the orthocones, ancestors to the later ammonites of the Mesozoic Seas, lived amongst and above these reef builders. These limestones proved to be ideal horizons for the collection of fossils by early Woolhope members.

NEW IDEAS ON DRIFTING CONTINENTS

The analogy drawn in the report to a tropical sea is now seen as particularly perceptive. Indeed, with the advent of continental drift theory supported by plate tectonic processes in the 1960s, the Woolhope area was firmly placed in the southern tropical belt during the Silurian. The evidence for this southern latitude comes from palaeomagnetic studies on Silurian lava flows outcropping in the Mendips, Skomer in Pembrokeshire and on the Dingle peninsula in south-west Ireland. Lavas as they cool take on the direction of the local magnetic field through the orientation of magnetite crystals (Fe_3O_4). This direction is dependent on the latitude of formation (Figures 1 & 2). Results from various Silurian sites both in the UK and neighbouring Europe and in the USA suggest a latitude 32° South, well within the tropical zone and consistent with coral reef environments.

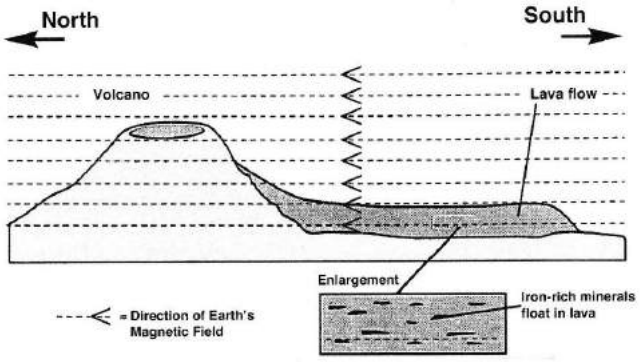


Figure 1. This illustrates lava erupting in the past at the magnetic equator (where the magnetic field direction is parallel to the Earth's surface). This direction is preserved in the lava when it solidifies (Drawn by Paul Olver)

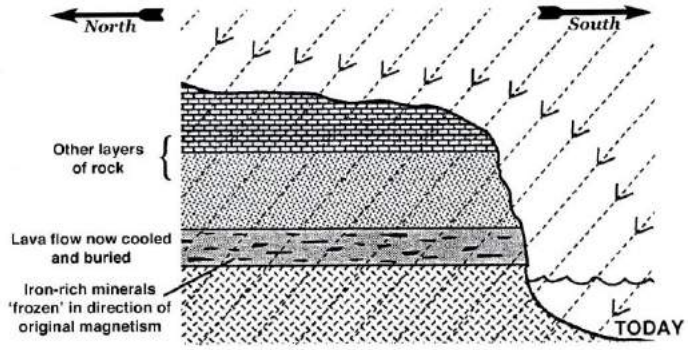


Figure 2. The same lava flow now exposed in a cliff, for example, in southern Britain. The direction shown for the magnetic field is consistent with its current 52°N latitude. The lava, however, retains its former direction of magnetisation. Once the rock is dated, this can be used to find out when and where it crystallised before continental drift brought it to its present location. (Drawn by Paul Olver)

However, one aspect of the Woolhope Dome limestone horizons is the relative lack of graptolites, a group of pelagic colonial organisms, which thrived in the near-surface waters of both Ordovician and Silurian seas. This rapidly evolving group proved to be excellent zone fossils and had been first designated in this role by Lapworth in his work on the Ordovician structure of the Southern Uplands of Scotland. Indeed, they allowed Lapworth to erect the Ordovician System in 1870 which took in some of Murchison's Silurian and the upper part of Sedgwick's Cambrian. In the Woolhope Dome, the rarity of any age-diagnostic fossils, such as graptolites, chitinozoans and conodonts, particularly in the limestone sequences, results in substantial age correlation uncertainties.[10]

IMPORTANCE OF BENTONITE HORIZONS

However, help was at hand from an unexpected direction. For many years, thin bentonite horizons have been identified in the local succession resulting from the deposition of volcanic ashes across the shallow Mid-Silurian tropical seas (Plate 1.7). Usually white or greenish grey in colour. these clays consisting of the minerals chlorite, illite, kaolinite and smectite, form distinctive bands within the limestones ranging in thickness between 10mm and 100mm but occasionally exceeding 500mm. They also contain minor amounts of resistant volcanic phenocrysts such as zircon and apatite. Nearly 150 discrete bentonite layers have now been identified in the Wenlock Series as a whole, suggesting an average of 40,000 years between these major pyroclastic events.[11]

The presence of zircons allows the bentonites to be dated by uranium-lead radiometric methods. [12] Through these methods, the Wenlock–Ludlow stage boundary has yielded a date of 427.86 +/- 0.32 Ma. This and other dates can now be combined with conventional graptolite zones to produce a complete geological timescale. Trace element analysis, particularly of rare earth elements, has also allowed the 'geochemical fingerprinting' of individual bentonite horizons so that correlation has been successfully made between the Woolhope Dome, Wenlock Edge, and the Wren's Nest inlier at Dudley in the West Midlands.[13]

Detailed field work on the Wenlock Series in the Woolhope Dome has also allowed the identification of sedimentary sequences associated with changes in relative sea levels. Limestones are generally deposited in periods of low sea level whereas the intervening shales (eg Coalbrookdale Formation) indicate a deeper water environment. The limestones have also yielded information on individual shallowing–upwards sequences (parasequences) which along with bentonite correlations across the area can be successfully used to correlate between the various outcrops in the Welsh borders. [14] [15]

MAJOR DISCOVERY IN HEREFORDSHIRE

Close examination of bentonite horizons in north-west Herefordshire has also revealed a remarkable assemblage of soft–bodied invertebrates preserved in exquisite detail. Volcanic ash, falling through the water column or being transported by seabed turbidity currents, rapidly accumulated around the organisms. Contemporary with this process was the rapid precipitation of clay minerals around the dead creature. Decay over time produced voids filled with calcite which faithfully replicated the shape of the organism and some of its internal structures such as the gut. At the same time, calcitic concretions were forming and it is these which prevented the delicate fossils from being squashed. These concretions nucleated independently and the enclosed fossils are therefore commonly not in the middle, but randomly disposed within the spherical nodule.[16]

These nodules have been studied through a process of multiple slicing and then bringing together the whole organism by combining hundreds of digital images using specialized computer software to reconstruct the whole fossil.[17] This was not possible until the late 1990s but it has enabled palaeontologists to get a total picture of Silurian marine life, which include both hard and soft body forms. The ubiquitous preservation of soft tissues in, for example, ostracods, where their individual gender has been revealed (Plate 1.8) and barnacles where the soft bodied larval stage has been preserved for the first time, means that this locality has been designated as a Conservation Lagerstätte.[18] Such localities are rare in the Silurian period and this has opened a window of opportunity to examine a more complete marine fauna.

THE WONDER OF WOOLHOPE

Bentonites also feature in our final topic, that is the propensity of certain areas of the Woolhope Dome to undergo catastrophic landslips (Plate 1.4). A contemporary report in 1575 gives an idea of the seriousness of this phenomenon which was locally named as 'The Wonder' (SO 633 365). The account was as follows: '*Marcley Hill began to open itself up in the Sunday evening and made a mighty bellowing noise and then lifted up itself to a great height and began travelling, carrying along trees which grew upon it, sheepfolds and flocks of sheep abiding thereon, passing along, it overthrew a chapel and thrust before it highways, houses and trees until Monday noon it stood still and moved no more, mounting to a hill 12 fathoms high*'.[19]

At the time the blame was laid at the door of underground fires which had produced a violent exhalation of vapours. Today, a slightly more prosaic explanation highlights the occurrence within the Silurian sequences of multiple bentonite layers which can act as thin, water-saturated slippage zones. The high angle of dip displayed by the strata in some areas of the Dome structure encourages this process to occur at regular intervals.

More recent examples of the same process at work are the landslip at Tower Hill on 15th March in 1844 near Dormington[20] and, into more recent times, the disastrous slip at Perton Quarry (Plate 1.9) in 1979 due to the extraction of Aymestry Limestone down dip which destabilized the limestone strata in the quarry face.

The Woolhope Dome has played a major part in the geological researches undertaken by this Club and, as we have seen, is still at the forefront of geological investigations as we learn more about our Silurian past. It fully deserves to have been selected as the location for one of the world's first field trips.

ACKNOWLEDGMENTS

I would like to thank fellow Woolhope members Gerry Calderbank for his expertise in drawing up the Woolhope Dome cross-section in Figure 3 and Derek Foxton for supplying the aerial photographs featured in Plates 1.4 & 1.9. I am also very grateful to Prof. David Siveter of the University of Leicester for giving his permission for the use of the false colour image of the male ostracod seen in Plate 1.8.

REFERENCES

[1] Scobie M.J. 'The Geological Report of the Proceedings at the First Excursion of the Club on Tuesday May 18th 1852' *Trans. Woolhope Natur. Fld. Club* (1852) 14-17.

[2] Daniels, Stephen & Watkins, Charles (eds) *The Picturesque Landscape: Visions of Georgian Herefordshire*, Dept. of Geography, University of Nottingham in association with Hereford City Art Gallery & University Art Gallery, Nottingham (1994).
[3] Williams, Robert 'An Introduction to Herefordshire' in Payne, J. (ed) *Herefordshire's Rocks & Scenery – a geology of the county*, Logaston Press (2017), pp.1-2.
[4] Wood, Gordon *Railways of Hereford*, Amadeus Press, Cleckheaton (2003) pp.99-105.
[5] Morton, John L. *King of Siluria – how Roderick Murchison changed the face of geology*, Brocken Spectre Publishing, Horsham, pp.49-57.
[6] Murchison, R.I., *The Silurian Syatem, founded on geological researches in the counties of Salop, Hereford.....Worcester & Stafford, with descriptions of the coal-fields & overlying formations*. John Murray, London (1839). 768 pp.
[7] Scobie in *Herefordshire's Rocks & Scenery – a geology of the county* p.17.
[8] *Ibid* p.15.
[9] *Ibid.* p.17.
[10] Cocks, L.P.M., Holland, C.H. & Rickards R.B. 'A Revised Correlation of Silurian Rocks in the British Isles', *Geol. Soc. London. Spec. Rep.* 21 (1992).
[11] Ray, David C., Jarochowska, Emilia, Hughes, Helen E. & Wheeler, James R. ' Non-biostratigraphic correlation techniques and their role in stratigraphy: examples from the Wenlock Series (Silurian) of the Midland Platform, England', *Proceedings of the OUGS, 5,* (2019) pp.59-64.
[12] Cramer B.D. *et al* 'U –Pb (zircon) age constraints on the timing and duration of Wenlock (Siluriian) paleocommunity collapse and recovery during the 'Big Crisis'. *Geol. Soc. Amer. Bull.* 124 (2012), 1841 – 57.
[13] Ray, *et al*. in note 11. p.60.
[14] Ray, D.C. & Butcher, A., 'Sequence stratigraphy of the type Wenlock area (Silurian), England. *Boll. Soc. Paleontol. Ital.*, 49, (2010) pp.47-54.
[15] Ray, D.C., Richards, T.D., Brett, C.E., Morton, A.C. & Brown, A.M. ' Late Wenlock sequence and bentonite stratigraphy in the Malverns, Suckley & Abberley Hills, England'. *Palaeogeogr. Palaeoclimatol. Palaeoecol.* 389 (2013) pp.115 – 127.
[16] Selden, Paul & Nudds, John *Evolution of Fossil Ecosystems* (2nd Edition), Manson Publishing, London (2012) pp.53-62.
[17] Siveter, D.J., Sutton, M.D., Briggs, D.E.G. & Siveter, D.J. 'An ostracod crustacean with soft parts from the Lower Silurian' *Science,* 302, pp.1749- 1751.
[18] Siveter *et al*. in note 15, p.7.
[19] Symonds, W.S. 'The Wonder, near Marcle.' *Trans. Woolhope Natur. Fld. Club* (1878), pp.74-75.
[20] *Hereford Journal* 20 March 1844.

‘The Club Oak’: death of a silent witness

by TOM WALL

We learn first of ‘The Club Oak’ in 1870, when a ‘Commissioner’ of the Woolhope Club (assuredly its former President, Dr Henry Graves Bull, 1818–1885) girthed this tree and many other oaks in Moccas Park.[1] *Bull reported that the Reverend Sir George H. Cornewall, Bart. (1833–1908), owner of the Park, had kindly allowed him to name the tree in honour of the Woolhope Club of which Sir George had been Honorary Secretary since 1866. It was admired by the Club on subsequent visits and a photograph exists of it in early leaf in 1998 (Plate 2.1).but on the occasion of the Club’s Field Meeting in June 2019 the oak was found to be dead (Plate 2.2). Past girthings and photographs of the tree prompt here some discursive reflections on events in the Park of which this tree will have been witness, events which have sometimes linked this Herefordshire heartland with distant places.*

THE HISTORY OF THE CLUB OAK

Readers of the Club’s *Transactions* for 1870 were able to scrutinise a photograph of the tree (reproduced here as Figure 1 and actually taken in 1871) to go along with the Commissioner’s description: ‘it is a tree in full luxuriance, with an upright bole rising some 45ft. into the tree. Its bark is curiously twisted, and with its great size gives it a solid knotty effect. It measures 19ft. 5in. in girth, and rises to the height of 94ft.’. It was identified as *Quercus sessiliflora*, known today as *Quercus petraea*, the Sessile Oak, the dominant oak of hilly ground in the west of the country. It stands in the Lower Park, the area of the deer park where there is flatter ground and gentler slopes and a continuous grass sward dotted with trees growing in varying densities; this contrasts with the Upper Park which is mostly steep and mainly wooded.

Further measurements followed at intervals (a full set is shown in Table 1) with a maximum height of about 105ft. recorded in 1932 and a greatest girth of 26ft. 11in. in 1997. Achieving accurate and comparable girth measurements proved difficult due to a large boss having formed at the usual girthing height of 5ft., and it is presumably a different approach to addressing this difficulty that explains the apparent reduction in girth as recorded in 1998.

	Year	Girth	Height
The Woolhope Club Oak	1870	19’ 5”	94’
	1891	20’ 10”	
	1932	23’ 0”	circa 105’
	1985	26’ 3”	circa 78’
	1997	26’ 11”	89’
	1998	24’ 7”	

Table 1. Girths and heights of The Club Oak.[2]

How old was our oak?

Bull had initiated a survey of the ‘Remarkable trees of Herefordshire’ in 1866, and in the Club’s *Transactions* for that year records of two trees were published in order to show the

information he was seeking, notably girth, height and spread; one of these two trees was the celebrated 'Moccas Oak'. This ancient pollard was by then 'reduced to a mere shell, hollow from top to bottom', and had a gaping, six-foot-wide hole in its overall girth of 36ft. It had been painted by the topographical artist Thomas Hearne (circa 1788) and drawn by J.G. Strutt (for his *Sylva Britannica*, 1822), as well as by an unknown artist for J.C. Loudon's *Arboretum et fruticetum Britannicum* (1838).[3]

Figure 1. The Club Oak in March 1871, *TWNFC* opp. p.314

Figure 2. The Club Oak in April 1932, *TWNFC* opp. p.182

In the report of his visit to Moccas and adjacent areas in 1870, the ever-energetic Bull lists the girths of 145 trees, many of which, including 70 oaks (amongst them the Moccas Oak and the Club Oak) stood in the Park; seven of these oaks can be traced today.[4] The Moccas Oak was girthed by the Club in 1891, but the failure to record the tree during the Club's Field Meeting of 1933 indicates its demise by then.

In the course of his report, Bull discusses how to determine the age of oaks, mentioning a method advanced by the Rev. R. Blight (newly elected to the Club) who maintained that their age could be calculated roughly by allowing five years for every inch of the radius of trees that did not exceed 3ft. in diameter, and six years for every inch of trees not exceeding 4ft. 6ins.. Although Bull did not apply the method to the Club Oak, had he done so it would have given a rough estimate of 222 years of age in 1870, suggesting a germination date of 1648, the year in which Parliament established a High Court of Justice for the trial of Charles I.

An alternative method of estimating the age of large trees in Britain was developed in the 1990s by John White of the Forestry Commission based on a wealth of recorded data and historical information.[5] The method depends on determining both the probable rate of early growth in relation to local conditions, and the duration of the development period of the tree up to an optimum crown size, its 'core development' phase. Successive measurement of trees at

Moccas enabled White to determine the likely 'core development' of the Club Oak, from which a rough age estimate was derived based on the girthing done in 1997.[6] This suggested that the tree was 468 years old, having germinated in about 1529, when Henry VIII was scheming to divorce Catherine of Aragon. Application of the same methodology to the Moccas Oak would date it to the time of the Norman Conquest.

Meat, timber, charcoal, lime and stone

Given a germination date of 1529, the Club Oak would already have been well grown by 1617, a date of significance, because in about that year Henry Vaughan of Moccas is known to have provided Fallow Deer to stock the Irish park of his cousin, Richard Boyle, Earl of Cork. This is the earliest reference we have to the deer of the Park and indeed to Moccas as a deer park.[7]

We may think of deer as ornaments, pleasing visual features within a landscape park, but historically parks were deer-farms, from which, as in this example, other parks might be populated. Principally however, they were larders from which venison could periodically be harvested, and the Club Oak will have witnessed many other activities with an economic rather than an aesthetic purpose. In 2002, a 'walk-over' archaeological reconnaissance survey revealed or confirmed evidence of pillow mounds (artificial rabbit warrens), charcoal burning platforms, saw pits, quarry sites and a lime kiln, indicating that the exploitation of the resources of the Park continued alongside its functions of deer larder, hunting place and landscape amenity: 'not far away from the arcadia of the Lower Park a small army of woodsmen, charcoal burners and quarrymen were at work'.[8]

'Fallages' and plantings

Whatever the precise age of the Club Oak, it will have lived through noticeable changes to the tree cover and tree species growing in the Park. The photo of 1871 shows that at that time it stood amongst a numerous cohort of younger oaks, indeed Bull commented that:

> 'Moccas Park in its general aspect is far too much crowded with trees. Every one of the grand old oaks is surrounded by a grove of smaller ones, until the Park itself is like a wood, and squirrels may skip from end to end without the need of touching the ground.'

He goes on to provide an explanation:

> '…some half century ago, or rather more, when the sad memory of a heavy timber fallage was green, there was a far-sighted steward of Moccas, of highly prudential "proclivities"— probably a Scotchman—who got permission to plant all these young oaks to take the place of the old ones as they decayed.'

The 'fallage' was presumably that of 1808/09, with the plantings following soon after. At that time, Sir George Amyand Cornewall (1748–1819), then owner of the Moccas Estate, was beset by acute financial problems and he realised over £12,600 through the felling of oaks, including, it seems, within the Park.[9]

Sir George's problems were both far afield and close at hand. He owned La Taste, a highly productive sugar plantation of 264 acres in Grenada, which depended on slave labour.[10] It brought in rents over five times an acre more than those from his Moccas Estate,[11] and it will have helped him to almost double the size of the Estate through the acquisition of 3,560 acres of mainly freehold land.[12] But, as a consequence of a slave rebellion in 1795, most of the

buildings and crops at La Taste were completely destroyed, leaving Cornewall with a bill of around £13,725 and the loss, until 1799, of his annual rent of £1,500.[13] In addition to these repair costs, in 1805 Cornewall had to support his family's banking business when it was threatened by bad investments and poor trade, and then there were substantial parliamentary election costs incurred in 1796 and 1806.[14]

The 'far-sighted steward' will have been Mr J. Webster, although confirmation of his nationality is lacking; from 1793 to 1836 he was Cornewall's gardener and forester.[15] By 1871 the young oaks he had planted had prospered, creating a 'grove' of trees fifty or more years old, forming a dense back-drop to the photograph. By 1932, when the next photo of the Club Oak was published in the *Transactions* (Figure 2), most of them had gone, presumably felled in 1897 when 415 trees were taken out of the Park.[16]

But by no means all of Webster's plantings were felled. An age profile of the parkland oaks made in 1997 shows a bimodal size/age distribution (Figure 3), with a marked peak of very small trees corresponding to plantings made since the 1960s, and a smaller subsidiary peak of trees with diameters in the range 80 to 120cm. Three oaks felled or windblown in 1998 had a mean diameter of 100cm, which lies at the mid-point of the subsidiary peak. They had a mean age (calculated by counting annual growth rings) of 176 years, so they dated from about 1822. That Webster planted good numbers of Sweet Chestnut too is suggested by the age profile for that species, as it is for the smaller numbers of Beech and Horse Chestnut, but in the case of these three species there are no tree-ring counts to provide confirmation of planting dates.

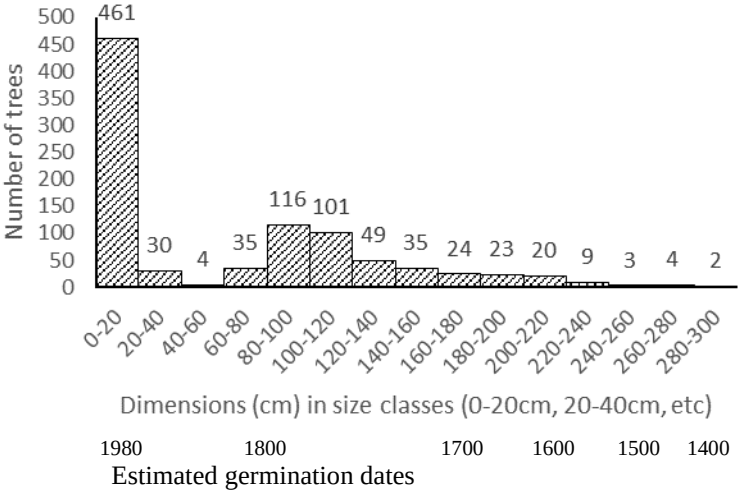


Figure 3. Diameters and ages of oak trees in the Lower Park, 1997, showing estimated germination dates

Giganteum

Close examination of the photo of 1932 reveals the presence of another tree species in the Park: visible in the distance to the right of the trunk of the Club Oak is the spire of a tree which hails from the montane coniferous forests of California. Although well-known to Native Americans,

it was not until 1833 that this species of tree was seen by people of European descent,[17] and it was only in 1852 that the first academic botanist examined material from it; this was Albert Kellogg, an American who intended to name it as the sole member of a new genus, *Washingtonia.* However, in 1853 William Lobb (1809–63), an expert plant hunter working for Veitch & Sons, the prominent Exeter-based nursery, brought back seed, herbarium specimens and seedlings, and the English botanist John Lindley beat Kellogg to it, naming the tree *Wellingtonia gigantea*, in memory of the Duke, who had died the previous year.[18] Although subsequently renamed *Sequoiadendron giganteum*, the common name of Wellingtonia has stuck, if only on this side of the Atlantic.

Following its introduction to Britain in 1853, trees were planted at Holme Lacy, Herefordshire, in 1855, as recorded by Bull in the same article as the one in which he chronicles the naming of the Club Oak.[19] The two Wellingtonias present today in Moccas Park may also have been planted in about 1855, presumably on the instruction of the then owner, Sir Velters Cornewall, (1824-1868), elder brother of the Reverend Sir George. This assumption is based on measurements taken in 1931 when the better of the two trees was found to be comparable in size to the largest trees at Holme Lacy.[20] So, Sir Velters, best known as a sportsman and gambler, may also have been a follower of silvicultural fashion.

Figure 4. The Wellingtonia as recorded in the *Transactions* for 1931, opp. p.108

This is the tallest tree in the Park. In 1931, at about 80 years old, it had already, at 108ft., over-topped the maximum ever recorded for the Club Oak, and it went on to exceed 120ft. in height (Table 2) before its top was blown out. Now only two trees in the Lower Park at Moccas, both of them oaks, are stouter. It was F.R. James who took the measurements in 1931, publishing his results in the *Transactions* along with a photo, which is reproduced here (Figure 4).

	Year	**Girth**	**Height**
Wellingtonia	1931	20’ 2”	108’
	1974		123’
	1997	27’ 11”	122’

Table 2. Girths and heights of the Wellingtonia.[21]

This arboreal phenomenon is however a misfit, a New World tree that really has no place in an Old World deer park. Yet it is a species which in our arbitrarily selective way we have come to

appreciate. Perhaps the punchability of its soft, rich-red-brown bark in which Treecreepers gouge cosy roosting hollows helps endear it to us, as may its provision of a secure home to Ravens which nest here among its highest branches.

Recruitment

Any tree such as the Wellingtonia planted in the Park requires a robust guard to protect it from both the herd of Fallow Deer and livestock. Their presence means that planting, rather than natural regeneration, is the way of establishing new generations of trees. After a period of 130 years when very few were planted, a significant programme started in the 1960s, initially undertaken by Richard Chester Master as owner, but carried forward since 1978 by the Nature Conservancy Council when it concluded a Nature Reserve Agreement with him, making this a National Nature Reserve (the agreement has since been transferred to the successor bodies, English Nature and Natural England). To date, well over 1,000 trees have been planted, and many more are being added in two new areas incorporated recently within the modern boundary of the Park. One is an extension of about 71 acres on low ground to the south-east of the Lower Park in an area known as The Meres and The Paddock, the other is a retrieval: 110 acres lost from the top of the Park in 1951. This area was sold to the Forestry Commission on the death of Sir Geoffrey, the last of the Cornewalls, in order to help with the payment of death duties, and was planted with conifers.[22] It subsequently changed hands before being purchased in 2006 by the Woodland Trust. After the conifers were felled, the land was leased to Natural England and it is being replanted as parkland. Retrieving the full original extent of the Park, which once ran down into the Golden Valley should now be the objective.[23]

It is possible that Lancelot 'Capability' Brown came within sight of the Club Oak when drawing up 'A Plan for the intended Alterations at Moccas Court in Herefordshire. The seat of Sir George Cornewall, Bart by LB: 1778', but the plan stops well short of the ground on which the tree stands. Humphry Repton may well have visited the Park too in the early 1790s, but his only known landscaping recommendations related to minor alterations at Moccas Court. But even without the direct input of Brown and Repton, much of the Park has a 'designed' look to it, with groupings of trees, vistas and open ground. Accordingly, since the 1990s it has been treated as a 'designed landscape', with a planting plan that safeguards and enhances possible design elements. Indeed, in 1993/94 fifty-five trees that had been planted in the Lower Park since the 1960s (out of more than six hundred planted there to that date) were relocated because they had been planted in places where they obscured views or cluttered open ground.

As well as Wellingtonias, a few other trees of more or less exotic origin had been planted in the Lower Park in the nineteenth century, such as Evergreen Oak *Quercus ilex* and Walnut *Juglans regia* (originally from the Mediterranean and the Balkans respectively), followed in the mid-twentieth by 18 specimen conifers, including Swamp Cypress *Taxodium distichum* (from the United States), and a range of exotic broadleaves, including Tree-of-Heaven *Ailanthus altissima* (from China). But as yet few, if any, of these endear themselves in the way of the Wellingtonias. Indeed, four Lawson's Cypress *Chamaecyparis lawsoniana* deployed in a diagonal phalanx across the Lower Park, have been felled, as have a European Larch *Larex decidua* and a Chinese Thuja *Thuja orientalis*.[24]

Such plantings seemed appropriate at the time, but Moccas is a deer park not an arboretum. A feel for the *genius loci* was wanting and the significance of parklands had yet to be fully understood. Indeed, nature conservationists were slow to grasp the importance of this special habitat which, although clearly in many ways artificial, harbours organisms,

particularly the insect fauna of dead wood, that demonstrate many centuries of ecological continuity. Now, when new trees are planted, the accent is very much on 'parkland species', but this to date has not been regarded as synonymous with 'native', as it has included Beech *Fagus sylvatica* which here is outside its native range, and Sweet (Spanish) Chestnut *Castanea sativa.* Both species, along with Horse Chestnut *Aesculus hippocastanum*, are important in providing particular habitat niches for the extensive and, in many cases rare, insect fauna of the Park, and for fungi too.

Managing the Park

Such is some of the field, photographic and documentary evidence of activities and events that the Club Oak will have silently witnessed in its long life. Evidence from earlier periods is often lacking, and that from more recent centuries is at best fragmentary. So, there are many questions which we can't now answer, such as how, historically, did numbers of Fallow Deer fluctuate? How many sheep and cattle were run alongside them? How was the grassland managed? How quickly was 'fallow wood' (Francis Kilvert's appealing term for 'dead wood') scavenged from the Lower Park? What nectar sources were available to the insect fauna? Such matters, and others, will have had a marked influence over the centuries, determining the ecological legacy of today.

We do know however that Sir George Amyand Cornewall was an 'improver' and that records in his account books include the 'cutting' of anthills, probably in the Park (an entry of January 1784 refers to 400 of them) and the conversion of parts of the Park to arable farming.[25] The latter was not however a complete departure, as there are quite extensive areas of ridge and furrow within the Lower Park dating presumably from mediaeval times,[26] and it is here that some of the oldest oaks are to be found.

From the 1960s onwards there was another and intensive period of 'improvement'. Over the years 1964–1972 almost all of the Lower Park was cultivated. Hawthorns *Crataegus monogyna* (an important nectar source for the insect fauna) were grubbed out, some areas were drained, extensive sweeps of anthills were flattened, slag and lime were spread, the grassland re-seeded, herbicides and fertilizer applied and grazing intensified. Thereafter, pasture quality was maintained by the periodic application of slag, and by fertilising, liming, topping, harrowing and rolling, while supplementary feeding of livestock was routine. The epiphytic lichen flora was just one of the groups of organisms to suffer as a consequence. It was not until the late 1980s that these activities were progressively phased out by the negotiation of compensatory arrangements through the Nature Reserve Agreement; they ceased altogether in 1996 apart from a few specific exceptions such as the selective application of herbicides using knapsack sprayers or weed-wipers.[27]

Post-mortem

To return to our Club's oak, the inevitable question is 'why did it die'? Or perhaps, 'what killed it'? We tend to feel that old oaks are immortal, trees which, in the words of the Reverend Francis Kilvert (1840–79), whose vicarage at Bredwardine was just a mile from the Park, 'look as if they had been at the beginning and making of the world and…will probably see its end'. Kilvert was not a Woolhopean, but he was a colleague and social acquaintance of the Reverend Sir George Cornewall, and a regular visitor to the Park, so he may well have known of the Club Oak. But although clearly a fine tree, it was a maiden, not a pollard and it was the pollards that attracted his particular attention:

> '…those grey old men of Moccas, those grey, gnarled, low-browed, knock-kneed, bowed, bent, huge, strange, long-armed, deformed, hunchbacked, misshapen oak men that stand waiting and watching century after century, biding God's time with both feet in the grave and yet tiring down and seeing out generation after generation…'.[28]

It is these trees, the old pollards, that appear timeless. They are trees which, though ancient, have retrenched, and they tick over, demanding much less in resources than a giant such as the Club Oak. So, should we be surprised at the death of a large, maiden, ancient oak, already noted as dying-back 20 years ago?[29]

Perhaps not, yet this is not the only oak in the Park to have died recently, or to appear to be struggling, and there are real anxieties that some deeply troubling process is underway. There is speculation that amongst a range of possible causes could be the agricultural intensification of the 1960s-1980s. This may have had a significantly detrimental effect on the trees by drainage, damage to root systems and soil compaction, while fertilizer and herbicide applications, and the secretion of veterinary medicine residues through the breakdown of dung, may have compromised the mutualistic mycorrhizal associations vital to the health of the trees. Natural England has initiated investigations and is trialling experimental remedies.

The future

The Club's visit of June 2019 was just the latest of many it has made to the Park, including for mycological field meetings—the 'Forays amongst the Funguses' initiated by Dr Bull in 1868, which included, during his lifetime, forays to Moccas in 1873, 1880 and 1881. The Club's interest in the Park extends now to over 150 years and will not end with the death of its oak. Perhaps another might be adopted, photographed and followed. If so, 'The Knoll Oak' (Figure 5) would seem to be a good candidate; it too is a maiden girthed by Bull in 1870. It was examined closely on the occasion of the Club's visit in 2019 when for a while it was mis-identified as the Club Oak, but it is perhaps 170 years younger.

Figure 5. The Knoll Oak from the 1932 *Transactions* opp. p.182

The Club is seeking to be proactive too, with discussions underway with a view to organising a conference at which the issues of tree health and management in Moccas and other parks in Herefordshire would be considered. And there would doubtless be a field visit to the Park, witnessed posthumously by the towering frame of the Club Oak.

REFERENCES

[1] Anon, 'Incidental notes on remarkable trees in Herefordshire', *TWNFC*, (1870), pp.288-321, p.314.
[2] From T. Wall, 'A landscape of remarkable trees', in P.T. Harding & T. Wall (eds.) *Moccas: an English deer park. The history, wildlife and management of the first parkland National Nature Reserve* (2000), p.87 (henceforward *Moccas* (2000)).
[3] *Moccas* (2000)., p.81.
[4] P. T. Harding & T. Wall, 'The trees: recruitment, losses and changes since the eighteenth century', in *Moccas* (2000), pp.111, 113.
[5] J. White, *Estimating the age of large trees in Britain.* Research Information Note 250. Forestry Authority (1994).
[6] T. Wall & P.T. Harding, 'The trees: species, numbers, growth forms, ages and dead wood', in *Moccas* (2000), p.121.
[7] T. Wall & R. Putman, 'Fallow deer: history and management', in *Moccas* (2000), p. 201.
[8] T. Hoverd, *An Archaeological Reconnaissance Survey of Moccas Deer Park* (2003), Herefordshire Archaeology Report No.67.
[9] S. Seymour, C. Watkins & S. Daniels, 'Sir George Cornewall: management, improvement and landscaping, 1771–1819', in *Moccas* (2000), p. 58.
[10] S. Seymour, S. Daniels & C. Watkins, 'Estate and empire: Sir George Cornewall's management of Moccas, Herefordshire and La Taste, Grenada, 1771–1819', *Journal of Historical Geography*, 24 (3) (1998), pp.313-351, p.330. (henceforward Seymour *et al.*)
[11] Seymour *et al.*, p.331.
[12] Seymour *et al.*, p.342.
[13] Seymour *et al.*, p.331.
[14] Seymour *et al.*, p.342.
[15] Seymour *et al.*, p 56.
[16] Harding & Wall, 'The trees: recruitment, losses and changes', in *Moccas* (2000), p.112.
[17] W. Knigge, 'Giant Sequoia (*Sequoiadendron giganteum* (Lindl.) Buchholz) in Europe', in P. S. Aune (ed.) *Proceedings of the symposium on Giant Sequoias: their place in the ecosystem and society*. USDA Forest Services General Technical Report (1992), p.8.
[18] R Ornduff, 'A botanist's view of the Big Tree', in Aune (ed.) *Proceedings of the symposium on Giant Sequoias*, p.11.
[19] Anon, 'Incidental notes on remarkable tree in Herefordshire', *TWNFC*, (1870), pp.288-321, p.311.
[20] F.R. James, 'Wellingtonia trees in Herefordshire', *TWNFC* (1931), pp.108-109.
[21] From Wall, 'A landscape of remarkable trees', p.87.
[22] D. Whitehead & T. Wall, 'From Sir George Cornewall to Lt. Col. William Chester Master: 1819–1962', in *Moccas* (2000) pp.63-68.
[23] J. Phibbs, 'Reading the landscape', in *Moccas* (2000), pp.69-79.
[24] J. Bacon & T. Wall, 'Management in practice', in *Moccas* (2000), pp.243-261.
[25] Seymour, Watkins & Daniels, 'Sir George Cornewall', pp.54, 55. In an unpublished report, *Moccas Court Parkland Plan* (2013), the consultants Ashmead Price, refer on p.45, to the 'cutting down' of *c*.4,500 anthills in 1784-5, but it may well be that not all of these were in the Park.
[26] J. Phibbs, 'Reading the landscape', p.69.
[27] Bacon & Wall, 'Management in practice', pp. 50, 251.
[28] From Kilvert's diary entry for 22 April 1876.
[29] Wall, 'A landscape of remarkable trees', p.87.

100 years ago: Hereford in the aftermath of the Great War, 1918-19

By HOWARD TOMLINSON

This article emanates from the author's researches into the history of Hereford Cathedral School (HCS) and particularly his discovery of an extraordinary schoolboy diary for the year 1919. The paper includes passing references to the diary but makes much more extensive use of Hereford Council records and editions of the Hereford Times *for 1919, as well as other sources, to give a snapshot of life in Hereford in the first year of peace follow the signing of the Armistice on 11 November 1918.*

INTRODUCTION

On Saturday 20 September 1919, almost 100 years ago to the day before I presented this paper to the Club, the editorial page of the *Hereford Times* carried the usual plethora of local news. For example, there was a report of the wedding of Captain W.L. Allen and Miss B.D. Bamford; a list of hunting appointments and a notice that the Hereford Choral Society would be holding its first rehearsal for the season on the following Friday, expressing the hope that the 'great demand' for men would be met with the coming of peace. There was also the report on the Ledbury flag-day for land workers; the newspaper's pledge that unemployed ex-servicemen would be able to advertise their services in the *Hereford Times* provided that their advertisements were no more than 18 words long and the announcement that the 'powerful, well-sprung and pneumatic-tyred' Napier motor-car, owned by the Hereford branch of the Red Cross, would now be available to medical men, the police and the general public 'for the removal of casualties or sick cases in recumbent position'. And then there was the political news: the revelation that Alderman Witts had been invited to accept the mayoralty—he later declined in favour of Councillor A.D. Steel, the chapter clerk, and the short article about the annual Hereford municipal elections, with the observation that it was 'well within the bounds of possibility' that there would be women candidates. This statement was, of course, made a few months after the passing of the 1918 Act giving the parliamentary franchise to women over 30, on condition that they or their husbands were local government electors.

These eight notices, taken almost at random, touching as they do on personal, social and municipal events, are all indications of life in an English county town of around 23,000 people in the first year of peace. But this was an incomplete picture of the state of the country in 1919. More redolent of the wider world was that day's typically robust editorial, entitled 'The Fundamental Necessity', written in the light of the formation of the Triple Alliance between the miners, railway-men and other transport workers. It is worth quoting at some length.

> '…the triple alliance that will bring us success in peace as it did in war is the triple alliance of brain, muscle and capital…Each is essential...'Britain must forge ahead with the production of goods...not only as many...as we did before but a great many additional [ones].' This can be done if Capital and Labour will adjust their differences...decline to listen to the malicious whisperers of the 'economic revolutionist' [and the] internationalist pro-Bolshevist agitator, and

> work together in peace and unity for the common good...Every strike, every 'cacanny' [the policy of work to rule] is a real and definite injury to the nation in the hour of great need...It is not true that Capital and Labour are necessary enemies...One cannot exist without the other...The time has come for the voice of common sense to be heard in the land, and for the futile vapourings of would-be red revolutionists to be silenced....The solution of our differences is to work together in unity and peace and to produce the wares.[1]

A week after this editorial, the editor of the *Manchester Guardian*, in a sombre piece of 27 September 1919, suggested that among many people there was 'the same sense of apprehensive bewilderment as followed the news of war in August 1914', and that the country might even be 'on the threshold of a civil upheaval...comparable with the plunge into foreign war'.

Indeed, throughout 1919, a fear of a Bolshevik uprising, little more than a year after the October Revolution in Russia, was prevalent in government, the fear being echoed in government supporting newspapers (including the *Hereford Times*) throughout the country. And there was sufficient reason for Lloyd George's government to worry. That January, crews of ships at Invergordon, Rosyth, Devonport and Portsmouth refused to weigh anchor and sail for action against the new Russian state. In the army, dissatisfaction about the slow rate of demobilisation—the policy for the discharge of 'pivotal' men was soon reversed by Winston Churchill, the Secretary of War—led to mutinies at Folkestone, Southampton and other camps in southern England as well as the channel port of Calais. Similarly, there were riots of Canadian troops waiting to return home at Kimnel Camp in North Wales. In Scotland, the representatives of 'red Clydeside'—including Emmanuel Shinwell, who later became a minister in Atlee's Labour government—were briefly arrested when a red flag flew over Glasgow city chambers.[2]

Strikes, too, were ever prevalent in the aftermath of the Great War, 35 million days being lost in industrial disputes in 1919. Following a strike of police officers in early August that year, there was extensive rioting in Liverpool, order only being restored with the mobilisation of thousands of troops, supported by four tanks in the streets and warships in the Mersey. But the most serious strike of all, as we will see, was the one that autumn on the railways.

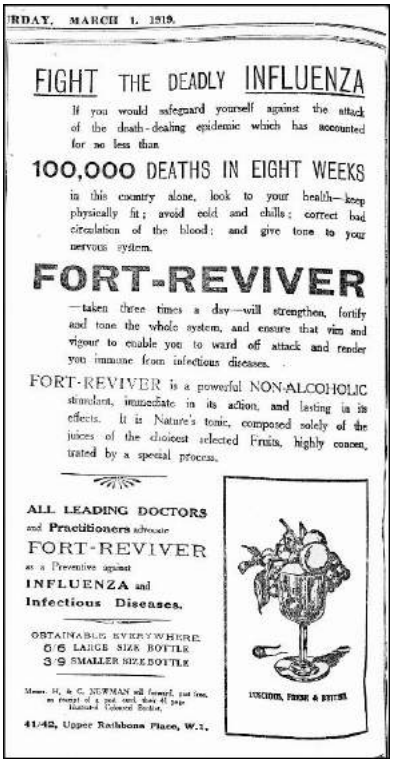
In retrospect, these disorders—however frightening at the time—were nothing more than minor skirmishes. In contrast to instability in Europe, they did not amount to anything approaching Bolshevik revolution. The British security services in 1918-19 thought otherwise but they had a professional interest in filing reports of subversion. Overall, the death toll from riots and mutinies in the United Kingdom in 1919 was no more than 30. This was trivial compared with either the bloodshed in Germany and elsewhere or the 150,000 deaths in England and Wales alone from the post-war influenza epidemic—ten times the number of civilians killed by enemy action from sea and air during the war itself.

EVENTS IN HEREFORDSHIRE

Influenza

Hereford was not immune from either the scourge of 'Spanish flu' or of strikes. The reports of the city's medical office of health for the quarter ending December 1918 reveal the extent of the crisis: 34 people had died from influenza out of 126 registered deaths over those three months, more than double the mortality rate for the same quarter in 1917.[3] The council were so concerned at the seriousness of the outbreak that on 12 November 1918, 'having regard to the

grave epidemic of influenza in the city which is seriously on the increase', that it urged the Ministry of Food to supplement the public's allowance of fats and sugar. The council then purchased two knapsack sprayers 'for spraying schools and public buildings with disinfectant', gave notice to city cinemas forbidding the admission of children, and temporarily closed all elementary schools on account of the epidemic.[4]


RDAY, MARCH 1, 1919.

FIGHT THE DEADLY INFLUENZA

If you would safeguard yourself against the attack of the death-dealing epidemic which has accounted for no less than

100,000 DEATHS IN EIGHT WEEKS

in this country alone, look to your health—keep physically fit; avoid cold and chills; correct bad circulation of the blood; and give tone to your nervous system.

FORT-REVIVER

—taken three times a day—will strengthen, fortify and tone the whole system, and ensure that vim and vigour to enable you to ward off attack and render you immune from infectious diseases.

FORT-REVIVER is a powerful NON-ALCOHOLIC stimulant, immediate in its action, and lasting in its effects. It is Nature's tonic, composed solely of the juices of the choicest selected Fruits, highly concentrated by a special process.

ALL LEADING DOCTORS and Practitioners advocate FORT-REVIVER as a Preventive against INFLUENZA and Infectious Diseases.

OBTAINABLE EVERYWHERE
6/6 LARGE SIZE BOTTLE
3/9 SMALLER SIZE BOTTLE

Messrs. H. & C. NEWMAN will forward, post free, on receipt of 2 3d. card, their 48 page Illustrated Coloured Booklet.

41/42, Upper Rathbone Place, W.1.

LUSCIOUS, FRESH & FRUITY.

At Hereford Cathedral School during this period, of the 120 or so pupils (around half of' whom were boarders), there were only 11 boys left in the school at one point. Not a single fatality, however, occurred, the Headmaster and his wife (a colleague later remembered) setting an example 'of courage and inner strength that helped us all in that grievous time of trial'.[5]

Late 1918 proved to be the height of the Hereford epidemic, the medical officer's report recording only five influenza deaths for the March quarter of 1919.[6] Thereafter, reports of fatalities resulting from the disease—as opposed, for example, to phthisis (pulmonary consumption)—disappear from his records.

It is ironic that just as the outbreak was petering out, Messrs H. and C. Newman put an advertisement in the *Hereford Times* in March 1919 about the preventative properties of 'Fort-Reviver', a fruit-juice stimulant, as a safeguard 'against the attack of the death-dealing epidemic' which (so the advert claimed) had accounted for 100,000 deaths country-wide in eight weeks.[7]

Figure 1 (left). The Fort-Reviver advert from the *Hereford Times*, March 1919

Strikes and Unrest

Just as Hereford was plagued by influenza for a few months in 1918-19, like the country at large, it was also periodically disrupted by strikes during these years. Indeed the threat of strikes at this time even reached the consciousness of our schoolboy diarist who on 21 February 1919 noted that the 'labour outlook was very bad', the miners having voted for a general strike.[8] In Hereford itself, strikes in 1919 took the form of wild-cat stoppages, perhaps influencing the 12 labourers, working at the Portfield gravel pits in June 1919, who demanded an increase from 10¾d. to 11½d. per hour. Following the downing of tools, the men were paid off. A strong letter was then sent by the Council to the manager of the Labour Exchange expressing the firm conviction that that if these men were restored to employment benefit, the 'labour question' would become 'intolerable'.[9]

More serious were organised strikes by national unions. The operative bakers who were paid £3 per week for a 54 hour week wanted the same rate as the London bakers—£4 for 44 hours—and struck for several days in early August 1919. The *Hereford Times*

characteristically predicted that if this demand was granted the price of a 4lb loaf would increase to 10d., and that if the principle of equal wages was accepted, the country would be 'heading straight for anarchy and black ruin'. Despite the efforts of the smaller non-unionised Hereford bakeries, there was a serious shortage of bread for three days over the bank holiday weekend, the city facing a bread shortage (so it was claimed) 'more grave and immediate than any which happened during the darkest hours of the war'. Thanks to the decisive action of Mayor Diamond, the crisis was averted, an interim settlement was arranged reducing the working week to 48 hours, and the bakers went back to work pending a national arbitration award.[10]

The national railway strike of the following month—the fear of which provoked the *Hereford Times* editorial of 20 September 1919—was of even greater consequence for the country at large. This posed a direct threat to an industry, employing half a million men, which was then controlled by the government; it threatened to bring the country to a standstill at a time when rail was the principal means of transport for goods as well as people, and it could have led to a general strike had the triple alliance been invoked. The government's resistance to the railwaymen's demand for a standardised rate of wages for all grades of workers—with a minimum of 40s. per week—led to a national strike from Saturday 27 September 1919. The government's fear of the consequences of the stoppage is illustrated by the Home Office directive that a joint city and county citizens' guard should, if necessary, be established. The Hereford force was to be set up with an Old Herefordian (old boy of the Cathedral school) rowing 'blue', Major R.H. Symonds-Tayler, as commandant.[11] The response was immediate: old soldiers re-joined their units and many other people came forward to volunteer their services. Despite this patriotic response, including the offer nationally of over half a million motor vehicles to the government to aid transport, the extent of the dislocation within Hereford is evident from newspaper reports: a shortage of food supplies; the using up of coal reserves; the resumption of war-time restrictions on fuel use; the reversal to food rationing (1s. 8d. worth of meat, 6 oz. of sugar and bacon, 4 oz. of marge, 2 oz. of lard and 1 oz. of butter per head per week), resulting in long and anxious queues at food shops; the dislocation of business; the disruption to postal services—although Home Office letters came to and from the Chief Constable by aeroplane (the racecourse being converted to a landing strip) for the first time in the city's history; the curtailing of cinema entertainments and the cutting of street-lighting, already limited in the city compared with the 800 or so gas lamps in pre-war days, by a half.[12] And this was quite apart from the travel disruptions. A tiny illustration of this is given in the Cathedral School governors' minute book for that autumn: the interviews for a new headmaster, initially scheduled for 30 September, had to be postponed. Notwithstanding the postponement, one determined candidate, Mr H.W. Annand, turned up to be interviewed that day. Despite Mr Annand's valiant efforts, he was not appointed to the headmastership.[13]

The troublesome rail strike lasted for little more than a week, ending on Sunday 5 October. That morning Hensley Henson, the bishop of Hereford, had denounced the strike in a 45-minute sermon in the cathedral, on a text from the Epistle of St James (chapter 1, verse 20): 'The Wrath of Man worketh not the righteousness of God'. The editor of the *Hereford Times* called it 'by far the most brilliant and convincing pronouncement on the strike that has been delivered by any leader of public opinion in this country'. And even a fifteen-year-old Cathedral School pupil, after the bishop had suppressed the School's coughing at the beginning of the sermon, confided to his diary that the sermon had been 'very fine'.[14] The bishop's fine words, however, were soon overtaken by events. That afternoon, as he returned to the Palace

following Evensong, he discovered that the strike had been called off, the government putting forward a compromise measure whereby, pending a full review, the war bonus of 33s. per week would continue for a year, in addition to the railway workers' weekly wage.

The railwaymen had won their main point, the abandonment of a proposed wage cut, but there was a serious long-term consequence: the gradual transfer of goods from rail to road over the coming years. This, indeed, had happened during the strike week in Hereford. Newspapers were distributed by a fleet of motor cars, other goods were transported to country areas by lorries, and the Merton Company organised a 9-10 hour road service from Broad Street to London via a new 45 horse-power AEC model vehicle which could take up to 30 passengers with their luggage. On the main roads outside the city, motors were described as being 'as thick as flies' and motorists were warned that very careful driving was required. The long-term damage to the rail industry was foreseen in this *Punch* cartoon named 'The Deliverer'.

Figure 2 (right). 'The Deliverer' from *Punch*, 8 October 1919

Such were some of Hereford's labour disruptions during 1919. The impression gained from local records, however, is that, the rail strike apart, industrial disputes were rare. Unionisation was, of course, prevalent even in Hereford. Among corporation employees, many labourers were members of the National Federation of General Workers, for whom Mr S. Box, the district organiser, was a zealous champion. And at a time when prices were beginning to surge ahead of wages, demands for higher pay were inevitable. Not all of Box's demands were met, but in the Hereford Town Hall of 1919, wage differences which came to deadlock were successfully settled by arbitration, the Whitley Council set up during the War for resolving such disputes effectively performing their function in these instances.[15]

So the city itself did not suffer the disorder experienced by other English towns in 1919. During that year, for example, local conditions and insensitivities to the demands of returning soldiers led to sporadic unrest in other West Midland towns, as well as Swindon and Luton, where the town hall was burnt to the ground, ironically during the peace day celebration of 19 July.[16] Hereford, by contrast, was relatively peaceful and was in this sense more typical of an English country town in the War's aftermath. So let us see how the city fared in other ways after the Great War, starting with the peace celebrations.

Peace celebrations

The city councillors at their meeting on the day after the Armistice passed a resolution expressing their 'feelings of profound joy and thankfulness that the indomitable bravery and persistent efforts of the forces of this Empire and its allies by sea, on land and in the air, have resulted in an Armistice conceding the full terms of the allies with a view to the conclusion of the honourable and lasting peace'. They further recorded 'their pride in the great part played by the men of Herefordshire in the Hereford Regiment, the Shropshire regiments, and the second battalion of the Worcester regiment, which includes the old Herefordshire Regiment, the 36th'.[17] Following thanksgivings for the cessation of hostilities—if not the onset of peace, which was not concluded until 28 June 1919 when the Treaty of Versailles was signed with Germany—there was a slow return of Hereford's sons from the war. Essentially, this was a sporadic demobilisation, although a cadre party of the 1st Herefords was officially welcomed home on 23 May 1919, when it was reported that the city was '*en fête*' for the day, the regiment's colours with ribbons won in France, Gallipoli, Egypt and Palestine being 'saluted with honour and admiration by a victorious people'.

Figure 3. The service at the temporary cenotaph in High Town in September 1919 (Derek Foxton Collection)

But the great celebration was to occur on 6 September, 'one of Hereford's greatest days' (so it was claimed), when thousands of returning soldiers and sailors were welcomed home as the 'heroes who for four long years [had] braved the perils of the trenches...[and] the mine-laden

seas to save England and the Empire from a fate too appalling to dwell upon'. A temporary wooden cenotaph that had been erected in High Town was surrounded by flowers placed there 'in memory of the gallant dead', and on the Sunday there was an open-air drum-head service in the square, addressed by the charismatic Hensley Henson, and witnessed by throngs of citizens, including several hundred from over-looking windows (Figure 3). 'It was', proclaimed the bishop, 'a war for the principles of liberty against the principles of tyranny; the law of justice against the law of force...In a word, it was a war for Christian civilisation'.[18]

Figure 4. The flowers around the temporary centotaph in High Town in 1919 (Derek Foxton Collection)

Figure 5 (right). The cenotaph was replaced in 1922 by the war memorial in front of the Shire Hall (Derek Foxton Collection)

When peace came in all but name, some of the better-off Hereford citizens no doubt hoped for a return to the half-remembered halcyon days prior to August 1914, when, as bishop Henson recalled, 'an army of two million volunteers had been brought together by their own choice', 'to the eternal glory of English people'.

One illustration of this desire to return to pre-war days is provided by the cathedral's musical community in its insistence that the Three Choirs Festival should be revived on its old footing. This was at odds with the feeling in Worcester that the festival should only be continued in a modified form, the Hereford view eventually prevailing with the full revival of the Three Choirs at Worcester in 1920.[19] More immediately in early 1919, Percy Hull, an Old Herefordian, accepted the office of honorary conductor of Hereford Choral Society. Rehearsals resumed on 7 February, and a triumphant rendering of Coleridge-Taylor's *Hiawatha* (or at least two parts of it) was eventually performed at the Shire Hall on 25 November, with a chorus of 190, which included 16 tenors and 47 basses, some of whom would have been demobilised that year.[20]

Working women and social change

But whatever the desires of Hereford's musical establishment and its wider social elite, there could be no going back to 1914, such had been the extent of social change brought about by the war. One such change involved the emancipation of women. In Herefordshire, quite apart from keeping the home fires burning, women had been involved in vital war work. In the Land Army, for example, at least one local girl (Miss H.Surridge) was awarded the Distinguished Service Bar for encouraging her fellow workers 'during a period of great strain' (so the citation went) and inspiring them 'with that patriotism necessary to carry through' their 'splendid work'.[21] More directly, splendid but dangerous war work was carried on at Number 14 Shell Filling Factory, Rotherwas. At the height of its activity in October 1918, nearly 4,000 women were employed at the factory, over two-thirds of its labour force. These were the 'canary girls', so called from their yellow skin colour caused by the jaundiced affect of the picric acid that was contained within the lyddite used for making explosives. Ironically, such girls who had done much on the home front to win the war, many of whom would have been young, single and living at home with their parents, were excluded from the provisions of the 1918 Reform Act. That Act had extended the franchise to women over 30 but only on condition that they or their husbands were local government electors. Moreover, with the running down of the filling factory in 1919—by the end of the year the workforce had shrunk to 435 people—and its eventual mothballing in 1920, the hope that Hereford would become a second Woolwich having come to nothing, most of the Rotherwas girls would have lost their jobs. And if they were fortunate enough to have found work, many would probably have returned to domestic service.[22]

By way of contrast, upper and middle-class women in 1919 were increasingly being recognised. Of immense long-term consequence was the government's passing of the sex disqualification Bill which opened jury service, the magistracy and the legal service to women and gave them qualified entry to the upper reaches of the civil service. It was less radical than the Labour Women's Emancipation Bill which had aimed to remove every remaining legal inequality between men and women but was defeated in the Lords. Nevertheless, the government's measure, although it took considerable time before its impact could be felt, was an important milestone on the road to gender equality.

Locally, a certain class of women in 1919 were beginning to make an impact on Hereford society. Although the Woolhope Club refused to countenance the election of two women nominated for membership by Dr A.E. Boycott, an Old Herefordian and distinguished pathologist (the son, in fact, of the Boycott of Boycott Road whom I will come to), other clubs did not so demur. The city's rowing club, for example, resolved in March 1919 to admit lady subscribers for another year, 'it being acknowledged that during the war their subscriptions had unquestionably saved the club', and the newly constituted Herefordshire sports club similarly welcomed women members.[23] Politically, too, women were slowly being accepted in a representative capacity.

Mrs E. R. Diamond, the lady mayoress, was among their number in the Herefordshire county elections of March 1919. She was one of 36 'reconstructionists' returned (out of a Council of 50), all of whom were pledged to support the bold schemes of reform outlined in Bishop Henson's progressive programme. Eight months later, in early November in the first such election for six years and a few weeks before Lady Astor took her seat in the House of Commons, Louisa Henrietta Luard—the daughter of Canon Lidderdale Smith and widow of a war hero—was returned as the first lady member of the Hereford City Council, the local

electorate having nearly doubled to almost 9,000 following the extension of the franchise (Plate 3.1).[24]

In her election manifesto, Mrs Luard had said this: 'Being a woman, I am a firm believer that economy can be combined with efficiency'.[25] And economy and efficiency were certainly required in a period of increasing national debt, rising prices and periodic shortages of coal and certain food stuffs. One indication of this was the introduction of a new national rationing system in the autumn of 1919—the old coupon that characterised the 1918 election being abandoned—and the continuation of rationing for meat, sugar and butter throughout the year. Bold local measures of social reconstruction were also a pressing necessity. One of these measures was the creation of a well-equipped maternity and infant welfare centre in 135 St Owen Street adjacent to the Town Hall. It was opened by Mrs Luard in early 1920 and then administered under the auspices of the Council by a management committee which included working women.[26]

National post-war optimism

Before examining other developments in 1919 Hereford, we need to consider the national picture and the extraordinary sense of optimism that followed the closure of the war to end all wars. This hope was symbolised by Lloyd George's promise on 23 November 1918 at Wolverhampton that that his party would 'make Britain a fit country for heroes to live in'. (Often misquoted!) More prosaically the following month, C.T. Pulley, Hereford's new MP, also reflected the national mood in his victory speech on the Mitre Hotel's balcony. He had polled more than 8,000 votes than the Labour candidate whose refusal to campaign on moral grounds had no doubt hindered his cause. 'The war has been a shattering event', Pulley proclaimed, 'and...we have to build up a healthier, happier and more self-supporting country on the foundations of the old one; and to do this thoroughly and successfully...[will] take and require our resources, energy and money to the utmost limit'.[27]

Reconstruction was indeed the watchword in the early months of peace. A new Ministry of Reconstruction concerned with post-war social and economic planning, had been established in July 1917 under Christopher Addison, whose work gave the coalition government its domestic agenda. Addison as President of the Local Government Board in January 1919 and then (from June) as the first ever Minister of Health was responsible for implementing much of the government's domestic manifesto. His Housing and Town Planning Act, as we will see, became the flagship of this reconstructionist programme.[28]

Reconstruction and development in Herefordshire

The new coalition government's policies of reconstruction were prominently disseminated to the provinces in the early weeks of 1919. Their details had even entered the consciousness of our schoolboy diarist—the Minister's namesake, although not his relation, Sydney Addison—who recorded on 17 February 1919 that he had attended a 'very good' lecture on 'Industrial Reconstruction' in Hereford Town Hall. This was the third in a series of talks on reconstruction delivered by E.L.S. Horsburgh.[29] Similar 'Oxford extension' lectures would no doubt have been given throughout the country during this period. Around the same time, Bishop Henson promoted a programme of social reconstruction in anticipation of the impending county council elections, appealing for 'better housing, better education, a larger outlook on life, richer opportunities for the people [and] a more evident and direct interest in the soil of the most beautiful county in England'. The following month 36 out of the 50 candidates returned were

'reconstructionists', who had pledged to support Henson's progressive scheme. 'The electors of Herefordshire', declared the editor of the *Hereford Times*, 'have decided in favour of a programme which for the first time in the history of our local government forms a consistent and concrete set of proposals designed to meet the new needs of the times'.[30]

In the immediate aftermath of war such schemes were a pressing necessity for the city as well as the county, and in that boom period—caused by the government's over-hasty deregulation of war-time economic controls—a start was made to developing Hereford's infrastructure. The two major corporation initiatives of 1919 were the extension of its electricity supply network and the start of the first major council house building programme in Hereford's history. It is to the council's great credit that it forged ahead with both of these projects which were eventually to change the face of the city and its surrounding countryside in the inter-war period.

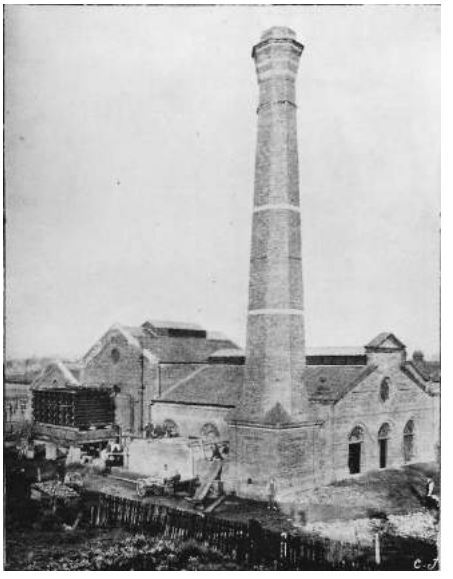


Figure 6. The power station in Widemarsh Street as seen from the cattle market (© Michael Rose)

Figure 7 (left). The power station frontage as seen from Widemarsh Street (Derek Foxton Collection)

An electricity plant had been established in Widemarsh Street in 1899 and then modernised and enlarged following the building of the Rotherwas munitions factory in 1915 (Figures 6 and 7). Ironically, at the end of the war, it was the threat of closure to the shell filling factory that was to provide the spur to the extension of the electricity grid, both within the city and the surrounding area. In late November 1918, only days after the signing of the Armistice, W.J. Kerr, chief engineer to the Council, reported to the electricity sub-committee, that the power supply to the Rotherwas munitions works had 'fallen off considerably', that they were 'faced with the closing down of the factory', and that it would be necessary 'to safeguard the interests of the department'. At the same meeting, the committee decided to consider 'to lay lines and supply power and lighting in the district', to investigate the possibility of obtaining a loan from the Ministry of Reconstruction and to begin negotiations with the Hereford District Council.[31] Over the course of the following year these plans were carried out: a £13,000 loan was successfully arranged with the government's development commissioners for a 20-mile

extension to the network, the corporation also being indemnified by the Ministry of Munitions for its outgoings for supplying the Rotherwas factory.[32]

That these schemes were accomplished was in large measure due to the efforts of the chief engineer, whose salary, in recognition of his work, was increased twice in nine months to £700 per annum, with a 1% bonus on the revenue derived from the extended scheme.[33] As a consequence, throughout 1919—particularly after the lifting of government controls—applications for power and light supplies were received almost daily from citizens, businesses and institutions within the city and locality. By way of illustration, supply was extended to Messrs. Greenlands cabinet works in Foley Street; steps were taken that summer to light the teacher training college throughout its buildings (three years earlier, it has to be said, than the Cathedral School) and agreements were made with Hereford RDC, as well as nine other rural district councils, for overhead power lines to supply electricity to their various parishes.[34] Loans were then secured for two new transformer stations near Eign Mill cottages and Rylands Street; 3,400 yards of cable and other hardware for the extension of the works to Hunderton. The disappearance of the poles—having been put on a train before the rail strike, they still had not arrived in Hereford by mid-November—delayed the start to the extension of the rural network but before the end of the year the chairman of the electricity committee could report to the Council that the first overhead line to Breinton had been started.[35]

By such means over the coming years, both the lives of Hereford's citizens and the landscape of the Herefordshire countryside were slowly but irrevocably changed. By 1922, *Kelly's Directory* indicated that the corporation's electricity plant was supplying 538,024 Herefordshire acres with 4,610 KW of power, compared with 850 KW over seven square miles in 1917. It was little short of a domestic and industrial revolution within the county, enacted in less than a quarter of a century from the first corporation electricity supply from its Widemarsh works on 14 December 1899. Most of this change had occurred in the immediate aftermath of the Great War.[36]

Housing development

Much was also to change in post-war Hereford in terms of social housing. As may be seen from a Hereford map of 1912 (Figure 8), the city was essentially confined to its historic centre, with very little development in its modern suburbs. But before the end of 1919, a start had been made to re-housing a part of its population from slum dwellings by the building of the first of 232 council houses that were planned for Breinton and Ross Roads, Portfields and Mostyn Street.

This was made possible by the passing of the Addison Act on 31 July that year. The Act launched a massive national local government housing programme. A new principle was established of a Treasury subsidy to cover the difference between the capital costs and the income earned through rents from working-class tenants, over and above a penny rate levied by the local authorities. The scheme was soon to run into the sands through a shortage of skilled workers, the unions opposing 'dilution' of trades through the use of the unskilled, soaring costs of the Treasury subsidy as a result of the uncontrolled prices of raw materials and the inabilities of some local authorities to cope with their new responsibilities. Nevertheless, despite these difficulties, 210,000 houses were eventually built for working people as a result of the scheme. It was but a drop in the ocean compared with the half a million homes needed but—and crucially for the future—Addison had established a new principle of housing as a social service.[37]

Figure 8. Plan of Hereford in March 1912 by E.G.Davies

As with electricity, Hereford's corporation was quick off the mark in taking advantage of the apparently favourable conditions for house building for the 'working classes' (as the Addison Act named them) in 1919. Some preparations had been made in the last year of the war, the Council housing committee having already responded to the Local Government Board circular of March 1918 about the provision of public funding. And within days of the Armistice, sites had been identified for purchase: land between Breinton Road and Westfaling Street and adjacent to the cemetery; part of Portfield Meadows; land in College Road, at the junction of Ross Road and Walnut Tree Lane and in Mostyn Street (which the corporation had already acquired). All told, it was reckoned that these 54 or so acres would accommodate 482 houses, half of which were to be built in the first tranche. It was one thing to identify sites; it was another to acquire them from five different owners: the Ecclesiastical Commissioners; the

Custos and Vicars of the College; the Trustees of the estate of William Boycott—formerly a Hereford solicitor, a city councillor and father of A.E. Boycott already mentioned; the Hereford Society for Aiding the Industrious and the Hopton Estate. The last two owners were uncooperative, resulting in the Council resorting to the compulsory purchase of the land at Portfields and College Road. Notices, too, had to be served on the tenants of allotments at Portfields, Mostyn Street and Breinton Road, a significant portion of the 900 holders of allotments in the city at that time. Needless to say, the petition organised by Mr F. Parker of the Fosse (another HCS parent), on behalf of the 71 tenants of the allotments near Bath Street, got nowhere.[38]

Figure 9. Houses under construction on Ross Road

Such difficulties were mostly overcome by the end of 1919. At their meeting of 9 December the Council committed to the biggest development project up to that time in Hereford's history. Following an assurance that the government would make good any loss the Council incurred in bank interest payments (estimated at £10,000 to £12,000 annually), Mayor Steel, together with the aldermen and councillors, affixed the city seal to loans worth over £160,000. A contract with John Laing & Son, then a relatively unknown Carlisle building firm, was also signed for the erection of 232 houses. That day, too, G.B. Greenland—who owned the High Street store, chaired the housing committee and is the third HCS parent of this story—cut the first sod on the new road between St Nicholas Rectory and the Cemetery, for the first of the 64 brick houses to be built on the Breinton Road site. At this ceremonial opening, Walter Shimmin, the new borough engineer and surveyor, who was to oversee the construction of the Hereford housing estates between the wars, was quoted as saying that 'every endeavour' had been made 'to meet the requirements of the working classes in need of houses', and that preference would be given to occupancy by former servicemen.[39] For those fortunate enough to acquire them, these were indeed homes fit for heroes, even if the 232 houses initially planned to be built barely touched the surface of Hereford's acute housing shortage (Figure 9).

The Hereford of 1919

Despite the Armistice and the outbreak nationally of (as one historian has put it) 'a near delirious happiness',[40] the war had left a legacy of mourning from which scarcely any family escaped. The coming of peace was certainly celebrated in Hereford, initially by the

professional and business classes at the grand ball of 26 February held here in the Shire Hall, where the victory decorations impressed one observer ‘as most fittingly patriotic but also as expressive of our feelings of relief and gladness from the terrible strain of the conflict’ and later by everyone on 26 July peace day festivities at a cost of over £1,000 from the Mayor’s special fund. But the reminders of the horrors of war were never far away: in the display of German trophy field guns and trench mortars, one of which found its way to the Cathedral School; in the temporary wooden High Town cenotaph, inscribed with the words ‘Live thou for England as I for England died’; in the appeals for more permanent memorials and rolls of honour for hundreds of men from the county who had made the supreme sacrifice; in the two minutes’ silence observed for the first time at 11am on Tuesday 11 November 1919 and in the gradual return to Hereford of demobilised soldiers and sailors, scores of whom were both disabled and unemployed more than a year after hostilities had ceased.[41] War-time conditions of rationing and occasional profiteering, together with escalating prices, also continued to prevail, as did periodic labour disputes. And then there were the newer traumas: the influenza epidemic of 1918-19, and the remoter but widely-held fear of Bolshevism stoked by wild stories in the national press which were often repeated by local newspapers. One such was picked up by the *Hereford Times* from a *Daily Mail* report which informed its readers that Soviet women had been nationalised with the imposition of 'free love without restriction' for those aged between 17 and 45.[42]

Communist sexual politics, however, did not have much influence on behaviour within the city of Hereford where popular recreations were generally more seemly and predictable. Pre-war cultural, social and sporting clubs were strengthened by the return of peace. To give just one example of a popular recreation: 4,832 games of bowls were played on Castle Green in 1919, returning to the corporation a net profit of £9 13s 10d.[43] But other less traditional activities were also being pursued on Castle Green. In the late summer, the Green was given over for two evenings each week to Hereford’s newly-established chamber of commerce for dancing and band promenade concerts, and Mill Street gardens were used for ‘pierrots performances’—with a screen, of course, for changing.[44] It was not to everyone’s taste. A couple of months later, Dawson, the greenkeeper, ‘strongly’ recommended that permission to hold dances on the Green should be withheld because it encouraged ‘so much indecency afterwards’.[45] Perhaps, like those who had joined in the ‘raging jazz dance’ which had incongruously featured with the foxtrot and hesitation waltz in the February victory ball,[46] these young men and women had been dancing to Dixie-land jazz which came to England in 1919. And it was not only the Hereford greenkeeper who towards the end of the year thought that things in the country had gone too far. Lloyd George in a speech at Manchester in December said this: ‘The year has been one without parallel. Loosed from the nightmare of a long and bitter war, we have given ourselves over, with an abandon almost continental, to an orgy of pleasure. Never was money poured out so freely on more selfish pursuits; seldom more unwisely by all classes, except the new poor and the chronic poor’.[47]

The Prime Minister’s appeal against extravagance in private as well as public life was understandable but one-sided. In Hereford at least, alongside the gyrating and profligacy, positive social advances can now be discerned in the war’s immediate aftermath. Despite the dislocations that led to Lloyd George calling 1919 ‘this sinister year’, new opportunities were being grasped in this city. Women of a certain class were beginning to be recognised in the professions and in politics. Social housing was for the first time becoming a major responsibility of local government. The spread of electricity was improving the lives of

citizens, as well as altering the local landscape. And with the increase of private motor vehicles, establishment of public bus companies and the tarmacking of streets—Mayor Steel securing £7,000 for this purpose before the year was out—Hereford's horse-drawn society was also slowly being modernised.[48]

In late December 1919, the *Hereford Times* described the celebration of the city's Christmas season at the end of the first year of peace.[49] It reported that Hereford had welcomed that 'peace-year Christmas with open arms'. The war had produced 'a splendid camaraderie' among the ex-servicemen, and ladies were no longer solitary now that their men had returned. Shops seemed like fairy-land, adorned with brilliant coloured lights, and window displays had revived 'their old allurement'. Drapery establishments had regained their charm, despite the rise in prices; confectioners had 'sprung up like mushroom' and had taken on 'an unusual seductiveness' and hardware businesses 'presented a glittering array of useful and decorative articles'. The appetite for fruit was proved by the number of people queuing up to buy them, apples being one of the few items being sold at pre-war prices. Through the slackening of controls, indifferent mutton or 'good old roast beef of old England' (although not poultry), together with 'delectable plum pudding', was again available for Christmas dinner. Coal was just sufficient, although reserve stocks had to be drawn on.[50] Domestic parcel and letter traffic was at an all-time high. The railway station was thick with trucks, trains were packed and there was a full holiday programme of entertainment to outdo anything that Hereford had seen before. And even the paper's editor was optimistic about the future. 'The war', he wrote, 'will be the making of a new Hereford: the achievement of patient work...[by] the city fathers. Already we see the outlines of a new garden city, in which bright and happy children will, let us hope, be reared, and where natural love and affection will reign supreme. Give up vision and life is useless. Deny that the best is yet to be and our city is doomed. We must be practical idealists if we wish to create a future worth living in'. Even though this vision was never fully realised, at the very least, these are noble words.

REFERENCES

[1]*Hereford Times* (henceforth *HT*), 20 Sept. 1919, p.4; quote from. Frank Dilnot, a Labour writer.
[2]Such disorders are well described in Simon Webb, *1919: Britain's Year of Revolution* (Barnsley, 2016).
[3]Herefordshire Archives and Records Centre (HARC), BO 35/2, report of D. Drybrough Gold, acting Medical Officer of Health, for quarter ending 31 Dec. 1918.
[4]HARC, BO 35/2, Council resolutions, 12 Nov. 1918.
[5]Howard Tomlinson, *Hereford Cathedral School: A History Over 800 Years* (Logaston, 2018), p.374.
[6]HARC, BO 35/2, report of J.W. Miller. Medical Officer of Health, for quarter ending 31 March 1919.
[7]*HT*, 1 March 1919, p.10.
[8]Tomlinson, *Hereford Cathedral School*,p.367.
[9]HARC, BG11/Dd/11, pp.427-28, Surveyor's report to the Roads Committee meeting of 10 June 1919. In mid-October 1918, the government had accepted the proposal of Christopher Addison (Minister of Reconstruction, 1917-18) that a non-contributory unemployment scheme should be established and open to all discharged workers, the Acts of 1911 and 1916 having provided only for insured workers. See Kenneth and Jane Morgan, *Portrait of a Progressive* (Oxford, 1980), p.79, for the genesis of this scheme and *HT*, 14 June 1919, p.4, for an excoriating editorial ('Demanding Dole') condemning its provisions. Its editor demanded the abolition of the 20s. weekly payment received by each of the unemployed (1,300 men and 650 women) then on the Hereford Labour Exchange registers.
[10]HARC, BG11/Dd/11, 9 Aug. 1919, pp.4, 9; HARC, BO 35/68, pp.374-75, 377, F&GP Committee minutes, 8 Aug., 16 Sept.1919.
[11]HARC, BO 35/184, p.13, Watch Committee minute, 6 Oct. 1919.
[12]*HT*, 4 Oct. 1919, pp.4ff; HARC BO 35/2, Waterworks and Lighting Committee report, 30 Sept. 1919.

[13]Tomlinson, *Hereford Cathedral School*, pp.367, 375n. and Hereford Cathedral School Archives, Governors' Minute Book for 1919.
[14]*HT*, 11 Oct. 1919, pp.4, 12; H.H. Henson, *Retrospective of an Unimportant Life, vol. 1863-1920* (Oxford, 1942), pp. 316-17; Tomlinson, *Hereford Cathedral School*, p.367n.
[15]See, for example: HARC, BG 11/Dd/11, p.445, Roads Committee minutes, P.B. Clegg Mellor's arbitration award, 24 Sept. 1919; BG 11/9/Da 8,pp.151,162, Gas Committee minute, 24 March 1919, referring to the arbitration ruling between the National Gas Company and the National Federation of General Workers, 20 Feb. 1919.
[16]Webb, *1919*, pp.89-91.
[17]HARC, BO 35/2, Council resolutions, 12 Nov. 1918.
[18]*HT*, 24 May 1919, p.5; 6 Sept. 1919, p.4; 13 Sept. 1919, p.13.
[19]*HT*, 1 Feb. 1919, p.4; A. Boden and P. Henley, *The Three Choirs Festival* (Woodbridge, 2017), pp.192-94.
[20]*HT*, 25 Jan.1919. p.7; 29 Nov. 1919, p.9.
[21]*HT*., 29 Nov. 1919, p.4.
[22] *In the Munitions: Women at War in Herefordshire* (Logaston,2013), pp.3-4; A. Johnson and R. Shoesmith (eds.), *The Story of Hereford* (Logaston, 2016), p.281. For an angry letter, written on behalf of discharged factory girls, see *HT*, 22 Nov. 1919, p.8.
[23]*HT*, 29 March 1919, p.7 (rowing club); 12 April 1919, p.7 (city sports), p.8 (Woolhope Club).
[24]*HT*, 8 March 1919, p.8; 8 Nov. 1919, p.11. Mrs Luard was one of the most notable of the county's public servants in this period. During the Great War, she was a founder of the Herefordshire Light Infantry War Fund which raised £7,000 for food parcels for prisoners of war in Germany and she became Hereford's first lady mayor in 1937.
[25]*HT*, 25 Oct. 1919, p.5.
[26] HARC, BO 35/2, reports of F&CP Committee to Council, 1, 30 Jan., 29 May 1919, re purchase of the centre; *HT*, 27 Dec. 1919, for its opening and management.
[27]*HT*, 4 Jan. 1919. The Labour candidate was the trade unionist, Mr S. Box, who polled 3,730 votes compared with Pulley's 11,689. Little more than 50% of the constituency's potential electorate actually voted.
[28]Morgan, *Portrait of a Progressive*, pp.70-88 and below, p.[13].
[29]Tomlinson, *Hereford Cathedral School*, p.366 (where the name of the lecturer is incorrectly given); *HT*, 25 Jan. 1919, p.5.
[30]*HT*, 8 Feb. 1919,p.9; 15 March 1919, p.4.
[31]HARC, BG 11/9/Fa2, pp. 318-19, report and Electricity Committee resolutions, 26 Nov. 1918.
[32]HARC, BG 11/9/Fa2, pp.323-24, Electricity Committee report, 31 Jan. 1919; p.352, minute, 30 Dec. 1919, re securing of the loan and indemnification; HARC, BO 35/2, Council resolution, 4 Feb. 1919.
[33]HARC, BO 35/68, p.372, F&GP Committee minute,1 Aug. 1919; HARC, BG 11/9/Fa2, pp.316-17, Electricity Committee minute, 25 Oct. 1919.
[34] HARC, BO 35/68, pp.331, 337, 340-43, Electricity Committee minutes, 25 March, 24 April, 8 Aug. 1919; Tomlinson, *Hereford Cathedral School*, p.381, for the lighting of HCS.
[35]*HT*, 15 Nov. 1919, p.12.
[36] *Kelly's Directories of Herefordshire and Shropshire* (12th ed. 1917; 13th ed. 1922)*;* Johnson and Shoesmith, *Hereford*,p.267; HARC, BG/11/9/Fa 2, pp. 315-54, minutes and reports of the Electricity Committee, 25 Dec. 1918 to 31 Dec. 1919.
[37]Morgan, *Portrait of a Progressive*, pp.100-11; *Oxford Dictionary of National Biography*, article on Christopher Addison, 1st Viscount Addison, 1869-1951, by Kenneth O. Morgan.
[38]This account is based on the Corporation Housing Committee minutes and reports: HARC, BG 11/9/Fb2, pp. 192-257, 25 Dec. 1918-1 Jan. 1920.
[39]HARC, BO 35/2, Council resolutions, 9 Dec. 1919; *HT*, 13 Dec. 1919, p.6.
[40]R. Blythe, *The Age of Illusion: England in the Twenties and Thirties* (London, reprint, 2010), p.6.
[41]Around 10% of the 744 men unemployed in the Hereford and district area in November 1919 were ex-servicemen: *HT*, 8 Nov. 1919, p.4; 22 Nov. 1919, pp. 8 (letter), 13.
[42]*HT*,15 March 1919, p.5.
[43]HARC, BO 35/208, p.149, Estates Committee report, 21 Oct. 1919.
[44]HARC, BO 35/208, p.139, Chamber of Commerce request and Estates Committee resolutions, 29 July 1919.
[45]HARC, BO 35/208, p.143, Estates Committee meeting, 23 September 1919. Dawson's allegations were disputed by the Chamber of Commerce. Ibid., pp.147-48, letter from the Secretary of its Advertising and Entertainments Committee, 21 Oct. 1919.
[46]*HT*, 1 March 1919, p.7.
[47]As reported by the *HT*, 13 Dec. 1919.

[48]Although in 1919 horses were still extensively used by the city corporation, as well as commercially. For the corporation's purchase and use of horses: HARC, BG 11/Dd/11, pp.408, 422, 429, Roads Committee minutes, 11 Feb., 29 April, 10 June 1919; for complaints of the Farmers' Union that the tarring of city roads 'made them unfit and dangerous for horse traffic': HARC, BO 35/172, p.46, 25 Nov.1919; for excrement on Hereford's street: *HT*, 1 Nov. 1919, p.8 and for a complaint about the inconvenience caused by the excessive camber of Widemarsh Street: *HT*, 13 Dec. 1919, p.9.
[49]*HT*, 27 Dec. 1919, p.4.
[50]It was earlier reported. *HT*, 20 Dec. 1919, p.8.

Accommodation for Cider Making in eastern Herefordshire

By EDWARD PETERS

The following analysis of accommodation for cider making in eastern Herefordshire is based on records of farm buildings built before about 1880, made by the writer over the last 40 years, much of it in the last 20. The area covered includes Acton Beauchamp and Mathon parishes, which were transferred to that county from Worcestershire in 1897. The recording was of necessity affected by what had survived, or had not been converted to some other, non-agricultural use, and by the availability of permission, which was only rarely refused. It must, in return, be noted that none of the buildings mentioned are open to public inspection. 298 are included in the analysis, with a further seven where only the use of the loft or whether it was attached to the farm house were noted.

Historical background

The earliest reference to cider making in the county found by the writer is in 1308, in Bosbury parish; Piers Plowman referred to perry later in that century. Orchards were recorded in the county by the early 16th century.[1] The Civil War introduced cider as a cheap drink to many, encouraging its manufacture. A little later the Rev. John Beale wrote on Herefordshire orchards; he had carried out experiments to improve the quality of cider. At the end of the 17th century Celia Fiennes noted that the county was very full of apple and pear trees.[2] In the 18th century the county was exporting cider. Falkner noted that some cider apples were poor on their own, but excellent if different types were blended. The agricultural returns which began in 1866 show that there were orchards in every parish in the county. Commercial production of cider began near Hereford by 1850; Bulmer's factory dates from 1880, and Weston's, at Much Marcle, from eight years later.[3] In 1894 one landowner considered that farmers with large acreages of apples and hops had not suffered badly in the depression. However, Hall, writing in 1911, considered that cider was not well made on farms in the north of the county, only a few taking the trouble to blend different types of apple. Lack of marketing was a problem.[4]

The apples were knocked off the trees with poles, left for some days on the ground, then collected into heaps some three or four feet high, and left for three weeks. This allowed them to mellow, reducing the water content and increasing the sugar. Windfalls were said not to be used, as producing inferior cider.[5] The apples might be stored in lofts, spread out no more than ten inches deep; decayed apples were removed before grinding in a cider mill.[6]

Cider mill buildings

Buildings for housing the mill had appeared in Gloucestershire and Monmouthshire in the 17th century; in the former county the mill was said to have been earlier in the open. Mrs. Grundy noted that early illustrations suggest that in Herefordshire early buildings had open sides, with timber posts to support the roof.[7]

Looking first at the buildings, the majority of the surviving ones had an upper floor, only 16% being single storey (Figure 1). In about two-thirds of those with upper floors, they were

used for granaries or hop drying; they were divided about equally between the two, after allowing for 6% where use for hops was a later development, as at Church Farm, Mathon. However, it should be remembered, as I. Homes noted, that hop drying only needed the building for about two months in the year, and that the upper floor could be used thereafter as a granary. This could well affect the subdivision.

Figure 1.Treduchan Farm, Llangarren parish, granary over cider mill

A very few cider mills were on the ground floor of a three-storey building, built in the late 18th or early 19th centuries as a granary.[8] In about a fifth of the buildings the use of the upper floor is not clear. Some, with very low side walls, may have been the apple stores mentioned by some writers. Some of those listed as probably granaries or for hops and so analysed, might have been for apples.[9] In six cases the cider mill was in or under part of a threshing barn, usually the result of alteration, as at Tyrrel's Frith Farm, Little Marcle. Some of these were open to the roof, others, as at Tyrrel's Frith, had a loft over, open to the threshing floor. In one case, in Wolferlow parish, the mill was in a room set completely below the end of the barn, taking advantage of the slope.

On the single-storey examples, one, at Hill House, Cradley, was in a square building on the side of a threshing barn. It appears that it was originally intended to house a horse engine to drive a threshing machine in the barn. Only four cider mills were in open buildings, that is open on one side, like a cartshed or shed for yard cattle, as at Downfield Farm, Sutton St Michael.

A quarter of the cider-mill houses were attached to the farm house, or were part of a range of buildings extending out from the house. The Pound, Coddington, is an example of the former as is Copley Farm, Cradley (Figure 2).

In date, the majority of the surviving buildings are from the late 18th or the 19th centuries; a number date from earlier in the 18th century and a few from the 17th. They were largely built of stone, brick accounting for only 15%, timber-framing for a slightly larger

proportion. The buildings were generally plain, only a few had some slight architectural pretensions. One exception, in the cottage ornée style, was designed in 1792 as the centrepiece to a proposed new village at Stoke Edith. It was not, however, built.[10]

Figure 2. Copley Farm, Cradley, cider mill attached to house; rear hop kiln erected later

The majority of the buildings were between 14 and 19 feet across, with a number more up to 22. At the other end there were a few down to just over 12 feet, and one, surprisingly, as narrow as 11 feet 4 inches. The room was generally longer than its width, but a few were shorter: where this happened, the shorter dimension has been used in the analysis. The narrowest dimension was related to the size of the mill, a space of about three feet being needed all round for the horse or other animal to drive it. In 15 cases, however, the building was too narrow or the mill was badly positioned, so that it was necessary to cut or build curved recesses in the walls to allow enough space for the horse or frame. In two cases, a brick side wall was built to a curve, as at Broadmoor Farm, Woolhope. At Hill Farm, Much Marcle, the mill was set too close to one corner, so that two adjacent walls were affected. In most cases it was two opposite walls, producing a slightly narrower building. In a very few, however, the mill was offset, and only one wall was affected. At Downfield Farm, where the mill is in an open-fronted shed, one post had to be offset. In view of the difficulty in moving the mill, once positioned, because of its weight, it is possible that in a few cases the mill may have been set up first and the building erected round it. In a few cases the building was not large enough to house both the mill and press, a small extension being provided for the latter, as at Mayfield Farm, Bishop's Frome.

In a few cases cider making was not the original use of the room. At Steward's Hyde, Bromyard, the mill was installed in space originally partly occupied by hop kilns, when a new kiln was built elsewhere to replace them. Or equipment may have been moved within the room, as possibly at Moor Abbey, Middleton on the Hill, where the press, dated 1826, blocks a doorway, indicating either replanning of a 17th-century building, or a change of use.

Cider mills

Turning to the equipment involved, in many cases it is no longer present. The mill may have become a garden ornament, but care is needed here, as the original mill may have been sold, and the garden ornament be one purchased by a later owner from another farm.

Figure 3. Mill, Stoney Villa, Cradley

Figure 4. Mill, Upper Walton, Much Cradley

The mill itself consisted primarily of a circular stone base in two, or in larger cases, more pieces, held together by iron cramps. A trough was cut into its upper surface, some 8 or 10 inches deep, the outer edge sloping. The trough had a smooth finish. Many had a wooden curb on the outer edge, held in place by iron pins or T-shaped cramps externally (the fixings may be the only evidence surviving for the curb). With the curb, there would have been a timber pad on the central, flat stone section. I. Homes considered that such curbs were normal in the county.[11]

A heavy stone roller was pulled round in the trough (or in some cases pushed) connected to a rotating timber axle, with a frame at the outer end for the horse. At its other end the axle was attached to a central, vertical timber which rotated with the roller. The post was held at the top in a socket either attached to the side or set in the underside of a heavy beam.

If the design of the building did not permit this, the socket could be attached to a timber fixed to the underside of the floor joists above. The socket may now be the only evidence for the position, or indeed the existence of the mill. Circular paving for the horse walk may occasionally survive in the floor. The overall diameter of the mill varied between about 6 and 8 feet, 6 inches, a few were larger. The smallest found was only 4 feet, 6 inches across. It was important not to overfill the trough, lest the roller should ride up over the apples. It was not only important properly to crush the apples, but also the pips, as they affected the flavour. A wooden tool was used to return any pulp collecting on the sloping side of the trough, to ensure that it was properly crushed.[12] The pulp may have been kept for a day in a vat before pressing, some considering that this improved the flavour. The mill could also be used for crushing pears to make perry, and I. Homes considered that it might also be used to crush oats.[13]

Cider presses

The pulp was then moved to the press. This consisted of a square, circular or polygonal stone or timber base, with a groove round the outer edge leading to a projecting lip. This discharged over a stone trough or half barrel. On either side were substantial timber uprights supporting a heavy cross beam: a further beam slid up and down between the posts, held in grooves in their inner faces. In earlier examples this was operated by a threaded timber screw, with, at the foot, a large knob with holes for bars to turn it. Iron screws appeared in the late 18th century.[14]

The sliding beam pressed on a timber flat plate on top of the pulp. The pulp was built up in layers on the base plate, each about six inches deep. Initially straw was used between the layers, but by the late 18th century horsehair cloths were being used to wrap the pulp, this being considered a better system. It also had the advantage of enclosing the edges of the layers. These were stacked six or so high before pressing. The juice was then put into vats, to allow impurities to collect at the bottom. The clear liquid was then racked off into fresh barrels, with further racking at intervals to check fermentation, and to retain some sweetness. The pulp, after pressing, could be watered and reground, to produce a weak cider.[15] By the 1830s presses with threaded iron uprights with iron screws to operate the sliding beam had appeared. An example was at Nuttal Farm, Much Marcle.[16]

Figure 5 (left). Cider press, Stoney Villa, Cradley

The pulp, once any juice had been fully extracted, could be mixed with lime and used as manure, or it could be fed to pigs. The cider house at Cambridge Farm, Castlemorton, in Worcestershire, had a room adjoining to store the used pulp; the pigsties were nearby for ease of feeding.[17]

The cider was stored in barrels, kept horizontal, often in a cellar below the farmhouse. This had wide doors, reached down a flight of steps. If the floor above was boarded, any unauthorised taking of cider was likely to have been heard. Alternatively, a lean-to, probably on the north side of the cider house, might be used, very occasionally a separate building. The store had only a few windows, if any. The barrels were ranged along the sides of the room, with a central walk-way, often with drainage channels each side.[18]

Buildings for housing cider-making equipment might also be found with cottages, though these must have had at least enough land for an orchard. There are examples on Coppet Hill in

Goodrich, equipment at one of which is illustrated (Figure 6). Occasionally the doorway to a building had to be altered to allow use of large barrels, as can be seen the The Old Court House, Goodrich (Figure 7).[19]

Figure 6. Cider press in a settlement cottage, Coppet Hill, Goodrich. Note the small day barrel and the planks for the press. (R. Lowe)

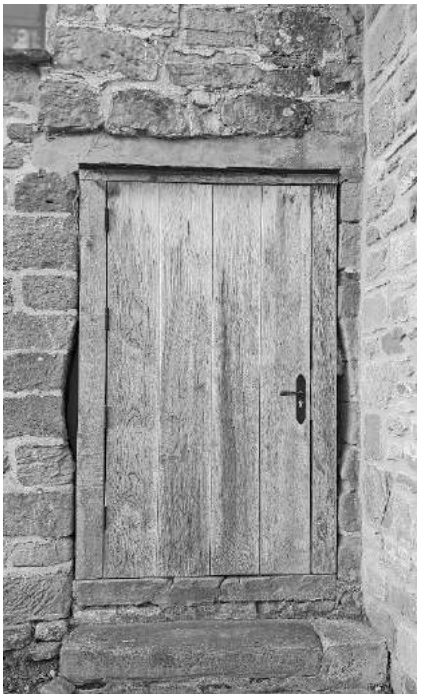


Figure 7. An early doorway which has been hollowed to allow large barrels through at The Old Court House, Goodrich, modern door and surround hiding door with 17th C hinges. (R. Lowe)

Travelling cider makers

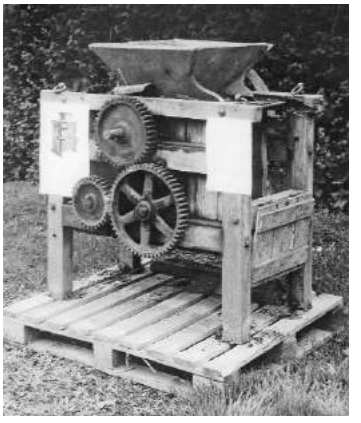


Figure 8. Scratter at Bosbury Cider Festival, 2006

There were also, by the late 19th century, travelling cider makers, which avoided the need to provide a fixed mill and press and a building to house them. Newhouse Farm, Tedstone Delamere, made use of them. A travelling cider maker would have used a scratter, a small, portable machine with rollers, with knives attached to cut up the apples; a few had narrow, stone rollers instead, the gap between them adjustable (Figure 8). One of the latter type is preserved at Avoncroft Museum in Worcestershire. Earlier scratters would have been hand operated, but later ones had a wheel for belting from some source of power. Very occasionally a farmer might have had a scratter, rather than a stone mill. However, the cider produced by a scratter was not so good as that from a stone mill, as the pips were not crushed. The cider, once made, still needed to the stored at the farm, so provision would have been needed for this.[20]

Buildings for cider-making and the equipment used may have varied in other parts of the country. In Devon and Somerset, for example, the buildings were said to have been smaller than in Herefordshire, as scratters were used rather than stone mills for crushing the apples.[21] The writer has, however, seen examples of stone mills further west in Cornwall.

REFERENCES

[1] Cooper, J. *et al*., *Bosbury*, 2016, p.34; Gaut, J., *A History of Worcestershire Agriculture*, 1939, p.75; Duncumb, J., *General View of the Agriculture of the County of Herefordshire*, 1805. p.76.
[2] Thirsk, J., ed., *Agrarian History of England & Wales*, 1640-1750, vol. vii, 1985, p.303; Thirsk, J., *Economic Policy and Projects*, 1978, p.140; Morris, C., Ed., *The Journeys of Celia Fiennes*, 1949, p.43.
[3] Various, *The Story of Hereford*, 2016, pp.208-9, 273; Falkner, F., 'On the Cultivation of Orchards and the Making of Cider and Perry,' *Journal of the Royal Agricultural Society of England*, IV, 1843, p.368; Agricultural Returns, comment by A. D. M. Phillips at Historic Farm Buildings Group conference at Hereford, 2005;
[4] Robinson, G. M., 'Agricultural Depression', 1870-1900, *Transactions of the Woolhope Club* (*TWNFC*), vol. xlii, 1978, p.268; Hall, A. D., *Pilgrimage of British Farming*, 1914, p.196.
[5] Falkner, p.400; Rowlandson, T., 'Farming of Herefordshire,' J.R.A.S.E., XIV, 1853, p.441; information from Cider Museum, Hereford.
[6] Inf. from Cider museum, Hereford; Marshall, J., *Rural Economy of Gloucestershire*, 1788, pp.289-90; Falkner, pp.401 & 403; Pitt, W., *General View of the Agriculture of the County of Worcestershire*, 1813, p.155.
[7] Newman, R., 'Effects of Orcharding and the Cider Industry … in West Gloucestershire,' *TWNFC*, xliv, 1983, p.212; Fox, Sir. C. & Lord Raglan, *Monmouthshire Houses*, III, 1954, p.24; Mrs. Grundy, comment at H. F. B. G. conference at Hereford, 2005.
[8] Homes, C.H.I., 'Agricultural Use of the Herefordshire House and its Outbuildings,' *Vernacular Architecture* 9, 1978, p.12 & 14.
[9] Marshall, p,290; Falkner, p 401; illustration at exhibition on cider at Bosbury, 2006.
[10] Whitehead, D., 'John Nash & Humphrey Repton, an Encounter in Herefordshire, *TWNFC*, xlvii, 1992, p.222 pl. XIII.
[11] Duncumb, p.85; Marshall, pp.273-7, 300; Homes, personal information.
[12] Massingham, H.J., *A Countryman's Journal*, 1939, pp.102-3; Pitt, p.159; exhibition at Bosbury, as note 9.
[13] Rowlandson, p.442. Duncumb, p.86; Homes, pers. information, 1978.
[14] Marshall, pp.278-80; Duncumb, pp.400-1; Quinion, M. B., *Cider Making*, 1997, p.15.
[15] Pitt, pp.156, 161; Falkner, p.402; Marshall, pp.306-8; Duncumb, p.86; Rowlandson, p.442.
[16] Falkner, p.401; Quinion; Marshall, p.310.
[17] Duncumb, p.86; Quinion, p.19; Marshall, p.310; information from farmer, Cambridge Farm, Castlemorton.
[18] Homes, V.A. 9, p.12.
[19] The writer is indebted to Rosalind Lowe for the reference to Coppet Hill and for Figures 7 and 8. The building at The Old Court House is believed to be early 17thC at the latest and may not originally have been a cider-house. See HAN 83, p.76. HAN 83 is available online on the Club's website.
[20] Quinion, p.21; Falkner, p.400.
[21] Falkner, p.400; Loudon, J.G., *Encyclopedia of Farm, Cottage and Villa Architecture*, 1845, p.403; Stafford, H., *Treatise on Cyder Making*, 1753, reprinted 2009, p.33, 34.

Bredwardine Bridge

By JOHN C. EISEL

Bredwardine Bridge (Plate 4.1) *is a fine example of an eighteenth-century brick bridge, but up to now its history has not received the attention that it deserves. This paper rectifies that omission, using what contemporary records that have survived, from which a detailed story has been built up. It is hoped that this will establish once and for all when the bridge was built and its builder, and tell something of the vicissitudes which it has suffered.*

INTRODUCTION

In the eighteenth century communication between Hereford and Brecon was poor, being hampered by the river Wye, so, in 1759, a meeting was held between the Deputy Steward of the city of Hereford and Sir Edward Williams, who represented the gentlemen of Breconshire, when they viewed the road between Hay and Hereford.[1] The Deputy Steward reported the conclusions to the Common Council of Hereford on 20 July 1759, saying that the it was for the common good of both of the counties of Hereford and Brecon that the road should be improved between Brecon and Bredwardine Passage via Hay, and also the road to Whitney Passage, and that a bridge should be built at Bredwardine.[2] All this should be in one Act, but with trustees from both Herefordshire and Breconshire for the roads, and trustees solely from Herefordshire for the bridge. Tolls should be paid on the bridge but only for 99 years, distinct from the other tolls for the road, and these tolls should be applied to building and repairing the bridge. It was expected that the expenses of the Act should be met out of money received as tolls, and each county was to pay an equal share. The Common Council agreed to these terms, and resolved to join with the gentlemen of Breconshire in a petition to Parliament to obtain an Act for this purpose, agreeing to contribute £100 towards the expense of obtaining it, to be repaid out of the tolls.[3]

GETTING THE BALL ROLLING

The order of 20 July 1759 for contributing £100 towards the cost of obtaining the Act was confirmed at a meeting of the Common Council on 2 November, and a subsequent meeting on 10 December 1759 agreed to a further £100 towards this end, to be repaid out of the tolls, probably because the cost was greater than expected.[4] The Act, which received the royal assent on 22 May 1760, had the lengthy title: 'An Act for repairing the roads from the town of *Brecon*, to the parish of *Brobury*, and to *Whitney Passage*, in the county of *Hereford*, and for building a bridge over the river *Wye*, at *Bredwardine Passage*, in the same county.'[5] Effectively, as recommended, it was in two parts. First there was a list of trustees for the roads, and the Act provided for the road from Hay to Brobury to be improved first, followed by the section of road from Hay to Whitney Passage, gates to be set up as necessary and the tolls to be used as security for any money that might be borrowed to effect the improvements. The gates were initially set up at the Black Lion, Hay, Bredwardine, and Whitney Passage. At that time there were no bridges at either Whitney or Bredwardine, and the second part of the Act listed other trustees for the construction of a new bridge at Bredwardine, with provision for specified tolls to be charged to be used as pontage i.e. to maintain the bridge. Under the Act Velters

Cornewall, Esq. was to be compensated for his interest in the ferry at Bredwardine, and Roger Price Esq. for his interest in the ferry at Byford. While the list of trustees for the bridge included the great and the good from round about, it also included 'the thirty-one chief Citizens, otherwise called the Common Council of the City of Hereford, and their Successors.' There were thus two sets of trustees, one for the road and the other for the bridge, who acted independently of each other.

Because of the two separate sets of trustees, there were necessarily two minute books, and the earliest minute book for the trustees of the turnpike road survives, covering the years 1760-1777.[6] The first meeting was held at the Three Horse Shoes, Bredwardine—probably an earlier name for the Red Lion—on 1 July 1760, and adjourned to the White Swan in Hay, when it was agreed to borrow a total of £3,500 on the security of the tolls. This borrowing enabled the trustees to start work on improving the two sections of road specified in the Act. The history of this turnpike road is, however, outside the scope of this paper. No early minute book survives for the Bredwardine Bridge Trust, only two later minute books which cover 1814-1887 and 1888-1894 respectively and these have been used, together with relevant press reports and other sources, to build up the story of Bredwardine Bridge.[7]

BUILDING BREDWARDINE BRIDGE

Because no early minute book survives for the trustees of Bredwardine Bridge, we have to deduce the early history of the bridge from the odd scraps of information that have survived. As with the turnpike road, nothing could happen until funding was in place. Whether the trustees attempted to borrow money on the strength of the tolls, as envisaged in the Act, is not known: it is possible that this happened and was unsuccessful as there was a delay in getting started, and it is not until the next year that there is any evidence of fund raising, when the trustees appealed for subscriptions to build the bridge, which was to be toll free. An advert for such subscriptions appeared in *Jackson's Oxford Journal* on 29 August 1761 and the *Gloucester Journal* on 1 September 1761, and from this we learn that it was intended to construct the bridge in timber.[8] All master builders interested were invited to send in their plans and proposals to William Ravenhill, in Hereford, who was collecting the subscriptions.[9] It also stated that a meeting of the trustees would be held at the Guildhall in Hereford on 8 September, presumably to consider what proposals had been received. No decision was made on 8 September and another advert appeared in those papers asking all master builders to submit proposals for building the bridge in timber, or in timber with stone piers, for consideration by a committee of the trustees on 19 September.[10] While no record of the meeting survives, a decision was made, either then or later, to use brick in the construction of the bridge, and on 22 December 1761 the trustees placed the following advert in the *Gloucester Journal*.

> Whereas the Trustees for Building a Bridge at Bredwardine propose to build the Piers thereof with Stone and Brick, any Workman who will undertake the Making and Burning of 100,000 Bricks at Bredwardine, where there is Clay convenient for the Purpose, or will raise Stone near the same Place, are desired to give their Proposals to Mr. Mayor, or to Mr. William Ravenhill, in Hereford, before the 18th Day of January next, when there will be a Meeting of the said Trustees.
>
> HEREFORD, Dec. 14. HENRY JONES, Clerk to the Trustees.

Meanwhile, at a meeting on 16 November 1761 the trustees agreed a place where the bridge should be sited: nothing is known about the meeting on 18 January 1762, but at another meeting on 22 January 1762, the trustees signed a contract with Thomas Davies, a bricklayer of Hereford. The contract was originally with Thomas Davies and James Traherne, bricklayers, but where it occurs in the surviving copy the name of Traherne has been scored through. Under the contract the piers of the bridge were to be built with stone up to a level of a foot above low water, with a brick superstructure of five large arches and a dry arch on the Bredwardine side. The dimensions of the various elements were specified, and the bridge was to be completed in two years, and for this Davies was to receive £890, to be paid in stages, and to keep the bridge in repair for seven years, wilful damage excepted. Clay for the bricks could be dug by Davies or his employees on waste ground in Bredwardine by the road that led to Hay, while stone could be dug from waste ground at Merbage (Merbach) Com[m]on, 'in or near the Brook that divides the Parishes of Clifford and Bredwardine', or any other waste in the parish of Bredwardine: Davies was thus not only to build the bridge, but to source and prepare the materials.[11] As tolls for the bridge were not mentioned until some years later, it is assumed that the subscription was successful, and covered the outlay for obtaining the necessary Act and building the bridge.

Figure 1. An aquatint, published by Samuel Ireland in 1797, which shows the dry arch on the toll-house side of the river. This was engraved from a sketch made before the flood of 1795

It is possible to suggest where the bricks with which the bridge was built were made, as an estate map of 1772 marks an area just to the north of the Red Lion at Bredwardine as 'Clay Pitts'. This land was part of the Moccas estate, and thus not waste, so it appears that Sir George

Cornewall, the owner of the estate, was supporting this public-spirited endeavour.[12] Most of this area was marked on the Bredwardine tithe map and apportionment of 1840/1842 as two fields, nearly adjoining, each with the name of 'Clay Pitts'. The bricks would have been fired in a clamp in the clay pit, and it is most likely that coal was brought up to Bredwardine by barge. It is also possible that the stone for the bridge came from the hill above Bredwardine, as the tithe map recorded three enclosures called 'Quarry Piece', one in Finestreet Dingle, and the other two adjoining, just at the end of Crafta Webb, and the 1886 six-inch OS map of the area records evidence of quarrying in both of these places. This seems to be most likely source of stone, but it should be noted that the map also records small quarries in the north of the parish, on the edge of Westonhill Wood, not too far from the stream dividing Bredwardine and Clifford parishes. Unless further evidence is found, the point must remain uncertain.

While no accounts or other records survive, the bridge was indeed completed in 1764, the year being known from a letter, written in Hereford on 1 May 1765, which appeared in the *St. James's Chronicle* for 7-9 May 1765 and which referred to the bridge being completed the previous year. Also in 1765 a picture of the bridge was drawn on an estate map, coloured pink to denote brickwork, but because the drawing was so small, only five arches were drawn and not six.[13] Ireland's aquatint of 1797 also shows five arches, but in that case one arch is hidden behind the trees in the left foreground (Figure 1).

REPAIRS

In November 1770 there was a great flood in the river and it is possible that some damage was done to the bridge, as it required repairs the following year. How these fitted in with the seven-year clause in the contract with Thomas Davies is unclear. A meeting of the trustees was held in the Guildhall, Hereford, on 6 July 1771, when anyone interested in submitting an estimate for the repairs was invited to attend. A similar meeting was held on 14 July 1772 to elect new trustees, and to order a toll gate to be erected for collecting the necessary tolls. This suggests that what money remained from the initial subscription was not adequate, and that tolls needed to be collected until enough money had been raised to clear the debts. A fortnight later another meeting was held in the Shire Hall to receive proposals for repairing the bridge, and anyone interested was invited to submit proposals. At some point a subscription was raised to cover the debts of the trustees, but no adverts for this can be traced in the *Hereford Journal*: it is known from an advert that appeared between 14 October and 2 December 1773, requesting that those gentlemen who had not paid their subscriptions 'for repairing and making free from toll the bridge over the Wye at Bredwardine' to pay them to Mr. William Ravenhill, the treasurer, in Hereford. The intention was that when a sufficient sum had been raised for the purpose then the toll gate would be discontinued and tolls cease. It is to be hoped that the promised subscriptions were forthcoming, and that a meeting of the trustees in March 1774, which took place at the Black Swan, Hereford, to consider further repairs, and to examine the treasurer's accounts was enabled to discontinue the tolls: regretfully, no minutes or accounts survive. No further adverts appeared in the *Hereford Journal* in the 1770s, and certainly none for letting the tolls, and it must be assumed that these had been discontinued.[14]

In the great flood of February 1795 the bridge seems to have escaped relatively unscathed, although reports circulated that it had been destroyed. So, for instance, a report appeared in the *Hampshire Chronicle* of 2 March 1795, under the by-line 'BRECON, *Feb*. 14.', which stated that 'the torrent was so irresistible as to carry away the beautiful bridge at Glasebury, the bridge at Hay, the new bridge at Whitney, and the bridge at Bredwardine, and it

is supposed that at Hereford, and all those on the banks have shared the same fate.' However, the report in the *Hereford Journal* of 18 February 1795 only mentions the bridges at Glasbury, Whitney and Hay as being carried away, and specifically stated that the bridge at Hereford had escaped unscathed. The bridge at Bredwardine was the only bridge above Hereford to survive.[15] (Plate 4.2)

THE NINETEENTH CENTURY

REINSTATEMENT OF TOLLS

In the early part of the nineteenth century the affairs of the trustees were in disorder, and a meeting of the Common Council of Hereford on 3 May 1814 added to the number of trustees, no doubt because numbers had fallen significantly, although the enlarged body did not meet until 27 September 1814: surviving records of the trustees begin in this year.[16] Meanwhile, business had to go on, and in 1814 the piers of the bridge were damaged by ice, an event which may have stimulated the reorganisation of the trustees, and William Preece, a stone mason from Hereford, was employed to undertake the repairs after a survey by Mr Gethen—John Gethin—which cost a total of £111 0s. 0d., paid on 27 Sept. 1814; Mr. Gethen was paid £12 12s.[17] Inevitably this sort of expenditure meant that the income of the trustees from some small investments was inadequate to maintain the bridge, and a meeting of the trustees on 21 November 1814 decided to erect toll gates within three furlongs of the bridge, as specified by the Act, and to reinstate the tolls.[18] On 8 October 1817 the trustees advertised in the *Hereford Journal* that they had caused a toll-house and toll-gate to be erected near the bridge, and that a toll or pontage would be charged to keep the bridge in repair: the bill of £94 15s. $11^1/_2$d. for constructing the toll-house and the necessary gates was not authorised for payment until a meeting of the trustees on 26 February 1818.[19] At that meeting it was also decided to offer the tolls to the then gate-keeper, Jos. Powell, for the sum of 80 guineas, commencing 1 March 1818. Joseph Powell did not pay his full rent, and to explain this a note was later added to the minutes by Sir George Cornewall, Bart, Treasurer, stating that of the £84 rent, £19 was allowed for charity children,[20] leaving £65 due, of which only a total of £57 19s. $3^1/_2$d. was received 'owing to some mismanagement & the Gate having been thrown into the River & some complaints.' Clearly the imposition of tolls, while justified, was not popular!

On 21 January 1819 the tolls for Bredwardine Bridge were let by auction to James Vaughan of Whitney for £101 10s., received by the trustees on 28 February 1820.[21] Then an advert in the *Hereford Journal* of 12 January 1820 informed interested parties that the tolls would be let by auction at the Swan Inn, Hay, on 27 January 1820: the accounts show that they were again let to James Vaughan, this time for £111 10s., while for 1821 he paid £90. In 1822 the tolls were let to John Jenkins for £102 10s., reported, rather late, at a meeting of the trustees on 13 February 1823, and these were received on 1 May 1823. At the same meeting it was resolved that Mr Gethen, the surveyor, should be employed to raise the road on the east entrance to the bridge with any necessary raising of the parapets, to paid for out of the funds in hand. Also that Mr Gethen should make all necessary repairs to the bridge. The accounts show that Mr Gethen was paid £39 11s. 4d. for widening the bridge and repairing the whole. There was also another payment of £36 15s. $6^1/_2$d. for materials, including 'Carpenter for Centre', the latter implying that an arch was repaired. Payment of rent of £107 from John Jenkins for 1823-4 was received on 1 March 1824.

Because of the income from letting the tolls the finances of the trustees had much improved and on 25 February 1824 they advertised in the *Hereford Journal* that the toll gate

would be removed on 1 March 1824. All past 'incumbrances' had been paid off, and the 'handsome balance' had been invested in the public funds, with the intention that the interest would meet the 'common annual Repairs' of the bridge. The accounts show that the balance was £256, of which £236 1s. 8d. was invested in the new 4% Consols, producing an annual interest of £9 8s. 10d. It was not until 1827 that the now redundant toll gates were sold, for which a Mr. Bell paid £4 15s.

TOLL FREE ONCE MORE – AND FURTHER REPAIRS

The toll-house of 1817 is assumed to be the present Bridge Cottage. Being low lying, it is vulnerable to floods, and was likely to have been flooded in November 1824, only a few years after it had been built. A great flood had peaked at Hereford on midnight of 25 November 1824, some 2ft. 5 inches below that of 1795, but still caused considerable damage. Upstream, the road at Letton had been flooded and the London mail was unable to reach Hay by the Whitney road, and so had taken the alternative route over Bredwardine. Over the bridge some 20 yards of the road was flooded and it was decided to cross as a man on horseback had just done so. Alas, this proved optimistic and the coach became stuck in the flood, where the passengers remained marooned until a boat was brought from Letton on a dray to effect their rescue. A long report in the *Hereford Journal* on 1 December 1824 detailed the efforts needed to rescue the coach and horses, but unfortunately two of the horses were lost; no mention was made of the toll-house being flooded.

It is assumed that the bridge was in a good state of repair after Mr Gethen had supervised his repairs, and the flood of 1824 does not seem to have caused damage, but further repairs to the piers were carried out in 1830, Mr Gethen having visited the bridge again and surveyed it, for which he was paid one guinea.[22] The accounts also record that Mr Easton was paid £2 16s. 0d. for bringing a barge from Hereford (purpose unspecified), and that Mr Hughes, Mason, was paid £31 for his work on the piers.

No meetings of the trustees were held between those of 27 September 1830 and 8 August 1836, and the accounts for this period were made up retrospectively. Probably because of this inactivity, on 8 February 1838 the Town Council of Hereford, as successor to the Common Council, appointed new trustees. In the same year yet more repairs were carried out, for which William Apperley was paid £5, and in 1842 the same person was paid £17 14s. 11d.

There was no record of any repairs immediately after the great floods of 1852, although the bridge was affected.[23] On 14 February 1852 the *Hereford Times* reported:

> The inhabitants of Bredwardine toll-house were in great danger, and a degree of difficulty was experienced in removing them, occasioned in some measure by their unwillingness to leave.

This most likely refers to the old toll house for the bridge, the other toll house at Bredwardine being on somewhat higher ground, but it was almost 28 years since the tolls had been lifted (Figure 2).

Figure 2, A charming Edwardian photograph of Bredwardine Bridge, looking across from the east bank. The series of stones are to keep wagon wheels away from the sides to prevent damage to the parapet by the hubs of the wheels. In the background is the toll house, and it is clear how vulnerable it is to flooding. (Derek Foxton Collection)

Further flooding took place later in the year, reported in the *Hereford Times* on 13 November 1852:

> Rumours of disaster were prevalent at an early hour in the morning. It had been known on Thursday evening, that the Brecon mail had found the road by Letton impassible [*sic*]; and this morning we learn that this road is no longer passable, in consequence of Bredwardine bridge having given way.

Four days later this alarmist report was corrected in the *Hereford Journal*:

> A report was circulated that Bredwardine Bridge, on the old Hay road, had given way, but this was not the fact, the bridge still standing uninjured by the rush of the torrent.

YET MORE REPAIRS, AND FURTHER TOLLS

More repairs were carried out in 1857, and a meeting of the trustees on 14 November 1857 ordered that bills for the repairs, totalling £37 16s. 3d. be paid, while a further meeting on 20 April 1861 authorised payment of bills totalling £30 19s. $3^1/_2$d. The state of repair of the bridge was clearly causing concern, and Mr Hughes, Calver Hill, a civil engineer, was engaged to report on the state of the bridge, which he did to the trustees on 23 July 1861.[24] His report was dated 11 July 1861 and concluded that the bridge was in advanced state of decay and needed

immediate repairs estimated at £150. However, it was not until 11 August 1862 that the matter was proceeded with, when a meeting of the trustees was told that a small amount of work to the two arches on the Bredwardine side was absolutely necessary before winter. It was also considered that Mr Chick, the county surveyor, should be employed to state what repairs should be undertaken.[25] Discussion of the status of Bredwardine Bridge took place at the Herefordshire Quarter Sessions in October 1862, reported in the *Hereford Times* on 18 October 1862. It was stated that the bridge was about to be put into thorough repair under the county surveyor (Mr W. Chick), and discussion centred about whether, under the circumstances of its construction, this fell under the responsibility of the Quarter Sessions. In the ensuing discussion Sir Velters Cornewall claimed (correctly) that no tolls had been levied for 40 years. It was pointed out that the trustees for the bridge had powers to levy tolls, and would be obliged to do so unless that county took to (i.e. took responsibility for) the bridge.

> 'The county surveyor reported that it would take £250 to put the bridge into a really good state of repair, and that the trustees could do with money they had in hand and subscriptions. If the county would then take the bridge [on] there would be no toll, but if the county refused to take it, the trustees must levy toll.'

The application for the county to take on Bredwardine Bridge was referred to counsel, but it was reported to the next Quarter Sessions that the opinion was adverse, and so the application was withdrawn. Meanwhile, in November 1862, because the number of surviving trustees for Bredwardine Bridge had fallen below a quorum, further trustees were appointed jointly by the Corporation of Hereford and the surviving trustees, as provided for by the Act. The necessary entry was made in the minute book of the trustees and these met as a body for the first time at the Red Lion, Bredwardine on 5 December 1862.[26] W. Chick attended a further meeting of the trustees on 3 March 1863 and submitted a specification of works, which he had estimated would cost £185 to £200. However, two tenders had been received, one of £259 from Mr John Thompson of Peterborough and another of £251 10s. from Mr Edward Bigglestone of Hereford. The contract was awarded to Mr Thompson, and payment of his bill of £254 10s. was approved at meeting on 23 March 1864: Mr Chick charged £21 16s. 3d. for his services.[27] All this was a severe drain on the resources of the trustees and the accounts show that on 18 July 1863 the trustees had borrowed £100 from Mr. John Price, builder, of Hay, upon the security of the tolls, reduced by £2 10s. which was the cost of an assignment. Then on 27 July 1863 the accounts show that the trustees received £189 7s. 2d. from the sale of their holding in the Consols, less the cost of powers of attorney, and that this was received through Tomkyns Dew, Esq.

With all the necessary expenditure on repairs, it was decided that tolls needed to be charged, and provision had to be made for a toll gate. This was considered at the meeting of the trustees on 11 August 1862 when it was

> Resolved that the Clerk do communicate with Sir Velters Cornewall Baronet for the purpose of the Commissioners becoming Tennants [*sic*] of the cottage now used as a post office on this side of the Bridge, it being a suitable dwelling for a collector of the Tolls arising from the Bridge.

The meeting of the trustees was held in the Red Lion, hence this refers to the Bredwardine side of the bridge. This decision was followed up at the meeting on 3 March 1863:

> Proposed by The Rev. G.H. Cornewall Seconded by The Rev. Samuel Clarke and Resolved that a Toll Gate be erected on the Bredwardine side of the Bridge near to the cottage in the occupation of [blank] the property of Sir Velters Cornewall Bart where it was formerly erected and that there be received for Pontage in the nature of a Toll, before any passage over the said Bridge shall be permitted, the several sums following (viz;)…

The minutes then listed the tolls to be charged. While it was not recorded in the minutes, the tenancy of the cottage must have been agreed, and there are regular payments of £3 5s. to the Revd Sir G. H. Cornewall for 'one year's rent of Cottage, used as a Toll House', the first retrospectively on 23 March 1864. Since the 1886 six-inch Ordnance Survey map marks the present house as the toll house, being then still in use, this must be the house that was owned by the Cornewall estate, and is likely to be the house built in 1817.[28]

Returning to the tolls for the bridge, those for 1 May 1863 to 1 May 1864 were let by auction at the Red Lion, Bredwardine, on 17 April 1863. The advert in the *Hereford Journal* on 11 April informed prospective bidders that the tolls, except for foot passengers, would those specified in the original Act. For this first year £41 was received, for the next year £64 and the year after that for £52. This regular income at least ensured that the trustees were in a position to pay when a bill for £101 14s. for repairs to the bridge was received in 1868.

It seems that the tolls were not always easy to let, and in 1868 the letting had to be adjourned to the Red Lion Inn, on 1 May 1868, the term to be from that day until 31 December 1869. The advert in the *Brecon County Times* of 25 April 1868 states that the tolls were 'arising from the Toll Gate upon Bredwardine Bridge, in the County of Hereford, together with the Cottage adjacent thereto, used as a Toll House,…' The tolls continued to be let by auction for as long as the tolls were charged for crossing the bridge, and the surviving accounts (up to 1878) show that they were usually let for about £60.[29] In general, tolls on roads were removed by the late 1870s, but those on Bredwardine Bridge remained, and in the late 1880s were being regularly let to Mr Thomas Davies, Old House, Bredwardine, for the sum of £47.[30] It should also be said that at this period meetings of the trustees were very sparsely attended, and were often inquorate, but that did not stop business being transacted!

As has been seen, the bridge had to be repaired on many occasions, and this may well be because of impact damage caused in periods of flood, by trees or other debris, and by ice, brickwork being more susceptible than stone to this type of damage. A good description of the dangers is found in Kilvert's diaries. On 12 December 1878 he recorded that there was a hard frost, and the river froze below Bredwardine Bridge, across from the vicarage garden to Brobury. There was a sudden thaw on 29 December and the frozen river broke up:

> Huge masses and floes of ice have been coming down the river all day rearing, crushing, grinding against each other, and thundering against the bridge.

The weather again turned to snow and a thaw set in. On 14 January 1879 Kilvert wrote:

> Last night the river rose rapidly and at midnight the ice was rushing down in vast masses, roaring, cracking, and thundering against the bridge like the rolling of a hundred waggons. By morning the river had sunk and left huge piles of ice stranded on the banks.[31]

Ice was not the only danger, a further danger being caused by the developing use of steam power, derived from large engines. Just over ten years after Kilvert wrote his graphic description the trustees raised their concerns about the danger caused to the bridge by traction engines, and on 4 December 1889 they instructed the clerk to ascertain whether the bridge was likely to be damaged by these. It was also decided that no traction engine should pass over the bridge without payment of 5s.; traction engines were, of course, not covered by the Act. On 2 May 1890 the trustees decided that notices should be fixed at either end of the bridge, stating that the bridge was not safe for traction engines and prohibiting their passage over the bridge. Notice was to be given to Mr John Read, Machinist, Burghill, Hereford, and to Mr William Hughes, Machinist, Cublington, Madley, Hereford.

THE END OF THE TRUSTEES

This concern about usage must have been triggered off by the fact that the bridge was in need of repair, and a specification and estimate for these was presented by Mr William Williams, the County Surveyor of Brecon, the estimate being £95 - £100. This was considered at a meeting on 30 June 1890, when a tender for £98 from Mr T. Jenkins, mason, of Brobury, was discussed. However, the trustees decided to advertise for tenders for the repairs, these to be opened at 10 a.m. on 10 July 1890. The contract was awarded to John Sandford, Letton, whose bill for £73 6s. 0d. was submitted to a meeting on 5 December 1890. However, his plea that he has made an error of £13 10s. 0d. in his estimate, omitting stone, fell on deaf ears!

Yet more repairs were needed the following year, and after a report from Mr Williams was received, a meeting on 4 September 1891 it was resolved to employ Mr Thomas Jenkins of Brobury to carry out the work in the concluding part of the report, which was to secure the stonework of the 'Peirs' and cutwaters. Then, on 7 May 1892 Mr Williams explained to the trustees the repairs recommended in his report, and the trustees decided that Mr Thomas Jenkins of Brobury again be employed, provided he employ not less than four men and two labourers at a time, and the work to proceed without intermission: the payment of £40 7s. 3d. to Thomas Jenkins was agreed at a meeting on 5 December 1892. At the same meeting the clerk was authorised to employ a person to collect the tolls from 1 January 1893 as the trustees were contemplating that the Herefordshire County Council would take over the bridge. They were told that Sir G. H. Cornewall had proposed a motion at a meeting of the Herefordshire County Council, that it be taken over as a county bridge, and that this had been carried. The trustees therefore decided to make application for carrying Sir George's motion into effect. This formal application was made to the roads and bridges committee of the County Council, and in January 1893 the committee reported that the County Surveyor (Mr Wakelam) had been instructed to inspect and report on the bridge when the level of the water had dropped enough so that a thorough inspection could be made.[32]

A printed report was subsequently prepared by the county surveyor, which was considered at a meeting on 15 May 1893, when Mr Williams disputed that piling was necessary, as recommended by Mr Wakelam in his report. However, it was agreed that underpinning should be done as recommended, and it was agreed that Mr Thomas Jenkins, then of Hill Court, Ross, but late of Brobury, should be offered the work. He declined and on 3 June 1893 the trustees advertised in the *Hereford Journal* for a contractor to repair the superstructure of the bridge, tenders to be sent in by 12 June 1893, which would be considered at the Red Lion the following day. It was proposed that the work should be completed by 31 July 1893, implying that it was considered that there was not too much to be done. This

resulted in five tenders, the lowest of which was one of £67 12s. 0d. from J. Sandford, of Letton, which was accepted. However, Mr Wakelam was still insisting on piling. There was better news at the meeting of the trustees on 24 October 1893 when the Rev. Sir G.H. Cornewall reported that the county council had dispensed with a condition to take out the surface of the bridge and refill it with Clee Hill stone: Mr Wakelam had also given up the idea of piling. The meeting also resolved that the bridge should be handed over to the County Council on 1 January 1894 and the tolls to cease, 'or such earlier date as may be found possible.' Mr Sandford's cheque for £81 15s. 1d. was authorised—presumably he had done extra work—and also one of £10 0s. 0d. to Shaw & Co for angle standards, probably designed to protect the cutwaters, which Mr Sandford was to install as soon as the water was low enough.

On 27 June 1894 a letter from the county surveyor was read out to the trustees, stating that work on the bridge was now completed and he was prepared to advise the Roads and Bridges Committee to take over Bredwardine Bridge. However, the clerk to the trustees pointed out that there was debt of about £47 against the trustees, and subscriptions were invited to defray that debt. It was resolved that the toll gate would not be removed until the trustees were in a position to defray their liabilities. Better news was reported at the meeting on 29 September when it was reported that Mr Frank Evans of Weston had undertaken to guarantee the liabilities, and so the toll gate was taken down, the final bills were ordered to be paid, and the bridge passed into the custody of the county council, who took it over without encumbrances, and became responsible for its future upkeep.

This set a precedent, and a similar condition was put on Fownhope Bridge in 1899, reported in the *Ross Gazette* on 13 July:

> In response to a request from the Parish Councils of Holme Lacy, Fownhope, and Mordiford, the Roads Committee recommended that the Council take over the bridge at Fownhope, crossing the River Wye, and make it toll free, on terms similar to those [when] the Bredwardine bridge was taken over in 1893 [*sic*], viz., that the bridge be in thorough repair and clear of debt.

MAJOR REPAIRS

On 20 July 1920 the first part of a paper on 'Fords and Ferries of the Wye' was read to the Club by Arthur H. Lamont, and in this he described Bredwardine Bridge, and stated that it was badly damaged in 1795 and was afterwards rebuilt; no supporting evidence was provided, and this does not reflect the current view. However, he did call attention to the then poor condition, with cracks and holes, and the pillars shaken by the modern traffic:

> The whole structure appears to be none too secure, and greatly in need of attention. There is an old toll-cottage at the Bredwardine end of the bridge, formerly let by the Hay Union for £40 per annum, who used part of the income for upkeep and repair, but since tolls were abolished nothing has been done for the bridge up to the time of writing.[33]

Lamont's reference to the 'Hay Union' clearly refers to the trustees for Bredwardine Bridge.

When responsibility for the bridge had passed to the County Council in 1894 it was in good condition, but evidently heavy traffic had caused rapid deterioration. From 1920 onwards

the situation was remedied under the supervision of Mr G.H. Jack, County Surveyor, who was a prominent member of the Club (Figure 3).

Figure 3. Bredwardine Bridge before the restoration under G.H. Jack. (Herefordshire Libraries Service)

Bredwardine Bridge consisted of a brick casing filled with loose earth and stone, and the casing was not strong enough to cope with the combined weight of the infill and heavy traffic. Because the work required could not be specified the usual tendering process was not applicable, and in July 1920 Mr Jack had to report that he was unable to find a contractor to carry out urgent repairs. A year later it was agreed to employ the local firm of Beavan and Hodges to undertake the urgent work needed on a commission basis, and the initial estimate was £2,000. Work began on 4 July 1921 and was finally completed on 21 April 1922 at a cost of £4,124 9s. 0d.[34] Despite this, it had been an economic repair with the costs being far less than that of building a replacement bridge. During the repairs 100,000 bricks had been used, with over 800 tons of concrete and several tons of steel reinforcing bars.[35] Since then no major repairs appear to have been done to the bridge itself, which stands as a testament to the work carried out under the supervision of Mr Jack. However, it should be noted that the concrete raft around the central pier has been made in comparatively recent years, perhaps as part of intended repairs to Bredwardine Bridge of an estimated £25,000 included in the proposed five-year programme for road improvements for the period 1962-1966.[36]

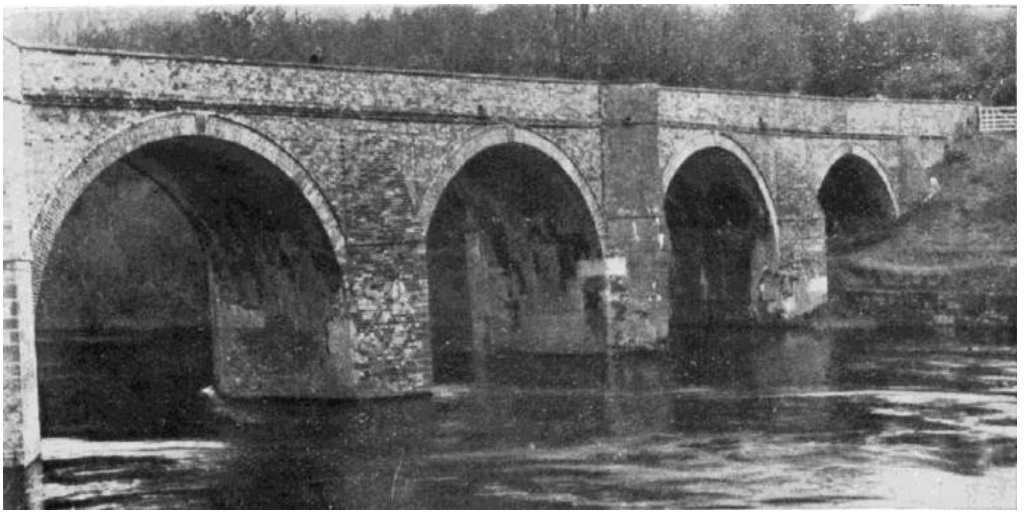


Figure 4. Bredwardine Bridge after restoration: a photograph published in the volume of the *Transactions* for 1924-6 (Plate 40.)

THE TRAP BEERHOUSE

Returning to Lamont's paper, he commented that it was not unusual to find an inn at a crossing point. In respect to Bredwardine Bridge he stated:

> The never-absent Inn stood on the left or north bank, below the present Brobury House, but it was demolished a good many years ago.

This was a beerhouse called The Trap Inn, operated by one Thomas Parsons, where, as will be seen, there was a record of the great flood of 1795. In March 1848 Thomas Parsons was a witness in a case of theft, brought at the Herefordshire Sessions, where there was mention of 'his house'. But this does not seem to have been licensed, as in the 1851 census Thomas Parsons was described as a labourer. However, it seems that he had other interests, and he was probably the Thomas Parsons who was paid £3 19s. by the trustees of the bridge in 1857 for stone and the use of a boat.[37] Then, on 18 September 1858 Thomas Parsons 'of the Trap Inn, Brobury, near the Bredwardine Bridge' advertised in the *Hereford Times* that he was in possession of three stray sheep which should be claimed on or before 25 September 1858. It is not therefore surprising that Thomas Parsons was described as a publican in the 1861 census. The next time that his name appeared in the press was in a report of a court case that was published in the *Hereford Times* on 15 November 1862. He was convicted of being drunk in charge of a horse and cart on the turnpike road near Stretton [Sugwas], for which he was fined 10s. 6d., including costs.

Thomas Parsons was a local man, born in Brobury, and was previously a servant at the vicarage. On 30 May 1905 the Club visited Bredwardine on the first field meeting of the season, where some venerable trees in the vicarage grounds were inspected. One tree that had been discussed in our *Transactions* for 1878 (p.105) was a fine cedar of Lebanon, and this was again visited and measured on 25 August 1891. It died in 1896 and was cut down in January

1898 at the behest of the Rev. H. T. Williamson, vicar of Bredwardine and rector of Brobury. The *Hereford Journal* of 3 June 1905 reported that, during his description of the tree, the Rev. Mr Williamson said:

> The Rev. N. D. H. Newton came to Bredwardine in 1821 as curate, and, having purchased the advowson, was instituted on his own presentation as vicar in 1829. Mr. Newton being a wealthy man, a lover of trees and flowers, spent a good deal of money in laying out these gardens and planting. His servant was a certain Thomas Parsons, born in 1803, whom I buried in 1882 when he was 79. This Thomas Parsons was the man who actually planted the tree. The vicar had a deep hole dug: Parsons put in the pot with the precious cedar. 'Now kick the pot,' said Mr. Newton. Thomas did so, and then covered the hole and roots up with soil, probably about the year 1830. The details of the planting lingered on in the memory of the old man, from whose sister I heard the story, which doubtless had often been told.

Thomas Parsons was also mentioned in Kilvert's diary for 2 September 1878:

> At the Trap end of the bridge some men were sitting and leaning over the bridge parapet while old Parsons brought up a stirrup cup to a horseman who had drawn rein there.[38]

A visit by a prominent member of the Club, said to have taken place in the winter of 1880 or 1881 was recorded in our *Transactions* for 1914:

> There was a small inn at the north end of Bredwardine Bridge, and an old woman named Parsons who lived there showed me a mark on the wall of her room where the flood of 1795 came up to, and which she stated was higher than that of 1852.[39]

Thomas Parsons's widowed sister Mary Evans kept house for him for a considerable time, already acting in this capacity in 1851: it is likely that she was the person of that name that members of the Club spoke to in 1880 or 1881. An earlier reference came when 'Mrs. Evans, of the "Trap Inn"' gave evidence at the trial of a juvenile delinquent in October 1859. Thomas Parsons died on 23 June 1882 at the age of 79 years and 11 months and as a consequence the beerhouse closed, this being reported at the Weobley Licensing Sessions on 21 August 1882.[40] The 1886 6-inch OS map marks several buildings along the left-hand river bank, below Bredwardine Bridge, and one of these was no doubt the Trap Inn. However, shortly afterwards the inn was demolished, perhaps to improve the outlook from the newly-built The Quinta, now called Brobury House, and there are no visible remains of the Trap Inn.[41]

ACKNOWLEDGEMENTS

I would like to thank the Herefordshire Libraries Service, Rosalind Lowe, and Dr. Derek Foxton for supplying the material used to illustrate this paper, acknowledged in the relevant place.

NOTES AND REFERENCES

[1] The turnpike road between Brecon and Hereford via Hay and Bredwardine had opened in 1757. Fairs, G.L., *A History of the Hay* (1972) p. 249.

[2] At this period there was no bridge over the Wye at Hay; although an Act enabling this had been passed in 1756 the bridge was not completed until 1763, when a 98-year lease of the tolls was granted to the builders of the bridge. In the event, the bridge and its successors were not free of tolls until 21 March 1933. /Fairs, pp.254 & 256.
[3] The Deputy Steward from 1755 was James Poole Esq. See Johnson, R, *Ancient Customs of the City of Hereford* (1882), p.229. The Deputy Steward was appointed by the Steward, and was Recorder of Hereford. James Poole resigned in September 1800, to be succeeded by Robert Phillipps, Esq. (*Hereford Journal*, henceforth *HJ*, 1 Oct. 1800) HARC BG 11/9/A/3, minute book covering 1755-1778.
[4] Hereford Archives and Record Centre (hereafter HARC) BG 11/9/A/3, minute book covering 1755-1778.
[5] 33 Geo. II, c.58.
[6] HARC CF50/209.
[7] HARC AA 70/1&2. Information from these minute books, which include some accounts, will be quoted without further reference.
[8] Rather surprisingly, neither this advert nor the follow-up adverts relating to Bredwardine Bridge have been traced in *Berrow's Worcester Journal*.
[9] This was possibly the William Ravenhill who was mayor of Hereford in 1747.
[10] *Jackson's Oxford Journal*, Sat. 12 Sept. 1761, *Gloucester Journal* (henceforth *GJ*), Tues. 15 Sept. 1761.
[11] HARC CF54/58 (Pilley MS 165). Thomas Davies may have been the person of that name, of Hampton Bishop, who advertised the services of himself and his company as wear builders in 1781 (HJ 21 June 1781). The document is endorsed 'Copy of the Proposals of Thos Davies ~~& James Traherne~~ for building a Bridge at Bredwardine & of the Order of the Trustees for burning Bricks & digging Stone for that purpose.' All this is important evidence about the use of bricks in Herefordshire. However, there is no mention in Davey, Edwin & Roseff, Rebecca, *Herefordshire Brickmakers* (2007), nor indeed of the bridge itself as a dateable brick structure. Thomas Davies was most likely the person of that name, bricklayer, who became a freeman of Hereford on 13 December 1733, and James Trahearne can be identified as the bricklayer of that name who became a freeman on 8 February 1732(/3). There was also a William Davies, possibly the brother of Thomas, who was apprenticed to Richard Jones, bricklayer, of Hereford, on 20 November 1732 and who became a freeman of Hereford on 29 January 1740(/1). HARC AT47, BG11/11/172.
[12] The atlas of the Moccas estate of Sir George Cornewall was surveyed by John Lambe Davis in 1772. It was given to WNFC by Sir William Cornewall in 1951 and is kept in the Club library. For a description of the atlas see Smith, Brian, *Herefordshire Maps 1577-1800* (2004), pp.139-41: the relevant map is illustrated on Plate 41. On the map of the holdings of the estate in Moccas one of the fields is named 'The Brickilns'. However, while this is too early for the present house and ancilliary buildings (begun 1775), it is unlikely to be where the bricks used in the building of Bredwardine Bridge were burnt, and probably relate to an earlier brick building in the vicinity which no longer survives. It is arguable as to whether this was part of the earlier Moccas Court. Britton and Brayley, *The Beauties of England and Wales*, Vol.6 (1805) p. 546, state, in respect to Bredwardine Castle: 'the ruins are said to have furnished great part of the materials used in the erection of the ancient residence of the Cornewalls at Moccas.'
[13] Most secondary sources state (incorrectly) that the bridge was built in 1769. See, for instance, Jeremiah, Josephine, *The River Wye. A Pictorial History* (2004), caption to plate 67. I also quoted it myself, for which see Eisel, John and Bennett, Frank, *The Pubs of Hay-on-Wye and the Golden Valley* (2005) p.169, but later corrected it, for which see Eisel, John C, 'The Great Flood of 1795,' *Transactions of the Woolhope Naturalists' Field Club* (henceforth *TWNFC*) (2010), n. 18. For the estate map see Smith, Brian S., *Herefordshire Maps 1577 to 1800. Supplement* (2012), p. 31. Angus's *Seats of the Nobility and Gentry in Great Britain and Wales* Vol. 1 (1787) (unpaginated), includes an engraving of Moccas Court (Plate XIX), derived from a drawing by James Wathen, the accompanying text to which includes: 'Near it is the Scite of *Bredwardine* Castle, once the Residence of the Family of the *Vaughans*, in its Vicinity is a handsome Bridge, built about 20 Years since, over the *Wye*, which has occasioned much travelling to *South Wales* through *Herefordshire*, the Post Road going over it.' This emphasises the importance of the bridge at that period.
[14] *HJ* 20 June 1771, 25 June & 16 July 1772, 14 Oct. – 2 Dec. 1773, 21 March 1774.
[15] Kissack, K, *The River Wye* 1978, p.48 states that the bridge at Bredwardine 'alone on the upper Wye, survived the 1795 flood, because the water came over the parapet.' However, no supporting evidence is given.
[16] References to meetings of the trustees are taken from the two minute books which cover 1814-1887 and 1888-1894 (HARC AA80/1&2) and will not be referenced again. At the rear of the 1814-1887 minute book are accounts covering the period 1814-1878, but these, are not complete, with long gaps. So, for instance, the accounts in the 1830s were made up retrospectively, during a period when no meetings of the trustees were held. There was a similar break in meetings of the trustees between 1849 and 1857, and no accounts for this period were entered. However, at periods when major repairs were being carried out to the bridge there were more meetings, and the accounts were better attended to.

[17] For John Gethin see Cross-Rudkin, P S M and Shaw, P T, 'John Gethin, Surveyor of the County Bridges', *TWNFC* xliv (1999), pp. 404-21. Gethin's involvement at Bredwardine is not noted in that paper, nor is his work in widening the Wye Bridge at Hereford in 1826. (*HJ* 23 Aug. 25 Oct. 1826) In contemporary reports the name is spelt 'Gethen' and 'Gethin' more or less equally, and although the latter is correct, the former is used here as it is the version used in the minute book of the Bridge Trustees.
[18] In the 19th century routine meetings of the trustees were generally held at the Red Lion Inn, Bredwardine, often referred just as the Lion Inn.
[19] Although this is clearly stated, it seems to be somewhat low, and a possible explanation is given in n.27 (below).
[20] The reason for this is not clear, but it may well have something to do with the Jarvis Charity.
[21] At this period the rent for the tolls was paid at the end of the year. No advert for the auction has so far been traced, so it is uncertain how it was publicised.
[22] John Gethin died on 24 May 1831. *HJ* 1 June 1831. His business as a stone and marble mason was taken on by his brother Benjamin Gethin. See *HJ* 22 June 1831.
[23] There are no extant accounts for the period 1850-1856 inclusive.
[24] Mr D Hughes seems to have been resident for a short time at Calver Hill House, Norton Canon. (*HJ* 18 Dec. 1861, *HT* 21 Dec. 1861.) Calver Hill house had been burnt in 1850 (*HT* 1 June 1850) and subsequently rebuilt. In December 1860 it was advertised as being to let (*HJ* 19 Dec. 1860 *et seq.*) It was again advertised as being to let in 1863 (*HT* & *HJ* 3 Oct. 1863)
[25] For more details of the work of William Chick, see Anderson, Philip J, 'William Chick, Herefordshire architect,' *TWNFC* Vol. 58 (2010), pp.156-179. For the work of county surveyors in general, see Pickford, Chris, The County Surveyors of Herefordshire,' *TWNFC* Vol. 58 (2010) pp.180-88.
[26] The accounts show that a payment of £5 10s. 8d. was made on behalf of the trustees to cover counsel's opinion, the town clerk's fees, and for the appointment of trustees.
[27] Some fencing was omitted, hence the bill being less than the tender.
[28] The tithe map and apportionment recorded this as a cottage and garden, with a coal yard over the road, the latter almost certainly being the coal yard which the accounts of the Jarvis Charity for 1840-41 record as being rented for £1 p. a (*HJ* 3 Nov. 1841). It is at least possible, indeed likely, that the toll cottage was built at the expense of Sir George Cornewall and hence was part of the estate. In 1822 Sir George Cornewall paid for a new schoolhouse to be built at Bredwardine, which he rented to the Trustees of the Jarvis Charity for £36 p.a., which was probably a subsidised rent. Pantall, Richard, *George Jarvis (1704-1793) and his Notorious Charity* (1993) p.44.
[29] See, for instance, *HJ* 10 March 1866, 30 Nov. 1878, 30 Nov. 1889, *HT* 23 Feb. 1867.
[30] The Whitney and Bredwardine Turnpike Trust was wound up in 1878 and on 26 December 1878 the old toll house to the north of the Red Lion Inn was conveyed to Sir George Cornewall for £35, the conveyance describing it as 'that Messuage or Cottage tenement until recently used and occupied as a Toll House and called "Bredwardine" Toll House Together with the site thereof situate on the side of the road leading from Bredwardine bridge to the said town of Hay and in the parish of Bredwardine in the said County of Hereford…' HARC AF/57/3/16.
[31] Summarised from Lockwood, David, *Kilvert, the Victorian. A New Selection from Kilvert's Diaries* (1994), pp. 318-20.
[32] *Leominster News*, 20 January 1893.
[33] The second part of the paper was not read to the Club until 28 Feb. 1922. For the full text see Lamont, Arthur H., 'Fords and Ferries of the Wye', *TWNFC* (1921-3), pp.73-94.
[34] The firm of Beavan and Hodges was well known in Hereford and the surrounding area. It ceased trading in 2009 after nearly 150 years in business.
[35] Charnock, George, 'Ancient Bridges and a Hereford Bridge Brotherhood', *TWNFC*, xlvi (1988), pp.19-20.
[36] *Kington Times*, 27 Nov. 1961.
[37] Kissack, *op. cit*., in note 15, on p. 49, after describing the bridge at Bredwardine, goes on to say 'The Wye then passes the site of the Trap House ferry and curves round Brobury Scar, …' The account quoted in the main text indicates that Parsons did have a boat, but it seems unlikely that the trustees would tolerate a ferry which would undercut the tolls charged on the bridge. Bryant's county map of 1835 marks Trap House in the relevant position by Bredwardine Bridge, and clearly the name of Thomas Parsons' beerhouse was derived from this.
[38] Plomer, W. (ed.), *Kilvert's Diary*, Volume 3 (1940), p.414.
[39] *TWNFC* 1914-17, p.71.
[40] *HJ* 19 Oct. 1859, *HT* 26 Aug. 1882.
[41] Quinta was built in 1880-1 for Mr & Mrs Houghton. Whitehead, D., & Patton, J, *A Survey of Historic Parks and Gardens in Herefordshire* (2001), p.59.

An unaltered toll house near Lingen? – a rare survival

By HARLEY THOMAS

The full history of turnpike roads in Herefordshire has yet to be written, not helped by the fact that few minute books have survived and much reliance has to be placed on adverts in the local newspapers. Just occasionally archaeology can be helpful in adding to our knowledge of the infrastructure, and this present paper presents new evidence in the form of a previously unidentified toll house.

INTRODUCTION

About half a kilometre west of Lingen, north-west Herefordshire, on the minor road to Willey, is a place known as The Old Shop (SO358674). The 'shop' was probably a craft workshop—blacksmith, carpenter or wheelwright—being at a suitable location at the junction of five roads or tracks (Plate 5.1). The Royal Commission records a seventeenth-century timber-framed, thatched cottage 'on the south side of the road' at The Old Shop, which at the time of survey (1934) was in poor condition.[1] This building was demolished in 1944 or 1945, but the 1903 O.S. map shows a symmetrical, two-cell building with the northern gable directly abutting the road—this positioning was not uncommon for a blacksmith's shop, but was also characteristic of turnpike cottages.[2, 3] There are small outbuildings to the south.

The Commission makes no mention of a much smaller and very unimposing 'shack' on the north side of the road (Plate 5.2). This single-storey building is clad haphazardly in sheets of reclaimed corrugated iron, except for the eastern elevation, which is of local stone with a chimney-shaft of late-eighteenth-century or early-nineteenth-century brick. The roof is of corrugated iron, replacing an earlier covering of Welsh slate which was stolen in approximately 1985; fragments in the rear garden suggest that the ridge was covered in 'Staffordshire' angle-tiles, although there is at least one piece of hand-made orange U-tile. The building measures, externally, approximately 12ft. by 16ft. and stands some 7ft. 6ins. to eaves, and some 10ft. to ridge-level. (These measurements are reasonably accurate, allowing for some soil build-up, and are given in imperial measure 'as built'). A simple extension to the east, with a corrugated iron roof on four roughly-trimmed posts has been damaged and detached by a falling tree—it is clearly much later than the main structure.

The interior is divided into two rooms by a (remnant) studwork and lath-and-plaster wall, with the eastern room, containing the doorway, being slightly larger. The ceiling is also of lath-and-plaster and bears traces of coloured lime-wash. The only obvious door, in the south elevation, measures 3ft. by approximately 5ft. 3ins. and could be original; there are remnants of a possible double casement immediately to the east. There is evidence of a small window high in the west wall. The floor of the western room was clearly brick-paved and this paving may once have extended throughout. The eastern gable contains a fireplace, originally with bread-oven, which has been much altered over the years. Parts of the timber frame are visible from within and display traditional pegged mortice-and-tenon construction, with traces of an external covering of lath-and-plaster.

This building is clearly domestic in origin, as indicated by the pink colour of the building on the 1885 OS map (Plate 5.3), and is a survival of a 'hovel' or 'cabin'. Once common and probably the homes of large numbers of the rural population, such buildings have generally disappeared, being small and poorly-built. The Old Shop example was last occupied by an elderly hurdle-maker, possibly into the 1930s, although the garden remained in cultivation for some years after his death.[4] But, important as it is in its own right, this humble building may be significant for another reason.

SIGNIFICANCE OF THE LOCATION

At The Old Shop, five roads meet to form a 'hand' (Plate 5.3). The minor road from Lingen branches left towards Willey Oak, Stapleton and Presteigne, right towards Brierley Hill, Willey Chapel, Stonewall Hill and Knighton. A green lane, currently with footpath status, leads north-westward past a once-important quarry and through extensive woodland, to Brierley Hill and Harley's Mountain. Another green lane, now a footpath, runs north-eastward towards Birtley, serving the 'Poor Meadow' (once let annually) and a small brickworks. Two other routes, a drive to Mynde Farm and a timber extraction track from Mynde Wood are creations of the later twentieth century.

Given this confluence of traffic, it is perhaps not entirely surprising that the 1815 Ordnance Survey drawing of the Presteigne area identifies a toll gate ('T.G.') at the Old Shop (Plate 5.1).[5] Bryant's map of 1835 has 'T.B.' with a probable gate across the Presteigne/Willey's Oak road before it forks possibly attached to the Old Shop building (although this conjunction would seem physically impossible on the ground) (Plate 5.4).[6] Scale and accuracy are not particularly helpful and neither map clearly identifies the location of any toll cottage, but it seems possible that the building recorded by the Royal Commission, on the south side of the road, may have been conscripted for such a purpose. The Lingen Tithe Map of 1841 does not show any building at this location, or even the separate land parcel in which it sits (Figure 5.1).

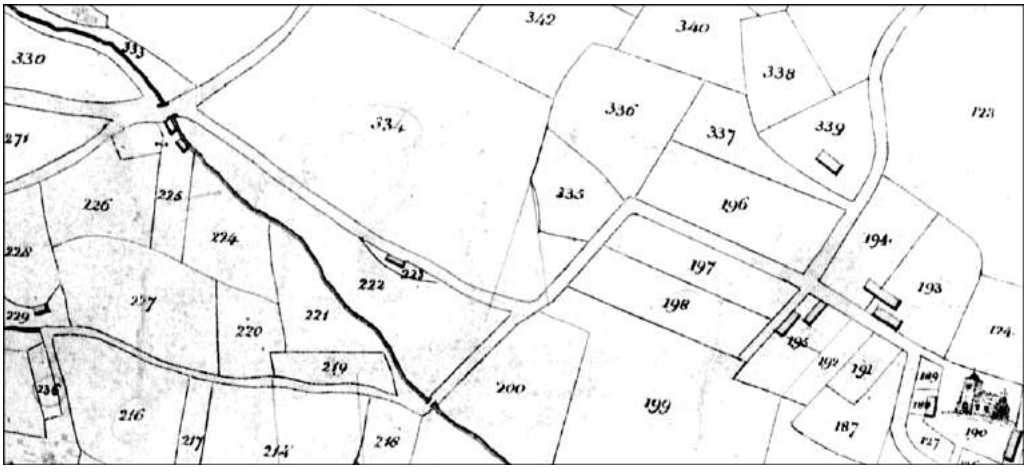


Figure 1. 1841 Lingen tithe map, The Old Shop top left. The building lies at the end of plot 330

Particulars of Sale of the Lingen Estate, drawn up in 1919, include a *Schedule of Holdings as Let* which lists 'Pt. 27. Turn Pike Cottage. Acreage .085'.[7] This holding, like the separately listed 'Old Shop Cottages', was included with Lot 27, Mynde Farm, presumably because of their relative insignificance, and so do not have their own detailed Lot Descriptions. A photocopy of the map included in the Sale Particulars is unclear and does not appear to show the building itself, but does identify the plot in which it sits as 484 (duplicating the number given to the green lane proceeding north-westward). The 1903 O.S. map shows the building under discussion sitting in plot number 484a, having an acreage of 0.085. In the *Schedule of Holdings As Let*, the tenant of 'Turn Pike Cottage' was a Mr A. Jones, with a monthly tenancy at a yearly rent of £5 4s. Mr Jones is also listed as tenant of the Old Shop Cottages, on a monthly tenancy at an annual rent of £15 12s., although the Lot Description of the Mynde Farm states the tenant of the Old Shop Cottages to be a Mr West.

It seems reasonable to argue that 'Turn Pike Cottage' is clearly differentiated from the Old Shop Cottage/Cottages recorded by the Royal Commission, and the name and the consistency of parcel number and acreage between the 1903 O.S. map and the 1919 Sale Particulars suggest strongly that the building in question was, at one time, a toll house.

DOCUMENTARY BACKGROUND

The dating of this toll house is inextricably tied up with the history of the Presteigne Turnpike Trust and that of the Staplebar Turnpike Trust, and the relationship between the two trusts. No minute books are known to exist for either of these trusts, and the complicated story can only be pieced together from newspaper reports and other stray references.

In 1756 an Act of Parliament established the Presteigne Turnpike Trust, specifying the various roads which came under its control. One of these was the road to Leintwardine, through Stapleton and Stapleton Hill, bearing right at Willey's Oak to Lingen, and then northwards towards Leintwardine.[8] The exact route at the north end of this road is not clear, and whether it went via Walford or Adforton has not been determined. Lists of toll houses operated by the Trust are found in advertisements for letting the tolls, and these give a snapshot of how the Trust operated at the time: such detailed lists appear between 1777 and 1796, and then from 1831 onwards. However, in 1802 there was a reference to a gate at Dickendale, on the road from Lingen to Wigmore, in such a way that implied it was an addition at that time.[9] This length of road had been added to the responsibilities of the Presteigne Trust when the relevant Act was renewed in 1778, and this reference probably indicates that the trust was finally doing something about it! However, at this period there is no mention of the toll house at the Old Shop at Lingen, which was thus not likely to be part of the same programme.

The Staplebar Trust was established by an Act of 1788, turnpiking, among other routes, one from Staplebar, near Byton, via Kinsham and Lingen, to Walford, which crossed at Lingen the line of the turnpike road from Willey's Oak to Wigmore. The Staplebar Trust seems to have been dormant until a further Act of 1810, '...Reviving, Continuing, Amending and making more Effectual...' the original proposal.[10] Notices in the *Hereford Journal* in December 1810 announced the immediate erection of new toll gates at Walford, Combe and Staplebar, but did not mention any construction work at Lingen.[11]

Advertisements in the *Hereford Journal* in December 1812, December 1813, March 1815 and January 1820 announce the letting of tolls from the Lingen, Combe, Byton (almost certainly 'Staplebar') and Walford gates, indicating that the building work announced in 1810 had taken place.[12] After 1820, individual gates were not specified in the occasional

advertisements announcing the auction of tolls. The Staplebar Trust expired in 1831 and parts of its network were absorbed or reabsorbed by the Presteigne Trust.[13]

It may be significant that there is no mention of a new gate being erected at Lingen, while gates were clearly built at Combe, Byton/Staplebar and Walford. The Walford gate no longer exists but the Combe and Staplebar buildings, although much altered, were clearly larger (with two storeys) and much more solidly built than the 'Turn Pike Cottage' at the Old Shop. It is possible that the Staplebar Trust acquired an existing building for its Lingen gate, and even that the building was previously used by the Presteigne Trust, which took responsibility for the road from Presteigne via Stapleton and Lingen (and hence the Old Shop) to Leintwardine, through the Act of 1756. But this is entirely speculative as, in the very scanty records of the Presteigne Trust, there is no mention of a gate at Lingen, and it is possible that the trust did not turnpike the road until much later.

CONCLUSION

It is impossible to date such a humble building accurately, because of the simplicity of construction, lack of decorative detail, possible later alterations, the use of reclaimed materials and so on. Documentary sources do not help very much, but do suggest that it was built either pre 1777, or post 1796: the first certain documentary mention is in late 1812, and none of these conflict with any structural indications, although the low doorway and the framing technique might suggest an early date.

The possible turnpike-related origins add to the interest of the building, as a remarkably unaltered survival. Other turnpike houses in the immediate area (e.g. Letton, Stapleton, Roddhurst) have disappeared completely, while survivors (e.g. Birtley, Combe) have been heavily altered and extended over the years. It also demonstrates the basic level of accommodation provided by some Turnpike Trusts, although it is clearly superior to the 'large sugar cask' occupied by an old lady keeping a gate on the Ross road.[14]

What is the future of this building? It has been entirely unused for many years and vandalism and the elements have taken their toll, although the current corrugated iron roof does keep the building water-tight. Any attempt at conversion to housing or holiday accommodation would inevitably dwarf the building and destroy the very character that makes it of interest. Restoration as a monument would be problematic because of its isolated position and hence vulnerability. Removal to a 'museum of buildings' would be relatively expensive and completely destructive of context. Perhaps it should be Listed for its function and rarity—as we all know, Lists tend to be stuffed with nondescript and unremarkable Georgian and Victorian buildings but lacking in anything that might be called the working-class experience. Listing would protect the building from casual demolition and the Listing process could involve more thorough survey and documentary research e.g. census returns. Meanwhile, this article is designed only to draw attention to an important building.

ACKNOWLEDGEMENTS

I would like to thank the Morris Family for allowing access to the building, which is, of course, private property and not accessible to the general public. I am very grateful to John Eisel for finding a way through the often confusing turnpike history of the area. General support and encouragement came from: Rosalind Lowe, Jeremy Milln, Alan Rosevear, Jan Scrine and David Viner.

REFERENCES

[1] Royal Commission on the Historical Monuments of England, *Herefordshire, volume III - north-west*, 1934,. p.137.
[2] Pers. com., Mrs M. Morris, Turn Farm, Lingen.
[3] Ordnance Survey, second edition 1:2500 series, Herefordshire, VI 9, 1903.
[4] Pers. com., Mrs M. Morris, Turn Farm, Lingen.
[5] Ordnance Survey, survey drawing of Presteigne area, by Thomas Budgen, 1815, British Library Online Gallery.
[6] Bryant's Map of Herefordshire, 1835. HARC F76/B/241.
[7] Currently in the possession of the Morris Family, Turn Farm, Lingen.
[8] The Act of 1756 was reprinted by Thomas Davies, at the Britannia Printing Office, Hereford, in 1815, together with the renewal Act of 1778.
[9] *Hereford Journal* (henceforth *HJ)* 1 December 1802.
[10] Notice of the intention to apply for the first Act (1788) was given in *HJ* 13 & 20 September 1787, and notice of renewal was given in *HJ* 13, 20 & 27 Sept. 1809. The full title of the 1788 Act was 'An Act for Amending, Widening, and Keeping in Repair the Roads leading from Staplebar to Lingen, and from thence, by Boresford to Willey's Oak and from Kinsham to the Kington and Radnor Turnpike Roads near the Rodd and from Lingen aforesaid to Walford, in the County of Hereford and which said Roads pass, or are intended to pass, through the several parishes of Titley, Staunton-upon-Arrow, Byton, Presteign, Kinsham, Walford, Lingen, Leintwardine, and Brampton Bryan, in the County of Hereford.'
[11] *HJ* 5 & 12 December 1810.
[12] *HJ* 23 & 30 December 1812, 1 & 8 December 1813, 1 March 1815, and 19 & 26 January 1820.
[13] www.legislation.gov.uk/changes/chron-tables/local/7 accessed 3 Sept. 2019.
1831 (1 Will 4) (c.xliv), s.1. / ….. c.xcviii Staplebar, Willey's Oak, Kingsham [*sic*] and Walford Roads (Herefordshire). (expired). It should be noted that while the toll gate at the Old Shop was marked on Bryant's map of 1835, there is no record of this toll gate after the demise of the Staplebar Trust, the conclusion being that the survey for Bryant's map, at least for this section, was carried out no later than 1831.
[14] Hurley, H., *Trackway to turnpike: the old roads of South Herefordshire*, Pound House, 1992, p.66.

The Church of St Michael at Moccas, Herefordshire

By DAVID WHITEHEAD

St Michael's at Moccas is a small estate church, which since the 16th century has been attached to Moccas Court, in whose grounds it sits. Like several other churches in West Herefordshire it has a remarkable early history as a Celtic minster, founded by the local saint Dyfrig (Dubricius) in the early 6th century. According to the Llandaff charters its community was led by an abbot in the early 7th century and apart from a Mercian incursion in c.745 remained in the hands of Llandaff until the 9th century. Today the fabric of the church dates from the mid 12th century but in the 17th century the antiquarian Silas Taylor saw the remains of a larger church in its graveyard. Apart from being refenestrated in the 14th century little was done to the church until the late 18th century. The early history of the church intrigued the Revd Sir George Cornewall (1833-1908), the rector and owner of the Court, who restored the church in 1870-71. He employed George Gilbert Scott junior (1829-97), a fastidious Anglo-Catholic architect who worked within an Arts and Crafts milieu, collaborating closely with his patron. As a result St Michael's has an outstanding interior: an early Christian chancel and apse and, from the hand of Charles Eamer Kempe (1837-1907) a ravishing setting for a large Walker organ, which at the time of writing (December 2019) is about to be restored to its full glory.[1]

EARLY HISTORY

The church of St Michael at Moccas sits in isolation upon its knoll, embraced since at least 1786 by the boundary wall built to define the pleasure grounds of the new Court (Plate 6.1). The earliest mapping of the area in 1772, which pre-dates the building of the Court, marks the church at the west end of a large rectangular enclosure, overlooked on the north-west by the Churchyard Coppice and on the south-west by the Churchyard Meadow. The Ordnance Survey draft drawing for 1815 and Bryant's map of 1835 suggest that the churchyard has been reduced considerably and the eastern section added to the pleasure grounds, albeit the hedged lane, marked in 1772, has been retained as a field-path, which exists today.[2] The reduction of the churchyard between 1772 and *c.*1815 underlines the dangers of trying to read the past into modern arrangements. Although a fieldwork survey carried out in 2002 observed a low earthwork bank to the north, enclosing the church, its yard and a substantial area of the pleasure grounds, subsequent excavations found no burials or structures beyond the north boundary of the present churchyard but located burials closer to the church, which complemented the 12th century date of the building. It has been suggested, that if there was an earlier church at Moccas, it may have been elsewhere.[3]

The archaeological evidence is particularly disappointing considering the wealth of hagiographical and charter evidence for the existence of an important early medieval church, thriving in different forms between the 6th and 9th centuries A.D. Modern interpretations of the Llandaff charters and the fabulous *Life of St Dubricius (Dyfrig)* have challenged aspects of the saint's life but have done little to undermine the presence of an early church at Moccas, possibly ruled by an abbot with similar institutions nearby, at *Bolgros* (Bellimore) and *Tir Conloc* (Madley).[4] Topographically, these sites may have been located on an island extending

up the Wye from Eaton Bishop to Moccas, known as *Inys Ebrdil*. It was separated from the Merbach-Woodbury Hill ridge by a great mere, which in early historic times drained into the Wye at its east end by the Cage Brook. Bruce Coplestone-Crow identifies this with the district of Mawfield, which was acknowledged in documents dating from the 6th to 14th centuries.[5]

The area was mapped by the Revd W.D. Barber of Thruxton who published a sketch-plan in the Woolhope Club *Transactions* (1916). This was re-published by Harding and Wall (2000) and accompanied by a discussion of the Lawn Pool at Moccas, which once drained via a stream to the east of Moccas Church, carrying water from the Meres to the Wye below Home Farm.[6] At some point, probably in the 17th century, a sluice was erected at the northern end of the Meres, which redirected the water by a culvert through the Little Park to Deppel Wood. Thus the early church and its extended graveyard stood at an earlier date above a tumbling stream, emptying the western end of a great glacial lake, equivalent to the Cage Brook at its east end. It is possible that the Moccas exit was dammed in more recent times to create a string of fishponds, one of which still survives.[7]

Ongoing research into the nature and character of early churches in Wales and the borderland has drawn attention to a number of generic features shared by putative Dark Age churches, including Moccas.

Church Groups in extended Graveyards

More than one church or chapel in a graveyard is fairly common in Wales. These subsidiary buildings or annexes are often associated with tombs containing the relics of a patron saint. There are four documented examples in Herefordshire: Hentland, Clifford, Titley and Moccas. For the last we have the eyewitness evidence of Silas Taylor (1624-78) who, in the 1650s whilst Parliamentary Sequestration officer for Herefordshire prepared, with the encouragement of Edward Harley of Brampton Bryan, a parish by parish history of Herefordshire.[8] He noted for Moccas that 'in the churchyard…are to be seen the foundations of a very large church to which this standing (i.e. the present parish church) was but a chapple'. Taylor's observations are generally accurate and he was regarded as a disciplined antiquarian by his friends such as John Aubrey and Samuel Pepys. This informs us that the present early-12th-century church may have been a subsidiary church to something greater and implies that the larger church may have been necessary to occasionally accommodate larger congregations on the site of a celebrated shrine e.g. St Dyfrig whose popularity had declined by the time Taylor visited Moccas. However, Taylor was an enthusiastic Celtic scholar and may have applied wishful thinking to a ruined secular building, perhaps the original castle/Court, which seems difficult to place before the 18th century.[9]

The two-celled Church

A recent scholar, David Petts, has reviewed the archaeology of the early medieval church in Wales and drawn attention to the ubiquity of the two-celled church in the Province and the borderland—churches like Moccas with a nave and chancel ending in an apse. Relatively speaking, these are early churches and appear to have too much ceremonial space. The chancel seems to us to be logical space for the altar and its use for this purpose increased as the Middle Ages progressed. Sometimes, at an early date, the altar was in the east end of the nave. It is, therefore, not certain what happened in the apse and chancel in the early church. They could be used for some other purpose; a shrine in the apse or more mundanely a seating area in the chancel for the clergy. The Revd Sir George Cornewall's researches brought him close to this conclusion when he briefed the Woolhope Club on the significance of Moccas church in 1891.

He said that 'in Moccas we have the earliest type of church, the basilica. The early church, we know, adapted the Roman Halls of Judgement, styled basilicas, to Christian worship'. These views coloured Sir George's approach to his restoration of St Michael's in 1870-71 (Plate 6.2). Apart from Moccas two-celled churches occur in Herefordshire at Kilpeck, Tyberton (beneath the Georgian refitting), Pencombe, Peterchurch, Urishay, Craswell and Ford (near Leominster). There is a strong westerly emphasis here. Of course, if as Taylor suggested there was a larger 'mother church' in the enclosure at Moccas, the present church may just have been an oratory (a place of private prayer) set within a large *locus sanctus* (holy place), along, perhaps, with other oratories.[10]

Abbots and Bishops

The Llandaff charters indicate that west Herefordshire in the early middle ages had many institutions ruled either by abbots or bishops. Moccas at various times seems to have had both. In *c*.620 Moccas had an abbot named Comeregius who occurs on a witness list, attached to a charter when a local king called Gurcant gave two and a half *unciae* of land at Ballingham to the church at Llandaff. In another charter Comeregius is referred to as a bishop and in a later list of the bishops of Llandaff he is found in 23rd place.[11] There were other bishops in Archenfield. Welsh Bicknor was regarded as an 'episcopal place' in *c*.575 and in 1976 a French scholar found a manuscript that contained a list of bishops for a place called *Clas Cynidr*. This has been conventionally identified as Glasbury but it could also refer to churches around Llangynidr in Powys but, closer to Moccas, an island-site in the Wye at Winforton, where until the mid 19th century the remains of a chapel dedicated to St Cynidr could still be seen. This 'chapel' was said in 1898 to have 'terminated in an apse at the east end'—i.e. another two-celled church to add to the list above. The last bishop in this list was a Welshman called Treferyn who has been identified with Tramerin, a bishop who was transferred to Hereford following the sack of the cathedral and city by Gruffydd ap Llewelyn in 1055. Little is known about these bishops and abbots but their presence elevates the significance of those places with which they were associated.[12]

Dedications to St Michael

Another feature that Moccas shares with many churches on both sides of the national border is the dedication to St Michael. Indeed, Herefordshire is apparently 'near the top of the league table of churches with this dedication'. It shares this honour with Exeter, another diocese where Celtic/British culture survived longer than elsewhere in England. Of course, the *Life of St Dubricius* asserts, fittingly, that Moccas was dedicated to him. But this dedication was no doubt replaced when the influence of Dyfrig declined and Anglo-Norman culture began to hold sway. St Michael was very popular on the continent and was promoted by the papacy. Since he was a saint who operated in the heavenly zone he is often associated with elevated sites. This, of course, must be discounted for Moccas, albeit from the car park, in the bed of one of the early fishponds, the church certainly appears to be in an elevated spot.[13]

The *Book of Llandaff* states that many churches, associated with St Dyfrig, in northern Archenfield were damaged by a Mercian raid in *c*.740, presumably led by King Aethelbald (d.757), the predecessor of Offa. However, this did not mark the permanent annexation of the region to the kingdom of England and the churches were returned to bishop Bethwyn of Llandaff by an obscure local king called Ithel and grants to Llandaff continued to be renewed for another century.[14] At this date (*c*.850) wholesale rededications may have occurred, corresponding with the introduction of English place-names. As the English church was

relatively close to the papacy, St Michael was perhaps a popular choice and as an ethereal saint he did not carry any imperialist baggage. However, given their widespread occurrence deep into Wales, it is more likely that the St Michael dedications came with the Normans. They also brought with them churchmen who had little sympathy with obscure 'uncouth saints'. The rebuilding of Moccas church in the early 12th century would be the opportune moment for a dedication to a saint with international appeal. This, of course, begs the question: what was the dedication of 'the very large church' seen by Silas Taylor? The answer seems to have been given to us by the *Book of Llandaff* which states that the Roman dedication of Moccas was Holy Trinity—another abstract dedication. Thus it could be postulated that the present church existed within the precinct of a larger church dedicated to St Dyfrig and later rededicated to the Holy Trinity. On its re-building in the Norman period, the two-celled church, perhaps previously an oratory, became St Michael.[15]

Richard Morris has an ingenious theory to explain why one of the churches at Moccas should become dedicated to St Michael. As we have seen the saint was active in the heavens and became a Christian substitute for the pagan god Mercury. Mercury was also the protector of herds of domesticated animals. He continues:

> 'A god named *Moccus* occurs in Langres in Gaul. The name means 'pig', and *Moccus* was equated with Mercury. The Herefordshire Moccas in the 12thc Liber Llandaff as *Mochros* 'moor for swine', a meaning which is confirmed by the meaning in Latin as *locus porcorum* 'place of pigs''.[16]

Moccas and the Minster Church of St Guthlac in Hereford

The fact that Moccas and the other communities on *Ynys Ebridi* were hidated for tax purposes and military service in Domesday Book suggests that in 1086 the area had been under English control for some time. They had also for administrative convenience been placed in Stretford Hundred, which straddled the Wye. Hundreds had only come into existence in the 10th century. The district had even been given the English name of Mawfield after a hamlet in the parish of Allensmore. Moreover, in Domesday Book the estate at Moccas was divided between the minster church of St Guthlac, situated on a gravel terrace to the south-west of Hereford Cathedral, and William the Conqueror's physician, Nigel. St Guthlac is likely to have held the whole property before 1066 and continued to claim ownership of the church until *c.*1200.[17]

The minster of St Guthlac received the patronage of King Aethebald of Mercia who laid waste the northern part of Archenfield in *c.*740. He was a cousin of St Guthlac (d.714) of Crowland, another Mercian prince, who according to his *Life* written in the 8th century had campaigned on the British frontier of Mercia in his youth, probably around 690. As an adult recluse at Crowland in Cambridgeshire, Guthlac had provided comfort and solace for the disturbed prince, his cousin, Aethelbald. It seems very likely that Aethebald, after Guthlac's death, had founded the minster in Hereford, dedicated to his friend and may even have brought his body there to be interred. It is likely that he endowed the new minster with some of the lands he had conquered, west of the Wye that had previously been dedicated to religious purposes, such as Moccas. The process was complicated since other estates near Moccas remained in the hands of Llandaff until *c.*850. [18]

In the mid 12th century the minster of St Guthlac became a regular Benedictine priory attached to Gloucester Abbey and was situated in the Bye Street suburb of Hereford, on the site of the present County Hospital. Occasionally, some official at Gloucester or Hereford

remembered the ancient attachment of Moccas church. In 1354 the abbot of Gloucester gave evidence to the Bishop of Hereford, John de Trillek, relating to the abbey's title to tithes, pensions and portions owed to them in the diocese of Hereford. Among these was a 3 shilling fee from Moccas. The bishop agreed with the claim, which must have related to St Guthlac's since in 1419, when an aid was being collected for the king, it was noted that 'the prior of Hereford (St Guthlac's) possesses a portion from Moccas' of 3 shillings.[19]

The Normans disapproved of secular minsters like St Guthlac, which contained priests who lived without the discipline of a monastic rule. By the middle of the 12th century both parts of Moccas were in the hands of Walter de Fresne who held the land—but probably not the church—by knight's service as part of the honour of Kington. The principal holding of the de Fresnes was in the parish of Sutton St Michael, close to the river Lugg. Their mansion, Freen's Court, survived until it was demolished in the 1950s. The de Fresnes probably secured the woodland manor of Moccas because it complemented their mainly arable property in Sutton St Michael. This descended to Hugh de Fresne who began building a castle at Moccas in 1293 but failed to comply with feudal law and seek a full licence to crenellate from the king. He was arrested by the sheriff. If he was allowed to complete his castle it was likely to be close to the church that his predecessor Walter had built early in the 12th century. It may have been on the site of the Home Farm and replaced the earthwork castle overlooking the Meres, built perhaps by Nigel or one of his tenants. Of course, the stone castle of 1293 could also have been the stone 'foundations' seen by Silas Taylor in the 1650s. The castle or house of the de Fresnes was said to be ruinous in 1375.[20]

THE CHURCH IN THE MIDDLE AGES

Like many other churches in the diocese of Hereford, the 14th century saw several changes made to the fabric of St Michael's. The chancel windows date from early in the century and just a little later are the north and south aisle windows with figures holding the de Fresne arms. It is tempting to suggest that the glass was commissioned by Sir John de Fresne, mentioned as a patron of the church in 1306, 1320 and finally in 1339. His tomb, it is assumed, now lies in the centre of the chancel having been rescued, and rather enthusiastically restored, in *c*.1870.[21] After the early 14th century few significant changes are made to the church, which seems to be reflected in the varying names of the patrons of the living, few of whom lived in Moccas. There were Roger Criketot and Stephen Lugwardyn in 1369; Sir John de Joce in 1379; Henry Catchpoll in 1391; Elizabeth Pembridge 1396 and finally Henry Scudamore in 1485. The tax records for the late 15th and early 16th centuries confirm the presence of a branch of the Scudamore family at Moccas until *c*.1550. However, the Vaughans are said to have acquired the main estate in the reign of Henry VII (1485-1509).[22]

Throughout the Middle Ages the incumbent at St Michael's is described as a rector, confirming that the living was never impropriated by another religious institution and subsequently downgraded to a vicarage. Retaining the rectorial status of the living was presumably down to the presence of an active gentry-patron. The church was also in the Deanery of Weobley, which accords with the position of the manor/vill in the hundred of Stretford in Domesday Book.[23] The deanery, like the hundred, was probably formally created in the late Saxon or early Norman era. Eventually Stretford disappeared and Moccas joined the hundred of Webtree along with most of the neighbouring parishes.

St Michael's generally attracted local men as rectors e.g. David de Clifford (1300), Richard de Bockleton (1306), Hugh de Monnington (1322) and Thomas Bristowe (1392).[24]

Since the living provided a relatively modest income of £6 in 1291 and £6 12s in 1534 it failed to attract ambitious career churchmen although John Watiers presented in 1369 was described as a chaplain, perhaps employed in the household of his two patrons, Roger Criketot and Stephen Lugwardyn who presented him.[25] A little later in 1396 John Whyte, presented by Elizabeth Pembridge, was described as a chaplain. In both these cases it looks as if the living of Moccas was being granted to support household chaplains. John Whyte was called upon to give evidence in 1416 at an inquiry into an appointment at Monnington where the king, Henry V was patron.[26]

During the Middle Ages there were a number of exchanges; for example, Hugh de Monnington swopped with Richard the Clerk of Linton in 1322. A similar exchange occurred in 1391 between John Tamworth, rector of Moccas and Thomas Bristowe of St Martin's royal chapel in London. Bristowe had been appointed rector earlier in the year but there is no evidence to explain why he suddenly had the urge to go to London. Occasionally external pressure was exerted to fill the living. In 1352 the bishop, John de Trillek, was urged by the pope to put pressure on the Dean and Chapter to provide a benefice for Richard Bonar 'a poor priest' of Moccas. The outcome is unclear.[27]

Later in the Middle Ages kings began levying taxes on benefices, often a tenth of the value of the living. Bishops were quick to defend the poorer benefices and produced long lists of exemptions. Moccas occurs in a return of 1406 of benefices 'which owing to the losses in war or poverty' were unable to pay the king's aid. The 'war' was presumably Owain Glyndŵr's raid of 1404, when Bishop Mascall reported 52 churches had been destroyed. Moccas seems to have escaped destruction but Clifford, nearby was listed one of the casualties.[28] Exemptions for Moccas from the King's aid came thick and fast in 1419, 1425, 1432, 1435, 1445, 1453, 1461, 1474 and 1492.[29] Frequently, nearly all the churches in the Deanery of Weobley were exempt along with Moccas. Ironically, the collectors were generally the heads of major monasteries such as Llanthony (1461) and Dore (1503). This must have increased divisions between the secular and regular clergy. In 1503 the share of the aid granted by convocation for Hereford diocese was £35 13s 4d, the contribution from Moccas was 6s.[30]

THE 16TH AND 17TH CENTURIES: SHADES OF OBSCURITY

This era is a blank canvas for those looking for information about the fabric of the parish church in Britain. Routine maintenance was carried out on the body of the church but the interior was subject to continuous interference as it adapted to fluctuating doctrine and practice. The parish élite via their churchwardens took responsibility for the nave but more problematic was the maintenance of the altar space by the rector, who may not have been resident or even a churchman. This is also a period when Moccas became an adjunct to a manorial centre at Bredwardine, where another parish church probably took priority. The earliest notice of the Vaughans of Bredwardine disposing of land in Moccas occurs in 1435 but it seems unlikely that the family established a cadet branch there until the late 16th century.[31]

The rectors of Moccas continued to be fairly well-to-do people. In 1508 the rector was Sir Thomas Jerolde, which sounds very fine, but we should not be misled by the title, since it became a convention in the late 15thc to refer to incumbents as 'Sir'. A few years later another titled rector is recorded—Sir Richard Pope—who died in 1544. It is not certain that he was rector of Moccas, but he was resident there and his neighbour, the rector of Brobury, Sir Hugh Pytte, was executor to his will. Sir Richard's inventory listed goods worth £28 10s 8d—a substantial sum.[32] A listing of probate material for the late 15th and early 16th century provides

a miscellaneous list of names from Moccas, but no sign of any resident gentry, helping to confirm that Sir Richard Pope was rector. A key feature in the documentation is the presence of a large number of Welsh surnames. For example the 'township' mustered twelve men for military service in 1542—nine bill-men and three archers. Five of them had Welsh surnames. The use of patronymic names linked by 'ap' was so common in the early 16th century that the probate clerk at Hereford Cathedral even added it to English surnames from Moccas by mistake.[33]

At the end of the 17th century documentation on church matters becomes more common. In 1663 the rector was John Taylor who was assessed for the Militia Tax and held property in Moccas valued at £30. That was half the assessment for the property of the resident lord of the manor Edward Cornewall Esq., which was assessed at £60 per annum.[34] Clearly the rectory had been re-endowed since the valuation given in 1534 when the rectory was assessed at £6 4s 4d.[35] John Taylor was a man with a substantial estate but only part of this is likely to have come from his glebe lands in Moccas. A terrier for 1677 lists the lands of his successor as rector, Thomas Prosser. He had 73½ acres of arable land and 21 acres of pasture. This was a good holding albeit much of the arable land was held in open fields. Nevertheless, it seems likely that both Taylor and Prosser held additional lands in their own right.[36] The Compton Census of 1676 gives some indication of Prosser's spiritual responsibilities. It was estimated that there were 100 adult conformists in the parish; two papists and five non-conformists. Bredwardine was fairly similar with 189 conformists, one papist and three non-conformists.[37] None of this provides information on the fabric of the church but simply indicates that the administrative structure for maintaining it was still present and operating. Much more could be found with a careful search in the Cathedral Library and the Hereford Archive Centre.

CARING FOR THE CHURCH IN THE LATE 18TH CENTURY

As with so much else at Moccas the arrival of Sir George Amyand (1748-1819) as consort for Catherine Cornewall—he assumed the surname Cornewall in 1771—inaugurated a new era at St Michael's. His copious household and farming accounts regularly indicate work in and around the church. In July 1776 the extended churchyard was drained, perhaps an indication that a substantial part of it was to be included in the new pleasure grounds around the Court. This cost £22 9s, a considerable sum; £3 12s 6d was also spent gathering stone, possibly to wall the reduced churchyard.[38] A decade later the grass in the churchyard was mowed and sold for 8s, which suggests that this was the area now added to the pleasure ground, rather that restricted area around the church. In 1785 the 'south fence' (probably the 'sunk fence' or ha-ha) was completed from the stable block as far as the churchyard i.e. along its southern boundary.[39] Work on the fabric of the church is mentioned in 1782 when 4s 6d was disbursed for filling holes in the apse and repairing windows.[40] This was presumably the result of neglect and bad housekeeping during the earlier decades of the 18th century, if not earlier. Sir George was taking his role as patron seriously. Seven years later new pews, costing seven guineas, were provided for the congregation, who, of course, should have paid the bill, rather than Sir George. His interest in church matters took a major step forward in 1791 when a substantial bill of £85 0s 11d appeared in his accounts. It seems that Sir George had decided to colonise the chancel, creating a family pew there. Bills were paid to plasterers, painters and glaziers and a grate, with a chimney piece, was inserted, together with soft furnishings like cushions and a cloth for the pulpit.[41] There is no reference to an altar or communion table so it seems that Sir George's inclinations were decidedly low-church.

Many years later, in August 1891, the Revd George Cornewall*l*, president of the Woolhope Club, held forth on the restoration carried out by his ancestor and proudly announced that the work had been carried out by 'Mr Westmacott', who decorated the family pew, restored the bell-cote and replaced the south window 'which (hitherto was) like an ordinary cottage window'. Since his audience may have been sceptical about the involvement of the famous London statuary, he offered to show them a drawing.[42] It is possible that the Revd George was getting confused since in his namesake's ledger-book, Richard and Henry Westmacott are paid in 1805 for providing designs for windows in Bredwardine Church, which, in the accounts, are said to have cast-iron frames.[43] There are, in addition, at Bredwardine, two memorials by Richard Westmacott to George Jarvis (1704-95), the eponymous founder of the charity at Staunton-on-Wye. The later Sir George may also have been misled by the presence in Moccas church of another, later, monument by Richard Westmacott junior, to the Sir George who died in 1835

The Churchwardens' Accounts 1797-1939

Between the death of Sir George Amyand Cornewall in 1819 and that of his grandson, Sir Velters Cornewall, in 1868 there are few useful references to Moccas Church in the family archive. There does, however, exist an orphaned volume of churchwarden's accounts running from 1797 to 1939, which takes up the story immediately after the first Sir George's restoration.[44] Initially, they refer to routine work on replacing slates on the roof and repairing broken windows but we also learn in 1803 that the interior of the church was lime-washed, with 5s. paid for materials and work. The proximity of the church to the pleasure grounds of the Court meant that the churchwardens had to look to their fencing. This was a regular and relatively expensive chore—7s. in 1820, for example. A little earlier two locks were purchased for the churchyard gates and we are left wondering if this was instigated by the churchwardens or the family at the Court. In 1826 there were regular visits by a mason—two days work on the fabric cost of 5s. In the 1820s and 30s the churchwardens began to take an interest in re-equipping the church. Six new 'communion seats' were purchased in 1824 and an 'altar service' in 1834. In the following year a new prayer book is bought and in 1836 an iron chest, presumably to keep the parish records in and/or the plate. It is also noticeable that the church was now regularly cleaned. It is clear that the church has become more self-sufficient and perhaps indicates a lack of patronage from the family at the Court, *viz*. the younger Sir George (1819-35) and Velters Cornewall (1835-1868).

During the 1840s there is very little activity recorded in the accounts but this coincides with the visit of Sir Stephen Glynne who was rather uncritical and very pleased to find a Norman plan and accompanying architectural details. With an eye for the picturesque, he notes that the exterior is 'finely mantled with ivy'. This had made further progress a decade later on the accompanying watercolour sketched by Charles Walker, where rampant vegetation is very much in evidence on all three gables of the church (Plate 6.3).[45] Returning to the churchwardens' accounts we find that in 1858 the £7 18s. 6d.—the largest sum entered into the accounts hitherto—was paid to a trio of craftsmen for repairs. One of these was James Kyte, a member of a family of skilled masons, working from Hay-on-Wye in this period. This was undoubtedly initiated by the Revd George Cornewall, who was appointed rector in 1858. A little later, in 1865-6, there was a major campaign to remove the ivy from the church. Pictorial considerations were being usurped by ecclesiological purity.[46]

The Revd Sir George Cornewall (1833-1908)

Between 1835 and 1868 the Moccas estate was in the hands of Sir Velters Cornewall, a bachelor and the elder brother of the Revd George. We catch a view of George occasionally in the local papers, often in the company of his younger sisters—Henrietta, Frances, Caroline and Selina. At the age of nineteen he is noticed with Henrietta at the Moccas Bow meeting in 1852. After Rugby and Trinity College Cambridge he was already destined for the church and spent the later 1850s as a parish priest at Weaverham in the diocese of Chester and a canon of Worcester Cathedral.[47] He was obviously destined to become rector of Moccas but had to wait for the existing incumbent to retire in 1858. In August of that year he officiated at the marriage of his sister Henrietta to the Revd Augustine Chester Master of Knole Park, Gloucestershire. In June the following year he attended a meeting for the Society for the Propagation of the Gospel at Kinnersley Castle and in February 1860 he was busy building a new rectory at Moccas, to the east of the church.[48] This was designed by George Truefitt (1824-1902), a London architect who may have come to the Revd George's attention as an assistant to Lewis Nockalls Cottingham, who restored Hereford Cathedral in the 1840s. It was an austere L-shaped building, built in brick with narrow windows. The *Hereford Times* regarded it as 'a large building' having eight bedrooms and three reception rooms.[49]

The direction of George's career changed in July 1862 when news reached Moccas that his elder brother, Lt. William Naper Cornewall, died leading a charge on the walls of Ning-po in China. Since Velters Cornewall was unmarried the Revd George became his heir. A correspondent, writing to the *Hereford Times* in 1859 commented sadly upon the failure of the male line of several gentry families in Herefordshire at this time and speculated that the Cornewalls were likely to follow suit.[50] However, in June 1867 the Revd George married in London Louisa Frances Bayley, the daughter of Francis Bayley, judge of the Westminster County Court. In Herefordshire the bells of Bredwardine church 'rang a merry peel' and the tenants of the Moccas estate were entertained with a dinner at the Red Lion with many toasts for the bride and groom. Even greater jubilation occurred later in the month when the bride and groom, after spending a honeymoon at Harpton Court, New Radnor, returned home. 'The country rose *en masse*' according to the local paper; floral arches spanned the route to the Rectory and every cottage was draped with flags. The celebrations lasted late into the night and the crowd consumed a hogshead of cider (249 litres) [52 gallons imperial measure] and a cake weighing 550 pounds.[51] On May 7th 1869, Geoffrey, the eldest of five children, was born to the Revd George and his wife Louisa.

The Revd George had considerable musical ability, nurtured at the Royal College of Music, which brought many complimentary comments in the columns of the local papers. At an amateur concert to raise money for the 'distressed weavers of Coventry', held at Staunton-on-Wye, near Moccas, he played the cello in a rendering of the symphony in E flat by Romberg. His 'masterly skill' was noticed again at a concert held at Shobdon in June 1867, where his 'operatic singing' was also said to be 'in great taste and justly deserved the encore'. the Revd George was also a notable, antiquarian, geologist, natural historian and a member of both the Cambrian Archaeological Society and the Herefordshire-based Woolhope Naturalists' Field Club, formed in 1851.[52] The diarist Francis Kilvert was vicar of Bredwardine, the neighbouring parish to Moccas, and a few years later bears witness to Revd George's wide interests and cultivated life. He regularly made use of the Revd George's library at the Court and attended the cultural soirees hosted by him and his equally talented wife.[53]

Towards the Restoration of St Michael's

Since 1858, when the Revd George became rector of St Michael's, especially once he had inherited the estate he must have frequently cast an eye towards the picturesque, but neglected, parish church. We can perhaps assume that the removal of the ivy between 1865-6, recorded in the churchwardens' accounts, was initiated by the Revd George. However, given the position of the church within full view of the Court, the ivy might have been tolerated since it enhanced the prospect from the principal rooms. We forget that 'counterfeit neglect' was one of the principal recommendations of the Picturesque Movement and had its roots in Herefordshire and, not least, at Moccas, where Richard Payne Knight was a regular visitor in *c*.1800.[54] At Malvern proposals for the restoration of the Priory Church were delayed for a decade (1803-13) because of the passionate defence of the ivy, which covered the great east window and was allowed to encroach upon the interior of the church.[55]

There were other reasons why the Revd George approached the restoration of St Michael's in a conservationist spirit. He was well aware that Moccas was a rare example of a two-celled early 12th century Romanesque church and shared with a number of other churches in south-west Herefordshire a sub-Roman/Celtic background. The Herefordshire Philosophical Society had celebrated this ancient history in 1849, when in June, on one of its first excursions, a convoy of carriages descended Dorstone Hill to visit Bredwardine and Moccas. The following year a lecture upon St Guthlac once again referred to Moccas and a brief account of the Dubrician connection was provided in *Hereford Times.*[56] Sir George was only seventeen but he was soon collecting Celtic references and this material is now in the Herefordshire Archive and Record Centre (HARC). Furthermore, after Trinity College he investigated the continental origins of early church architecture in late Roman period on a tour in 1863 of the Eastern Mediterranean and Sicily.[57] Thus in 1870 when he began to seriously consider the restoration of his church, he needed to find an architect who would be sympathetic to its unique background.

Presciently, we find the Revd George on 4 July 1863 at the celebrations surrounding the re-opening of Hereford Cathedral, recently completed by Sir George Gilbert Scott.[58] As a diocesan clergyman and rural dean, this was to be expected, but given that when he came to choosing an architect for his rectory, he employed George Truefitt, associated with Lewis Knockalls Cottingham, Scott's predecessor at the Cathedral, he might be tempted return to the same source. His interest in Scott was demonstrated a few months later when, after joining the Woolhope Club in September, Sir George was present at Great Malvern Priory, where Scott's work was once again on show.[59]

The Revd George soon discovered that at Hereford the eminent architect had already handed over responsibility for completion of Hereford project to his son, also George Gilbert Scott. Moreover, the young Scott, seeking to establish an independent career, had recently (1866-70) been commissioned to restore Broughton Castle in Oxfordshire, the ancestral home of Lord Saye and Sele, the garrulous Archdeacon of Hereford who was well-known to Revd George and chosen in 1870 to celebrate the re-dedication of Moccas after its restoration by Scott junior. This was an unusual choice since, according to Kilvert, the venerable archdeacon was not a great preacher, albeit his 'plain and homely' style appealed to the cottagers. His presence at the opening ceremony would be explained if he had recommended the young Scott to Revd George.[60] Another explanation for the choice of Scott junior may have been his partnership with the celebrated church architect, George Frederick Bodley, who in the 1860s was consulted widely in Herefordshire and mentioned by name in Sir George's 1891 Woolhope talk, referring to his restoration of Wigmore church (1868). Since the younger Scott

also brought the decorator, Charles Eamer Kempe with him to Moccas and he had been discovered by Bodley, this gives further credence to Scott's arrival on the scene via Bodley.[61]

Revd George's architectural taste was greatly influenced by his antiquarianism. In 1891 he lectured the Woolhope Club on the 'Roman basilica plan' which was adopted by the early Christian church and reflected in the apse and chancel at Moccas. He asserted that 'in the 19th century, if we are to bring into being a new scheme of architecture, we must look back to these early forms, from which has evolved all that is grand and beautiful in its late development'. This was a revolutionary statement and suggests that he was putting aside Pugin's gothic revival, with its emphasis upon the 13th century and continental models. He also recounted that on his Mediterranean travels in 1863 he visited the Roman site at Paestum—'a perilous journey'—where he noticed that many temples were constructed of Travertine (tufa), which, he points out, was the material employed copiously in the eastern end of Moccas Church. Thus Sir George was a precocious client, who required a collaborative architect and one not hide-bound by prevailing gothic fashions.[62]

George Gilbert Scott Junior

George Gilbert Scott junior was thus an ideal choice. He had already broken away from his father's ubiquitous 13th-century gothic and was prepared to embrace other models. He was even sympathetic to classicism and in his domestic work embraced the Queen Anne Revival. In London he defended Wren's churches, which were very much out of favour and in some cases threatened with demolition. Thus he would have welcomed Revd George's scholarly approach to the restoration of St Michael's, appreciating that its Romanesque architecture flagged up its sub-Roman Celtic origins. This clearly needed to be preserved and enhanced and the wholesale replacement or the addition of new materials was out of the question. 'Patch and mend'—the watchword of the SPAB, a conservation body for which Scott had campaigned—was the order of the day.[63]

Revd George wanted to raise the height of the apse and chancel using the travertine available on the estate. This could be found where several springs created a deposit in Depple Wood, on the slopes of the Wye, to the west of the Court. As it turned out, this was over ambitious, and the source ran out but, fortunately, 'several truckloads' were provided by Sir Thomas Winnington of Stanford-upon-Teme from Southstone Rock on the Teme. No doubt, the younger Scott would have known that his father had exploited this source for the new vaults of Worcester Cathedral. The ready availability of travertine from the Teme valley, allowed Scott to raise the roof of the chancel and apse at Moccas. In the event he used the travertine with alternate courses of stone so the new work could be distinguished from the old.[64] The Revd George succeeded to the baronetcy on the death of his brother Velters on 14 October 1868.

Scott's correspondence with Revd Sir George—including specifications, plans and estimates—survives in the Moccas collection at the Herefordshire Archive and Record Centre (Plate 6.4).[65] It began in March 1870 but was interrupted in September when Scott's office in Cecil Street, Westminster, was destroyed by fire and all his papers, together with those of his father, were destroyed. This resulted in a mental breakdown, which recurred throughout the rest of his life. He recovered on this occasion through the nursing of Ellen Sampson, who subsequently became his wife. Scott refers in passing to his illness in a letter to Sir George, written from Eastbourne, where he was convalescing, in August 1871. Here he adjusts all his estimates, taking into account the extra work encountered by the contractor, Messrs H.R.

Franklin & Co of Deddington in Oxfordshire, whose competence had enabled the project to continue, notwithstanding the absence of the architect.[66]

The Restoration of 1870-71[67]

The heightening of the chancel and apse made it necessary to re-build the Romanesque chancel arch and provide a new roof. As a result the apse required 'a quantity of new circular work, which is very tedious to execute' and was thus more expensive. A new floor was laid, using where possible the existing slabs. The windows in the chancel also required new tracery and mullions. They were also re-glazed but the original stained glass was re-inserted in the north window and, perhaps, completed by Burlison and Grylls, who provided the south window. The Romanesque windows in the apse were repaired and given 'hard arches'. Scott's estimate for all the exterior work came to £297 and this included under-pinning all the walls with cemented brick and a 4-inch piped drain to carry water away from the foundations. There was also a thorough inspection to replace any decaying stonework. Notwithstanding Sir George's campaign there was still some ivy to deal with. Both doors were carefully restored but with no new additions apart from a new porch for the south entrance based upon the 14th-century timber porch at nearby Thruxton.

Inside, the plasterwork and several layers of distemper were removed and all the walls repaired and re-pointed. New ceilings were provided throughout with the nave ceiling being boarded in the 15th-century manner, embellished with 48 carved wooden bosses designed by Scott. This was eventually deemed to be insufficient and further six were added in 1871. The new ceiling, including the new roof for the chancel and apse, was priced at £354.

Both Sir George and Scott had very clear ideas about the eastern arrangements of the church. Both were committed to an austere setting to complement its primitive origins but the latter, closely allied to the Anglo-Catholic wing of the established church, suggested a fixed altar for the apse instead of a communion table. Sir George expressed his doubts—he apparently had a Jacobean table available—but was talked into a fixed stone altar. When he saw it he changed his mind again, complaining about its length and severity. Scott responded by stating that in the Middle Ages altars were always covered with a cloth, which he could provide. He also suggested it should be illuminated with a chandelier 'of the old 'spider' pattern'. Nevertheless, Sir George remained unconvinced and Scott was close to accepting the return of the communion table but mentioned that the Dean of Westminster had recently put up a fixed altar in Henry VII's chapel made of black marble. He had celebrated a communion service on it without any adverse reaction from his discriminating congregation. This seems to have clinched the argument—the altar remained. The debate did not end there; the style of the altar cloth resulted in a lengthy discussion and Scott sent Sir George off to an exhibition at Burlington House to see a Van Eyck painting depicting a late medieval frontal. Scott insisted that the cloth should be made from Eastern fabric so it would imitate medieval needlework. He drew Sir George's attention to a cloth he had recently designed for Ripon Cathedral, embroidered with sacred monograms. Once again Sir George surrendered (Plate 6.5).

Also hotly debated was the purpose of the chancel. On the original estimates of 18 March 1870 a chancel screen, iron gates and choir seating are priced at £168. Three days later Scott writes that he has prepared a design for the chancel seats and 'a screen of a kind'. He hoped that these would meet with Sir George's approval. Once again, Sir George had his own ideas and by May 18 the screen had been reduced to a minimum but still with low gates, which Scott assured his client could easily be folded away. Notwithstanding his stone altar, Sir George was

here decisively rejecting the Anglo-Catholic preference for separating the sacerdotal space of the chancel from the congregation in the nave. He was also keen to see the seats in the chancel made available for the congregation, perhaps for his family. But on this issue Scott dug his heels in. He envisaged services with multiple clergymen aided by a surpliced choir, who would sit in the chancel seats, long-ways, separated from the lay congregation beyond the screen. He felt that 'it would not look nice to see a clergyman in a surplice sitting side-by-side with ladies and gentlemen'. He accepted other clergymen would only be seen at Moccas infrequently but when they did it would 'it would give a good deal of dignity to the chancel'. Ideally, he wanted the chancel to be furnished 'prie-dieu – as used on the continent' i.e. in Catholic churches. But in the end he seems to have given ground and agreed to four stalls facing the altar—to be used by the congregation—and six stalls facing across the chancel for the celebrants. The correspondence makes no mention of altar rails and it appears that Scott—and his client—saw the chancel and the apse as a single sacerdotal space. Today there are Jacobean ones which were brought from Willersley, a neighbouring church declared redundant in the 1970s.[68] Nevertheless, perhaps against his better judgement, Sir George got his early Christian setting for the chancel and apse at St Michael's albeit he later compromised its purity by making the de Fresne tomb a central feature.

The Organ setting

Strangely, there seems to have been no debate about the furnishing of the nave. The light oak pews, pulpit and reading desk were produced by Franklin & Sons and are late gothic in detail. It contrasts sharply with the highly embellished setting provided for the organ at the west end. J.W. Walker & Sons expressed disapproval for the extended context for their instrument but Scott was determined to exploit it for a decorative climax. He rejected Walkers' proposed colour scheme for the pipes and their piercings for the backdrop, having already written to Sir George in March 1872 insisting that the organ 'required delicate detail' and a 'true case, not a mere frame supporting the pipes'. He admitted that the area of panelling he envisaged was large and that it would cost an extra £116 but it was 'so important a feature in the church that I do not see how it can be made less ornate'. Initially, Walkers were going to provide the casing albeit in a letter to Sir George they tried to persuade him to go for a cheaper less elaborate solution. In the end Scott got his way and brought construction and decoration under his control by giving the contract to Franklin & Co. They agreed to undertake the organ case and its fittings, as designed by Scott, for £95 - £20 less than Walkers' price (Plate 6.6).[69]

As we have seen, Scott, like most *fin de siècle* architects of an Arts and Crafts persuasion, liked to have every aspect of a contract under his control. Clearly, this was alien for Walkers and, perhaps, for Sir George who was expected to pay the bill but once again had to leave artistic decisions to his architect. Scott brought in Charles Eamer Kempe (1837-1907) to decorate both the instrument and its setting. Kempe was a protégé of Scott's erstwhile partner, George Frederick Bodley (1827-1907) who was looking for an alternative to Morris & Co for stained glass. In contrast to Morris's atheism Kempe was an Anglo-Catholic, like Scott. As an amateur artist Scott had employed him in 1868 at the church of St John the Baptist at Cirencester to paint 15th-century diaper patterns on the walls. A year earlier Kempe had set up his own studio in London specialising in stained glass, religious textiles, altars, frontals, furniture and other decorative work. Unlike Morris & Co he was also happy to work to architects' designs, which, of course, suited Scott who subsequently employed him a great deal. Scott liked Kempe's subdued palette, his 'sombre tints' and lack of gaudiness. Like Scott

he was inspired by the decorative schemes of the 15th century, which earlier architects and artists of the Victorian gothic revival had regarded as debased. His glass was predominantly gold with touches of blue—again of late medieval inspiration.[70]

Scott had a lot on his hands at the west end of the church. Structurally, extra support was needed to create a bell chamber and virtue was made out of necessity by inserting a massive tie beam with arched braces, producing a frame for the decorative work behind. A vestry was also created and stairs inserted to the bell chamber. This was hidden behind a fine oak screen, boarded in the vernacular manner with narrow overlapping slats, crenellated in the 15th-century style. The broad opening immediately behind the font, in the middle of the aisle, has a low profile arch, leading the eye upwards to the panelled organ loft. Here we encounter the olive green and orangey-red that dominates the ensemble. Kempe & Co's printed arabesque papers are separated by vertical strips, painted blue and gold as heraldic poles. The top of the panelled balcony is finished with a briar rose frieze, derivative from Morris & Co. Above the console, flanked by red panels, a canopy curves forward, embellished with laudatory exclamations, with the gothic letters painted on scrolls. The composition is crowned with the pipe case, which breaks forward in the baroque fashion and is enriched with late gothic fretwork, set in margins of more blue and gold piping. On the bottom of the pipe case a royal blue frieze, enriched with golden sun-bursts, separates the loft from the pipes. Finally, on either side is the great expanse of olive-green panelling, with the margins picked out in black and central squares of pierced quatrefoils, seen against a black and white ground with a gold *patera* at the centre. The panelling is terminated with a green and red briar rose frieze, leaving a stretch of stonework visible either side, under a green ceiling, suggesting that some mural decoration was planned but not executed. It remains a wonderful composition, unparalleled anywhere else in Herefordshire.[71]

Sir George was very pleased with his organ—and his church—which he wrote about at length in the *Transactions of the Woolhope Club* (1891), at a time when he was Hon. Secretary. Walker's had toned down Sir George's ambitions for his organ, reducing the number of stops and persuading him to forgo a swell. They pointed out that the organ he had in mind would be too powerful for a small church. The completed instrument was delivered late in 1872 at a cost of £260, but within a year Sir George was insisting upon his swell with five extra pipes for an additional £76, which was added to the instrument in April 1873.[72] Francis Kilvert vouches for the power of the new organ and records in his diary a visit to Moccas in April 1875. As he approached the east lodge leading down to the church and court, he was met by some wandering singers 'with voices matched like bells'. He could not understand what they sang but in the distance he could hear the strains of the organ coming from St Michael's church. On coming closer he was hailed from the churchyard by James Atalay, Bishop of Hereford (1868-95), who offered to show him the church. Kilvert was reluctant to interrupt his patron in full flight but the bishop hustled him into the chancel and when Sir George had finished he showed the visitors 'the beautiful little Norman church with its apse and stone altar'. Kilvert noted in his diary that Sir Reginald de Fresne, whose tomb was now set in the middle of the chancel, may well have been an ancestor of his.[73]

It is significant that Kilvert noticed the stone altar, which we might take for granted today, as we do the rest of the late Victorian restoration, which not only preserved the fabric of the church and has now weathered 135 winters, but also provided it with a very distinct and beautiful interior. It is very easy to be complacent, even antagonistic, about Victorian restorations. Contemporaries recognised, albeit again, we may not, that George Gilbert Scott

junior was an exceptional architect; ‘scholarly and sound in style’ but also ‘individual and interesting’; an architect of ‘remarkable and exceptional ability’ whose work showed ‘delicate refinement without weakness’. Sir John Betjeman thought that Scott junior was ‘the greatest architect of the Victorian era’. Sir George, it seems, chose well and let Scott get on with the work and took credit for the glory of it thereafter.[74]

NOTES AND REFERENCES

[1]I owe a debt of gratitude to Dr Rachel Jenkins, a resident of Moccas and President of the Woolhope Club 2019-20, for suggesting that I write about St Michael’s church, and especially about the restoration in 1870-1, to provide some historical background for the organ restoration fund.
[2] Hereford Archives and Record Office (HARC), C62.
[3] HARC/HSM 32806, Tim Hoverd, Archaeological Survey of the Moccas Estate (2003)
[4] G.H. Doble, *Lives of the Welsh Saints* (1984), pp.61-66; Wendy Davies, *An Early Welsh Microcosm*, Royal Historical Society Studies in History 9 (1978), pp.26, 28, 32, 121.
[5] Bruce Coplestone-Crow, *Herefordshire Place-Names*, BAR British Series, 214 (1989), pp.14-16.
[6] Revd W D Barber’ The Book of Llandaff and Herefordshire Place-Names’ in *Trans. Woolhope Natur. Fld Club* (*TWNFC*), 1916, pp.158-64- map opposite p.160.
[7]David Whitehead & David Lovelace, *Moccas Court Parkland Plan* (Ashmead Price, 2013), pp.41-2.
[8] British Library, Harleian MS. 6726.
[9] David Petts, *The Early Medieval Church in Wales* (2009), pp.72-4; *Oxford DNB, ‘*Silas Taylor (1624-78)’; for the de Fresne castle see Whitehead & Lovelace (2013), pp.7.
[10] Petts, *Early Medieval Wales*, pp.69-70; Revd Sir George Cornewall. ‘Moccas Church’ in *TWNFC* (1891), pp.230.
[11] Petts, *Early Medieval Church*, pp.171, 177; Davies, *Welsh Microcosm*. pp.135; Doble, *Welsh Saints*, pp.87.
[12] Petts, *Early Medieval Wales*, pp.170-1; A.T. Bannister, ‘The Priory of Austin Canons at Wormesley’ in *TWNFC* (1926), p.154; C.J. Robinson, *The Mansions and Manors of Herefordshire* (1872), p.305.
[13] Sarah and John Zaluckyj, *The Celtic and Christian Sites of the Central and Southern Marches* (2006), pp.291-2.
[14] Davies, *Welsh Microcosm*, p.176.
[15] Doble, *Welsh Saints*,p.63.
[16] Richard Morris, *Churches in the Landscape* (1989). pp.52-6.
[17] Whitehead & Lovelace, *Moccas Parkland Plan*, 6; Chris. Thorne (ed,) *Domesday Book* (1983), pp.6(7) 7(7), n7.
[18] D. A. Whitehead, ‘Historical Introduction’ in Ron Shoesmith, *Excavations on Castle Green, Hereford* (CBA Research Report, 36), 1980, pp.1-4.
[19] *Register of John de Trillek* (1912), p.229; *Register of Edmund Lacy* (1917), p.68.
[20] Whitehead & Lovelace, *Moccas Parkland Plan*, pp.6-7.
[21] *Registesr of Bishop Orleton* (1908), pp.217, 387; *Bishop Swinfield (*1909*)*, p.537.
[22] *Register of Lewis de Charleton* (1913), p.70; *John Gilbert* (1913) p.116; *John Trefnant* (1914), pp.176, 180; *Thomas Myllyngs* (1910), p.200; Robinson, *Mansions and Manors*, p.209 but see HARC J56/III/III for earlier Vaughan ref.
[23] *Taxation of Pope Nicholas, 1291* (1802), p.159.
[24] *Swinfield*, pp.522, 537; *Orleton*, p.217; *Trefnant*, p.177.
[25] *Taxation of Pope Nicholas*, p.159; *Valor Ecclesiasticus* III (1817), p.351.
[26] *Charlton*, p.70; *Reg. of Robert Mascall* (1916), p.182.
[27] *Reg. Orleton*, p.217; *Trefnant*, p.188; *Trillek*, p.181.
[28] *Reg. Mascall*, p.26.
[29] *Reg. Edmund Lacy*, pp.68, 88; *Reg. Thomas Spofford* (1917), pp.135, 192, 262; *Reg. of John Stanbury* (1918), pp.13, 66; *Myllyng*, pp.2, 150.
[30] *Stanbury*, p.66; *Reg. of Richard Mayhew* (1919), p.60.
[31] HARC, J56/11/111.
[32] M. A. Faraday (ed.), *Calendar of Probate Administration Acts 1407-1550, Hereford* (2008), p.508/6, 544/23.
[33] M.A. Faraday (ed.), *The Herefordshire Musters of 1539 and 1542* (2012), p.70-1.
[34] M.A. Faraday (ed.), *Herefordshire Militia Assessments of 1663* (Camden Society, 1972), p.127.
[35] *Valor Ecclesiasticus* III (1817), p.31.
[36] HARC, 6/64-68.
[37] Anne Whiteman (ed.), *The Compton Census of 1676* (Records of Social and Economic History, NS 10, 1986), p.255.
[38] HARC, J56/IV/2.

[39] HARC, J56/III/115; Chester Master Cirencester Accounts, Transcription by Hazel Fryer in Dubois Landscape Survey Group, *Moccas Court, Herefordshire: Notes on the Landscaping of the Deer Park* (1993), W 1779.
[40] HARC, J56/IV/3.
[41] Fryer, Cirencester Accounts.
[42] Cornewall, *TWNFC* (1891), p.230.
[43] HARC, A57/1-26
[44] HARC, AS93/1
[45] John Leonard (ed.), *Herefordshire Churches through Victorian Eyes* (2006), p.6.
[46]HARC, AS93/1*; London Evening Standard* 26 September 1908 –obit of Revd Sir George Cornewall.
[47] *Hereford Times* (*HT*) 7 August 1852; *Wiltshire and Gloucestershire Standard* 3 October 1908.
[48] *HT* 7 August 1858, 4 June 1859, 25 February 1860.
[49] *RIBA Directory of British Architects* II (2001), p.839.
[50] *HT* 19 July 1862, 27 November 1858.
[51] *HT* 8 June 1867, 29 June 1867.
[52] *HJ* 16 February 1861, 20 January 1867, 20 June 1887.
[53] William Plomer, *Kilvert's Diary* II (1961), p.26; III, p.399.
[54] R.P. Knight, *The Landscape: a Didactic Poem* (1797), lines 4-5; Whitehead & Lovelace, *Moccas: Parkland Plan*, pp.18-19.
[55]John Chambers, *A General History of Malvern* (1817), pp.72-4.
[56] J.C. Eisel, 'The Herefordshire Philosophical Society' in *TWNFC* 59 (2011), pp.27-8; *HT* 23 March 1850.
[57] Whitehead & Lovelace, *Moccas: Parkland Plan*, 25; *TWNFC* (1891), pp.231, 238.
[58] *HJ* 4 July 1863.
[59]*TWNFC* (1852-65), p.301.
[60] Gavin Stamp, *An Architect of Promise: George Gilbert Scott Junior, 1839-1897* (2002), 22-24, 238-9, 268-9: Plomer, *Kilvert's Diary*, III, 165.
[61] Michael Hall, *George Frederick Bodley* (2014), pp.102, 202; *TWNFC* (1891), p.221; G. Aylmer & J. Tiller, *Hereford Cathedral: a History* (2000), pp.162-3.
[62] *TWNFC* (1891), pp.221, 230-1, 238.
[63] Stamp, *Architect of Promise*, pp.7-11, 137, 142-7, 223-5.
[64] *TWNFC* (1891), pp.222.240-1; Richard Lockett, 'Gilbert Scott and the Restoration of Worcester Cathedral 1863-74' in *Trans. Worcestershire Arch. Society*, 3rd Series 16 (1978), p.13.
[65] HARC, AF57/17, 20; 59/17, 19.
[66] Stamp, *Architect of Promise*, pp.32-4; HARC, AF/57/17.
[67] The information exploited here comes almost entirely from Scott's correspondence with the Revd Sir George Cornewall, which the latter carefully preserved – see note 65 above.
[68] Alan Brooks & Nikolaus Pevsner, *The Buildings of England: Herefordshire* (2012), pp.513, 677.
[69] HARC, AF/57/17.
[70] Stamp, *Architect of Promise*, pp.268-70; Michael Hall, *Bodley*, pp.141-3.
[71] St James Kinnersley has a decorated organ case by Bodley *c*.1887, which may have been decorated by Kempe. Brooks & Pevsner, *Herefordshire*, 408; Herb.Powell, 'Organ Cases in the Diocese of Hereford' *TWNFC* (1978), p.234.
[72] HARC, A59/17.
[73] Plomer, *Kilvert's Diary* III, p.165.
[74] Stamp, *Architect of Promise*, 343-6 quoting the *British Architect* XIVII, 11th June 1987, p.413; *The Builder* LXXII 12 June 1897, p.531 - unpublished recollections of Sir Ninian Comper.

The demolition of Butchers' Row, Hereford

By JOHN C. EISEL

An enduring image of Hereford is that of the Old House, the sole remaining part of Butchers' Row, standing in proud isolation since 1837 (Plate 7.1). Whilst much has been written about Butchers' Row in the past, the same incorrect information has been repeated time and time again, without any critical analysis. In this paper such contemporary evidence as has survived has been consulted and this gives a very convincing picture of how Butchers' Row came to be demolished, rather at variance with other interpretations, and it is hoped that this will set the record straight.

INTRODUCTION

In the years immediately after the Conquest of 1066 William FitzOsbern developed a large, roughly triangular, market place, to the north of the old Saxon defences. The present view is that this was an open space, in piazza style, with All Saints' and St. Peter's churches standing in isolation. Because there was so much space it was gradually infilled, so, for instance, the area to the west of All Saints' church was infilled with a row of houses/shops, creating Bewell Street and what is now Eign Gate. The area to the east of that church was also infilled with a block of buildings. Similarly, the area to the north-east of St. Peter's Church, bounded by what are now Commercial Street, Union Street, and St. Peter Street, was built over. This process was well under way by the late thirteenth century.

The central area would have continued to have been a market place, with temporary stalls, which eventually became permanent, again in the mediaeval period: the extent of this infill is clearly seen on Taylor's map of 1757 (Figures 1 & 2).[1] To the west was the High Cross, then, moving eastwards, the pillared Town Hall or Market Hall (or House), built in 1576, and the central block of timbered buildings, two rows of buildings standing back to back, named as The Butchery on the south side and as Cooken Row marked on the north side (Plates 7.2 & 7.3). On the south side, connected by Golden Alley, a continuation of The Butchery ran part-way down St. Peter Street. On the north side, where Bye Street (later Commercial Street) was at its widest, was the Tolsey. Of these, the Tolsey was demolished *c*.1770, at about the same time that the Market House lost its topmost floor, and the High Cross was demolished in 1776.[2] Further change was to come; there was pressure to open out the centre of High Town to re-create an open space. As a consequence Butchers' Row later fell victim to the reformers, the destruction of which in the early nineteenth century is the main theme of this paper.

At this period the streets of Hereford were the responsibility of the Commissioners for Paving and Lighting, whose authority derived from an Act of 1774, enhanced by a further Act of 1816, and whose minute books record some of the story.[3] This information is augmented by the minute book of the Common Council of Hereford, which in 1836 became the Town Council, and adverts and reports in the local press, and the story is built up from these sources. Frustratingly, no accounts for the Paving Commissioners are known to survive, apart from routine accounts for one or two years. It is likely that separate accounts were kept for the various appeals for subscriptions towards the clearance of High Town, but only one survives because it was published in the local press: had further accounts survived they would have added greatly to the detail of the story of the demolition of Butchers' Row.

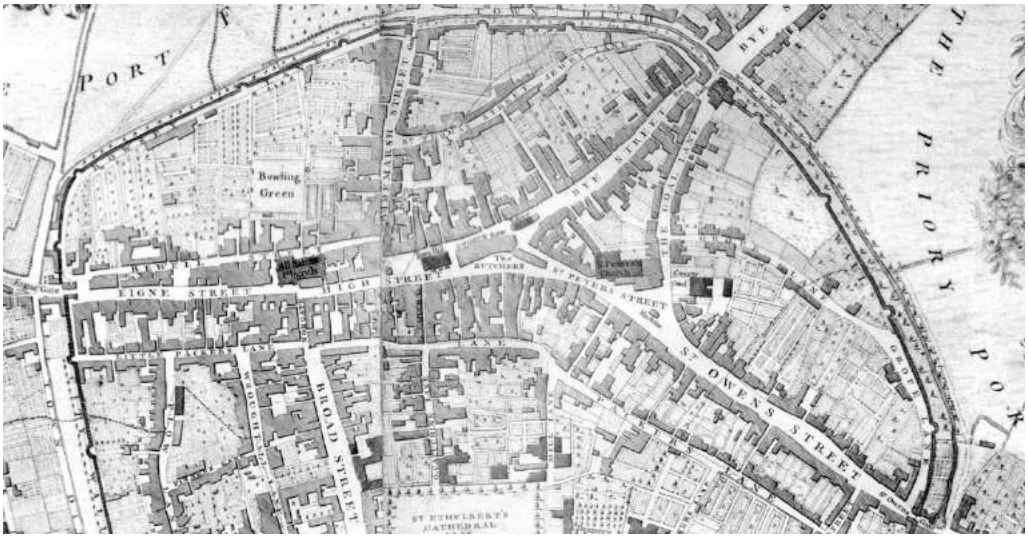


Figure 1. Part of Isaac Taylor's 1757 map of Hereford

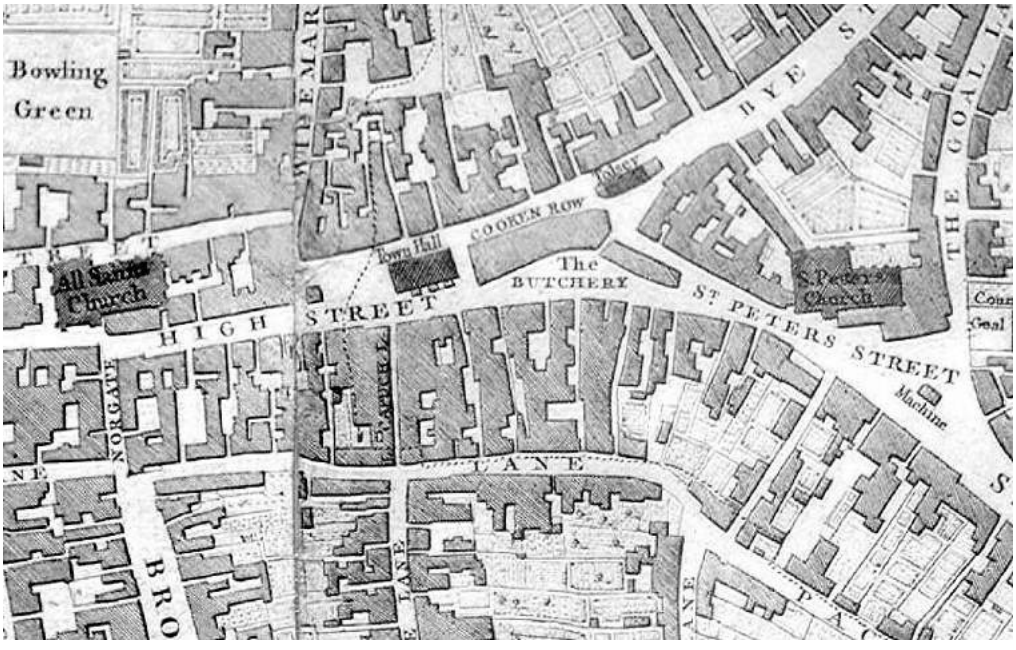


Figure 2. Detail from Taylor's 1757 map, showing the area of Butchers' Row

COOKEN ROW

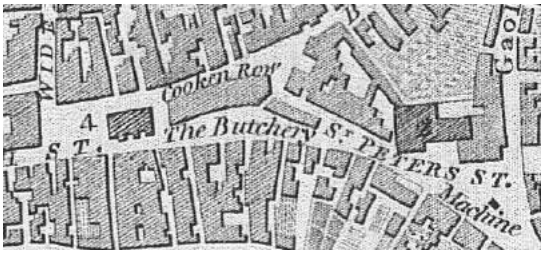


Figure 3. The centre part of Cole's map of 1806, which was published to illustrate the Herefordshire volume in Brayley and Britton's *Beauties of England and Wales*

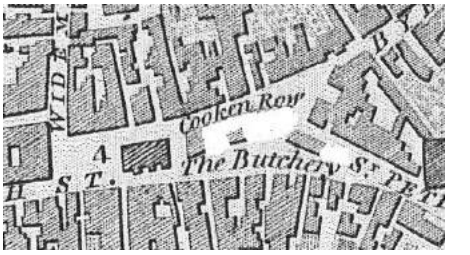


Figure 4. Cole's map revised to show the location of the final three houses which were demolished in the 1830s

Here it should be noticed that the name Cooken Row, which appears on Coles's map of 1806 (Figure 3), was by then a conscious anachronism, and did not feature in the local press at the time of demolition, all the buildings in the centre being referred to collectively as Butcher/Butchers' Row. Indeed, there is confusion as to what exactly the term Cooken Row refers to. In a series of leases in the Guildhall Collection, covering 1721 to 1812, relating to a tenement owned by the Corporation, this was referred to as being 'in Cocken or Butchers Row', showing not only that that the name Cooken / Cocken was then falling out of favour, but also that the two were interchangeable.[4] However, there is a strong possibility that this was actually the name of the narrow passage between Butchers' Row and the north side of High Town, evidence of which is found in a series of leases in the archives of Hereford Cathedral.[5] These relate to a property, part of the endowment of the College of Vicars Choral, which was stated to be in Cooken Row, but from a lease of 26 July 1826 onwards the street was called Bye Street. Finally, it was sold to Joseph Carless, butcher, in 1868, and the conveyance, dated 27 February 1868 refers to the property as 1 & 2 Commercial Street, partly in the occupation of William Pritchard, tailor: an attached plan of the property shows how it was then divided. But these leases cause confusion also. A lease of 26 May 1790 states unequivocally that the property was then in the possession of Thomas Dimes, and the occupants of the adjoining properties positively identify it with the house Thomas Dimes moved into in 1788, when he advertised that he had 'removed into BUTCHER-ROW.'[6] Thus in this case the term 'Butcher-Row' as well as 'Cooken Row' was applied to a property on the north side of High Town/Bye Street/Commercial Street.

In 1783 a school for young ladies and gentlemen was opened by one J. Goldsmith in Bye Street, which was stated to be 'near Butchers' Row', rather than using Cooken Row as the reference.[7]

It is also worth pointing out that Rees's *Hereford Guide* of 1827, published when the demolition of the buildings in the centre of Hereford was well under way, states that:

> 'Eastward from the Old Town Hall, was a row of old houses, which at the present, for the most part, taken down, called on the north, or Bye-street side, *Cooken Row*, and on the other, *The Butchers' Row*.'[8]

This seems quite clear, although the example quoted above makes clear that nothing is as it seems, and this must be borne in mind when interpreting the location of other properties which were stated to have been in Butchers' Row, and which may well have been on the north side of High Town (Figure 4).

BUSINESSES IN BUTCHERS' ROW

While it must be assumed that the names 'Cooken Row' and 'Butcher Row' or 'The Butchery' began as descriptions of the activities within those locations, by the period of the final demolition of the central block there was a wide range of trades and businesses pursued within them. So far the only relatively modern evidence of baking within this area comes in 1762, when William Bullock, a baker and maltster, advertised his shop and premises as being to let, and it would be reasonable to assume that these were somewhere in Cooken Row, but the advert in the *Gloucester Journal* clearly states that they were in 'Butcher-Row'. However, this may well be a similar case to that of Thomas Dimes, as Bullock's premises came with a garden, and so much more likely to have been on the north side of what became the open space of High Town.[9]

It is also clear that the buildings in Butchers' Row were rebuilt from time to time. At a meeting on 9 August 1779 the Paving Commissioners ordered:

> 'That the Commissioners present at the meeting do take a View of M^{r} Thomas Thomas's Ground in the Butcher Row and give directions for the Foundation to be laid out to prevent any Incroachment—A View being taken It is ordered that the Building be ranged Six Inches without the House of M^{rs} Aubrey and even with the corner of Mr Careless's House.'[10]

Mr Careless was a butcher, and when the house in his occupation was advertised to be sold by auction on 16 September 1784 it was described as 'All that Freehold Messuage, or Dwelling-House, with a stable, pigscot, and cowhouse, situate in the Butcher Row, now in the possession of Mr William Careless, Butcher.'[11]

As indicated above, prevention of encroachment was one of the duties of the Paving Commissioners, as John Allen, the bookseller and stationer, found to his cost. He set up in business in Hereford in October 1779 and evidently did work to his premises, which did not please the Paving Commissioners, as the minutes of a meeting on 1 February 1780 recorded:

> 'It is also ordered that M^{r} Allen Bookseller in the Butcher Row have notice given to him to alter or pull down his bow window within Twenty Days.'[12]

The diverse nature of the businesses in Butchers' Row increased as time went by, and in 1787 Mr Archer, mercer and draper, moved from 'Butcher-row' to Broad Capuchin Lane, although there was no indication of how long he had been trading in Butchers' Row. On 8 August 1792 Mr Whitney, hairdresser and perfumer, advertised in the *Hereford Journal* that he had moved from his late shop 'at the corner of Butcher Row' to one in the High Town, no doubt to more salubrious surroundings!

Occasionally it is possible to identify approximately where a shop is in the central block. Thus, for instance, the shop, opened in 1799 by Matthew Nash, saddler, etc., which was stated to be in the High Street, opposite his late master's (Joseph White). White is known to have had

a shop on the south side of what is now High Town, a few doors along from the Sun Tavern, and this places Matthew Nash's shop in the southern range of Butchers' Row, which bounded High Street on the north side. This location is confirmed by later evidence, quoted below.[13]

Just occasionally the exact location of the various premises can be deduced. On 23 December 1807 three adjoining messuages 'now in the several occupations of Peter Williams, Thomas Hardwick, and William Baynham' were offered for sale by auction at the New Inn. As usual the result was not reported, but on 5 October 1809 'those Two Freehold DWELLING-HOUSES and BUILDINGS, situate in the Butcher-row, adjoining Golden Alley, in the City of Hereford, now in the occupation of Peter Williams and William Jones' were offered for sale by auction at the Sun Tavern. There is evidence to suggest that Peter Williams's shop was on the north side of Butchers' Row, indicating that William Jones was at the south end of Golden Alley.[14]

FIRST MOVES.

The prevailing attitude to Butchers' Row was expressed in *The Hereford Guide*, published in 1806, where it was stated:

> 'The improvement which seems to be most wished for at present is, the taking down of the old buildings called the Butchers'-row, situated eastwards from the Market-house. Not only the situation and irregular appearance of those houses, recommend the measure, but also appropriation, which is a real nuisance; the circumstances of cattle being slaughtered in the centre of the City, to the great annoyance of the inhabitants, being an evil of a very serious nature, and requiring a speedy removal.'[15]

The first step in the demolition of Butchers' Row came at a meeting of the Paving Commissioners on 18 January 1813, when it was decided that a subscription for taking down Butchers' Row should be set on foot, and that the clerk to the Commissioners should attend on each of the Commissioners for their subscription. This seems to have been triggered by a notice that had appeared in the *Hereford Journal* on 30 December 1812, repeated in the next two issues, announcing the sale by auction of a house in Butchers' Row, then in the hands of Mr George Carver, grocer, the sale to take place on 15 January 1813. Although not reported or recorded in the minutes, this was bought by the Paving Commissioners, and a laudatory report in the *Hereford Journal* on 20 January 1813 stated that the commissioners 'are making arrangements to purchase and take down the house at the end of the row, next St. Owen's-street, …' (Plate 7.4). It was also reported that the necessary sum, apart from one hundred pounds, was subscribed almost immediately, and suggested that the remainder would be subscribed within a few days. Apparently this was optimistic, and the following report appeared in the *Hereford Journal* on 28 April 1813:

> 'We feel much pleasure in stating that T. Foley, Esq. M. P. for this county, has subscribed the sum of Twenty Pounds towards pulling down the House at the end of the Butchers-row, at the top of St. Owen's-street, in this city. The subscription list is left at the Hotel Coffee-room, and we doubt not will soon have a considerable accession to the list of subscribers to this praiseworthy undertaking.'[16]

At that period the premises were being used by George Carver to sell earthenware, and after the sale on 15 January 1813 the contents were advertised to be sold by auction on 1 February

1813 and on 4 & 5 March 1813: in both cases the sale was stated to take place at the 'May-Pole'. Then on 19 May 1813 the building materials of the house were advertised to be sold by auction on 28 May 1813: particulars could be obtained from Mr Lee, Bye Street, or the auctioneer. 'Mr Lee' was Isaac Lee, clerk to the Paving Commissioners. As usual there was no report of any of the auctions, but there is no doubt that they took place, and the building on the east side of what is now the Old House was demolished (Plate 7.5).[17]

Next to go was a building at the south end of Butcher Row, which was purchased by the Commissioners in 1815. The materials of the house were advertised to be sold by auction on 3 July 1815, together with a pew in St. Peter's church, the advert appearing over the name of Mr I. Lee. The minutes of the meeting of the Commissioners that took place on 18 July 1815 noted that a house has been purchased, that it was formerly an inn called the Old George, and that the materials and seat had been sold; also that the deficiency in the purchase money would be met out of the rents that the Commissioners received, to be repaid out of the subscriptions 'as soon as it will admit thereof.'[18] (Plate 7.6)

A DETERMINED EFFORT

In 1816 a dwelling house 'in the Butcher-row, at the top of Bye-Street', then in the occupation of a Mr Edmonds as yearly tenant, was offered for sale by auction at the Catherine Wheel Inn on 5 April. Although not recorded in the minutes of the Paving Commissioners it was clearly bought on their behalf, and the materials of the house, together with a seat in St. Peter's Church, were offered for sale on the premises on 14 August 1816: again details were available from Mr I. Lee.[19]

The purchase of the house occupied by Mr Edmonds evidently stimulated the Paving Commissioners and at a meeting on 19 June 1816 it was decided that the buildings in Butchers' Row 'are a great annoyance to persons passing along and through the said City the streets being rendered narrow and inconvenient thereby, and that it would add much to the Ornament and Convenience of the said City, to take the said Buildings down. That for the purpose of defraying the Expence thereof it is expedient to solicit Voluntary Contributions from the Inhabitants of the said City and Neighbourhood.' Helpfully, the minutes indicate that there were then about seventeen premises in Butchers' Row, including what is now the Old House, which would be involved in the clearance scheme.[20]

The only information about the property purchased by the Commissioners at this period was embodied in the minutes of a meeting of the Commissioners which took place on 10 June 1817, which decided that money remaining from the sale of the materials of a house on the corner of King Street and Bridge Street, together with those from houses in Butchers' Row and some money from the sale of land in King Street, should be applied to the purchase of Mr Thomas Hardwick's house, whose name appears in the commissioners' minutes in 1816 as one of the occupiers of premises in Butchers' Row.

As for the subscriptions, it was not until August 1817 that a list of these, totalling £222 8s., appeared in the *Hereford Journal*: this list was headed by the Corporation of Hereford with a donation of £50. Subsequent donations were advertised in the *Hereford Journal*, the final notice of which appeared as a news item on Wed. 31 Dec. 1817. Further properties in the Row must have been purchased, but there is no indication either in the minutes of the Paving Commissioners or in the *Hereford Journal*. However, on 7 April 1818 the Commissioners ordered 'That Mr Heather be imployed to take down the Houses purchased by the Commissioners in the Butchers Row. And that the same be begun upon as soon as possible.'

No doubt the properties in Butchers' Row were in a dilapidated state, and it is no surprise that on 12 September 1818 one fell down:

> 'On Saturday, between the hours of two and three o'clock in the afternoon, a house on the North side of the Butcher Row in this city, fell to the ground; fortunately it had previously given sufficient indication of falling, to induce passengers to keep at a proper distance, or the consequences might have been serious, as the market is in the immediate vicinity, and the street in front of it generally crowded with people on a Market day. Arrangements had been made for taking down the house, which was not inhabited at the time it fell. We sincerely hope this event will lead to the expeditious removal of the rest of the houses which constitute this pile of building, many of them being in a very insecure state, and all of them at present inhabited; we doubt not a second subscription for the purpose will be liberally supported, and feel confident immediate measures will be taken to effect an object, that will at once so materially improve the city, and remove a dangerous nuisance.'[21]

The clearance of Butchers' Row was remarked on in 1819 by J.P. Wright in his guide *A Walk through Hereford*:

> 'We shall trace our steps to the High-town, where we shall detain the traveller to remark, that the row of old houses to the left of the Town Hall, (called the Butcher Row), is in progress of removal, a purpose in part effected, which will be the means of forming in the centre of the town, an airy and spacious area, of which few cities can boast.'

In this description the traveller was returning to High Town from Widemarsh Street.

It is clear that the subscriptions were proving inadequate to complete the job of clearing Butchers' Row, and on 28 June 1819 the commissioners decided to start another subscription list towards taking down the remaining part, using £25 from the funds: listed in the minutes were the subscriptions from the twelve commissioners present, all of one guinea, except that John Pateshall subscribed two guineas. It was also decided to use the balance of £37 3s. 4d. from the previous subscription. Publicity was given in the *Hereford Journal* of 6 October 1819, the advert stating that the previous subscriptions had been inadequate to complete the task, and that about one third of the houses still remained.

This subscription enabled to Commissioners to start on further clearance, and negotiations took place with Mr Nash, saddler, about his house in Butchers' Row. On 21 December 1819 it was decided 'That the sum of three hundred pounds be given to Mr Nash Sadler for his Premises, Provided the Corporation will give up their right in the same: (to be paid to Mr Nash on giving up the Possession).' Then on 4 April 1820 the commissioners decided to give Mr Nash notice that they intended to take down his house in Butchers' Row in the first week in May and gave him notice to quit by the first of that month: the remaining part of the purchase money was to be paid on him quitting the premises and producing the deeds. As far as can be determined, the materials of the house were not offered for sale by auction, but the house was certainly demolished as, on 31 May 1820, Matthew Nash advertised in the *Hereford Journal* that he had moved to premises in Bye Street 'in consequence of his House having been taken down…'[22] With this, it is certain that most of the buildings of Butchers' Row had been demolished, leaving the centre of the city rather like a bomb site, with the few remaining buildings scattered at random.

A PROLONGED ENDGAME

Nothing much seems to have happened in the 1820s. On 8 April 1825 the Common Council of Hereford agreed that the Corporation's interest in the house in Butchers' Row, occupied by Joseph Nash, butcher, be relinquished as soon as arrangements had been made for taking down the reminder.[23] In 1828 the Common Council noted that a fund was to be raised for taking down the remainder of the old houses in Butchers' Row, and on 2 December 1830 the Town Clerk was instructed to inform the Commissioners that the Corporation had helped already by subscriptions and relinquishing their interest in several houses, considerably helping in the clearance, and were still disposed to relinquish their interest in the house occupied by Joseph Nash at the south-east corner of the old Market House, provided that the Commissioners made over to the corporation the land on which the other houses of Butchers' Row stood, and also the land on which the houses to be demolished were standing.[24] This was agreed at a meeting of the Paving Commissioners on 14 December 1830, and on 7 February 1831 the Common Council ordered that the house at the corner of the Market House be demolished. The materials of the house were advertised to be sold by auction on the premises on 23 February 1831, the house to be demolished and the materials to be removed by the purchaser: further details could be obtained from William Pateshall, the town clerk. Curiously enough, the advert in the *Hereford Journal* on 16 & 23 February 1831 stated that the house was at the north-east corner of the Market House, although the minutes of both the Common Council and the Paving Commissioners both refer to the south-east corner, and other evidence, quoted below, indicates that they were correct.

The imminent removal of the house once occupied by Joseph Nash was referred to in a letter that appeared in the *Hereford Journal* on 9 March 1831, a letter which refers to 'the three remaining unsightly incumbrances' and advocating the complete removal of these (Figure 4). After the demolition of Mr Nash's house things moved slowly, and it was not until 6 November 1833 that the *Hereford Journal* reported:

> 'A correspondent states that it is in contemplation to perfect the improvement commenced by taking down the houses in the Butchers-row, in this city, and that a renewed subscription will shortly take place to purchase the two remaining tenements, which when removed, will effect a fine opening from the High-town. Mr Lee, the Clerk to the Commissioners, will receive subscriptions, and it is conceived there are circumstances at present in favour of such a measure, that may not soon occur again.'

A meeting of the Paving Commissioners to consider the best method of raising a subscription to take down the two remaining buildings of Butchers' Row was held on 17 December 1833, but the meeting was adjourned because of poor attendance, and the matter was not considered again until a meeting of the commissioners on 3 February 1835. At the latter meeting the Clerk to the Commissioners, Isaac Lee, was instructed to approach the owners of the two surviving houses of Butchers' Row, one formerly in the occupation of Mr Rd. Wheeler and the other in the occupation of Samuel Caswall with a view to ascertaining the amounts they would want for their interests in the houses.[25] The meeting also decided to set up a committee composed of certain commissioners to solicit subscriptions from corporate bodes and private individuals towards removing the remaining two houses, and this resolution and a list of the individuals involved was printed as a broadsheet. There was an immediate response from the Common

Council, which, at a meeting on 6 February 1835, agreed a donation of £200 towards demolishing the two houses, the property of Mr Caswall and Mr Davies.[26] Later evidence shows that Mr Davies's house was at the north-west corner of the old Butchers' Row, and comparison of a print of the Caswall shop, published in 1837, with an earlier painting, indicates that it was the fourth house to the east of the Market Hall on the south side of Butchers' Row (Figure 5).[27] Then, on 3 July 1835, the Common Council decided to pay the £200 donation as soon as it could be procured. There was a need for the money as on 18 August 1835 the commissioners recorded that one of the houses had been bought: this was Mr. Davies's house, as Mr and Mrs &Mrs Caswall remained obdurate, and no agreement had been made with them. It was decided that the commissioners tasked with this negotiation should try again and report back on 8 September. However, the negotiations were not successful, and at the meeting on 8 September it was decided that notice of the matter being referred to a jury in the event of non-acceptance be suspended. In the end, in view of the breakdown in negotiations, this went ahead.

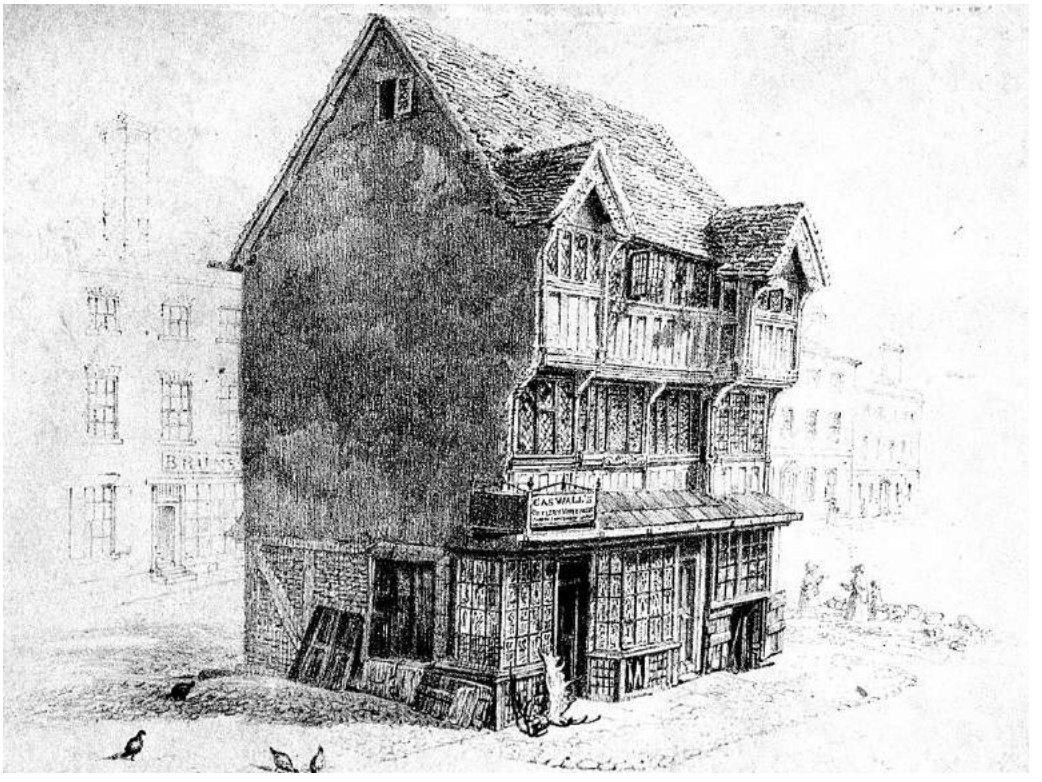


Figure 5. A fine lithograph of Caswall's shop, published shortly after its demolition in 1837. (Derek Foxton Collection)

A report by the commissioners tasked with raising the necessary money appeared in the *Hereford Journa*l on 9 March 1836, with a long list of donations received or promised. The list was headed by £200 from the 'late Body Corporate' and the same amount from the Paving

Commissioners, and donations of £50 each from four prominent citizens, and other donations of a lesser amount.[28] In the same issue it was reported that the previous day a jury had been empanelled at the Guildhall to assess the value of Mr Caswall's property in the former Butchers' Row, and that the jury assessed the house at £700 and the loss of business at £200.

On 13 August 1836 a letter appeared in the *Hereford Times*, asking whether a rumour that the house in Butchers' Row, formerly occupied by Mrs Payne, was to be let.[29] The writer, a subscriber to the fund for the demolition, trusted that it would be pulled down at once, which would encourage further subscriptions towards the purchase of the other house. In fact the commissioners had already decided at a meeting on 9 August 1836 that this house should be kept void in the hope that it would be shortly taken down.

On 6 September 1836 the commissioners decided that notice would be given to Mr and Mrs Caswall to quit the house by 31 December, at which time, in default of title, the amount awarded by the jury would be paid into the Bank of England, and that 'it may be on this occasion important to suggest that the award of the Jury, may not be binding, interminably upon the proprietors.' In other words, the offer wouldn't be on the table for ever. A week later the *Hereford Times* reported that it had been decided to take down the remains of Butchers' Row early in the following January and that notices had been served on the tenants to give possession on 31 December 1836. Then, on 17 September 1836, an advert appeared in the *Hereford Times*, publicising the names of the committee members who were still collecting subscriptions towards that end.

Mr and Mrs. Caswall were still refusing to co-operate, and continued to resist the Paving Commissioners who were using their powers to remove what were termed nuisances (which were closely defined in the Act), and to make contracts to buy property to widen the road. In prosecution of their intentions, on 13 December 1836 the commissioners ordered that notice be given by Mr Cleave to Mr Caswall of the decision of the commissioners to invest the purchase price of the house, and that as soon as that had been done, they would proceed to remove the house.[30]

At a meeting of the commissioners on 3 January 1837 a letter was read out about a claim from a Mr Harrison that he owned a moiety (half) of the Caswall house, and the meeting resolved that the moiety should be purchased provided that title could be proved: nothing further was heard of this claim. The meeting also decided that notice should be given to Mr & Mrs. Caswall that the house would be taken down in a certain specified time. However, this did not happen immediately and it is possible that Samuel Caswall was ill, as he died on 16 February 1837. His widow advertised her thanks for the patronage that had been bestowed on her husband for the previous 42 years, and informed them that she would be carrying on the business as a cutler with the assistance of her son, but there was no mention of the proposed demolition of her house.[31] However, on 7 March 1837 the commissioners ordered that the purchase money be paid into the Court of Chancery, and that notice of this be given to the proper parties, and that notice to quit on 1 May 1837 be given. They also ordered that the materials of the houses be offered for sale, and the purchasers be indemnified from the consequences of taking down the houses, the latter condition because of the dispute over the purchase of the house. The materials of both houses were advertised to be sold by auction on 11 April 1837 and were bought by Mr William Heather. The day after the auction an up-to-date list of subscriptions towards the removal of these final two buildings appeared in the *Hereford Journal*, and also in the *Hereford Times* on 15 April 1837. The house nearest to the Market Place—Mr Davies's house—had cost, in purchase money and conveyancing, £560 6s., while

Mr Caswall's, stated to be furthest from the Market Place, was to cost £700 and £200 for goodwill, as awarded by the jury.[32]

But all was not finished. On 22 April 1837 it was reported in the *Hereford Times* that the commissioners had agreed to a request made by Mrs. Caswall to remain in her house until 1 June, and that Mr William Heather, as purchaser of the materials, had agreed to this. It is possible that Mrs. Caswall asked for a further extension, as on 16 May the commissioners refused to allow more time. While the reports stated that the buildings would be taken down in June, on 10 May the *Hereford Journal* reported that one of the houses had been taken down—clearly Mr Davies's house—and that the other would be cleared by the beginning of June.

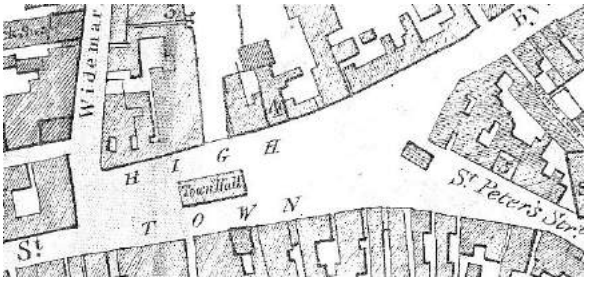


Figure 6. Wood's Survey of 1836. When this was published the remaining two houses in the centre of High Town were still standing. Wood evidently decided to omit them as the decision to demolish them had already been made, but which took some time to implement

On 3 June 1837 Mary 'Caswell' advertised in the *Hereford Times* that she had moved to a shop and premises opposite the Provincial Bank in Bye Street, and this left the way clear for demolition of her former premises. This happened very quickly, and on 14 June the *Hereford Journal* reported that the 'The High-town of this city now presents a remarkably-improved and pleasing appearance, an open area of great extent being gained by the total removal of the two old houses of the Butcher's Row.'

The commissioners must have heaved a sigh of relief at this outcome, having had many problems over the years with Samuel Caswall, who was evidently a difficult neighbour.[33] Actually the *Hereford Journal* was a little premature, as on 17 June 1837 W.H. Vale, the printer and bookseller in High Town, advertised in the *Hereford Times* that he had published on that day a lithograph of the Old House 'formerly occupied by Mrs. CASWELL, the materials of which are now being removed from the spot where it recently stood.' This lithograph shows clearly the horns which marked the Caswalls' shop (Figure 5).

THE OLD HOUSE

In the final push for clearance of Butchers' Row there was mention of three houses to be cleared, and this was completed in June 1837. There was no mention of what is now the Old House, which was then occupied by Thomas Wheeler, saddler etc. whose name was recorded as one of the residents in the area in 1816. With all the uncertainty surrounding that final clearance, it is not surprising that in 1836 rumours that he was about to give up business were rife. Consequently he found it necessary to publish a denial in the *Hereford Journal* on 18 May 1836, the advert stating that he was in business in High Town, place unstated, but when a lithograph of the house was published by W.H. Vale on 13 September 1837 it was described as 'Mr Wheeler's House,' indicating that Thomas Wheeler was then in occupation. Indeed, there is evidence to suggest that business to which he was the successor may have been located in the same premises since the eighteenth century.[34]

Figure 7. The Old House in 1863, towards the end of the occupation by John Roberts. (Derek Foxton Collection)

On 1 April 1840 Thomas Wheeler advertised his thanks to those generations who had patronised the establishment since his apprenticeship in 1772, and advised his customers that he was declining business on behold of John Roberts, his assistant, who had been running it for several years. Thomas Wheeler died only a few months later, and debts due to his estate were to be paid to John Roberts, his successor, who continued in business at the Old House until 1867 (Figure 7).[35]

Thomas Wheeler's ownership of the Old House was an important factor in its survival. This was recognised as an outstanding landmark, and the *Hereford Journal Almanac* for 1852 was illustrated with an engraving of it. The almanac was given away with the edition of 24 December 1851, and in that issue there was a long description, finishing with the paragraph:

> 'The late proprietor, Mr Wheeler, (who died in 1840), took great pride in the house, and was himself a worthy character of the "old school." He ever resisted proposals for its removal, and refused many offers for its purchase, and in his will bequeathing it to his relatives, we believe his instructions were that if possible they should never dispose it.'

That is, in a nutshell, how the Old House survived, and we have much to thank Thomas Wheeler for.

CONCLUSION

From the very detailed discussion above, the evidence indicates that the clearance of Butchers'

Row began in 1813, and between 1816 and 1820 a concerted effort was made to remove the remainder of the houses. Certainly by 1831—and most likely by 1820—only three houses remained, the evidence indicating that there was still a pair probably back-to-back, or nearly so, on the east side of the Market Hall—the western end of Butchers' Row—and another house somewhere about the middle of the former row on the south side, as well as the Old House itself. Of these three houses, one was demolished at the instance of the Common Council in 1831 and the two remaining by the Paving Commissioners in 1837, leaving the Old House in splendid isolation at one end of High Town, balanced by the stunted remains of the Market Hall at the other, until the latter was demolished in 1861.

ACKNOWLEDGMENTS

Thanks to Catherine Willson for access to the collection of paintings, drawings, and prints in the Resource Centre in Friars Street. Also to Dr. Derek Foxton for supplying many of the images used to illustrate this paper, acknowledged in the appropriate places.

NOTES AND REFERENCES

[1] For the history of the Market Hall see Eisel, J.C. 'Notes on the former Hereford Market Hall and the Tolsey' *TWNFC* (2005) where it is demonstrated that there was a predecessor to the Market Hall, on another site. It is not known whether anything had previously occupied the site of the Market Hall constructed in 1576.

[2] The minutes of a meeting of the Common Council on 5 August 1776 record that it was ordered 'That the High Cross be forth with taken down & that the Stones and other Materials be sold by the Chamberlains to the best Bidder.' Although no confirmation of any auction has been found in the *Hereford Journal*, there is no reason to doubt that this happened. Herefordshire Archives and Records Centre (HARC) BG11/9/A/3 f.354. A description of the High Cross can be found in Rees, W.J. *The Hereford Guide* (1827), p.39 fn: 'This was situated about 30 yards west of the Town Hall, for the use of the market, and was an old square building supported by a stone pillar at each corner, and by one of larger dimensions in the entre.'

[3] HARC BG 11/14/1&2, minutes 1774–1809 and 1810–1854. Details of the activities of the Paving Commissioners are taken from these minute books without further reference, unless the extract is relevant to the argument.

[4] HARC GH 1/89-106.

[5] In *Hereford Journal* (henceforth *HJ*) 10 Dec. 1878 it is stated that it was the narrow passageway between Butchers' Row and the north side of High Town that was called Cooken Row. Leases in Hereford Cathedral Library, Ref. 3645 i – xii.

[6] *HJ* 22 Oct. 1788.

[7] *HJ* 20 & 27 Feb. 1783.

[8] p. 38, fn.

[9] *Gloucester Journal*, 12 & 19 Jan. 1762. (*Pugh's Hereford Journal* did not begin publication until 1770.) As well as a bake-house and malt-house, the premises had a yard and a garden, so may have been on the north side of what is now High town. There is no evidence to support the inference that Cooken Row had a separate history from Butchers' Row in the late eighteenth century and early nineteenth century, for which see *The Story of Hereford* (2016), p. 213.

[10] HARC BG11/14/11 f.20

[11] *HJ* 2 & 9 Sept. 1784. William Carless seems to be the person of that name, butcher, who became a freeman of Hereford on 29 Nov. 1784, after he had advertised his house as being for sale. (HARC AT 47). In view of the number of freeman who were enrolled in 1784, it seems that the civic authorities were

chasing those who were trading without being made free of the city! The mention of a stable, pigscot and cowhouse makes this another possibility for a house on the north side of High Town.

[12] *HJ* 14 Oct. 1779. From 5 Oct. 1786 John Allen was advertising from the Market Place, which probably indicates that he had moved premises by that time, the Market Place being to the west of Butchers' Row. In 1806 he advertised from 2 High Town, possibly because the properties were numbered at about this time. (*HJ* 26 Nov. 1806) Next door at 1 High Town was Thomas Davies, also a bookseller and stationer.

[13] *HJ* 18 Oct. 1797, 6 Nov. 1799, 8 Jan. 1800.

[14] *HJ* 16& 23 Dec. 1807, 27 Sept. & 4 Oct. 1809.

[15] (Rees, W.J.), *The Hereford Guide* (1806), p.30-1, fn.

[16] This refers to the City Arms Hotel.

[17] *HJ* 20 Jan. & 3 March 1813. This building, on the east side of the Old House, was referred to in the obituary of William Havard, one of the partners in the City and County Bank, a local man who made good in London (*HJ* 2 May 1810). '…Mr. Havard was born in St. Owen's-street, in this city, where his parents kept a small shop. Their house was situated at the eastern extremity of the Butcher-row, and fronte[d] the old May-pole: it is now used for the sale of earthenware.'

[18] In the past the Old George has been identified as the house to the east of the Old House, but that is clearly incorrect. The relevant advert (*HJ* 28 June 1815) refers to the 'South end', which could be either end of the southern range of buildings or that it was on the south side of the block of buildings. The latter is correct, as the present analysis of the contemporary evidence makes it absolutely clear that the house to the east of the Old House was demolished in 1813, while later evidence, quoted in the relevant place in the main text, shows that the house at the west end of the south range was not demolished until 1831. The location of the Old George was incorrectly given in Whitehead, David, and Shoesmith, Ron, *James Wathen's Herefordshire 1770-1820* (1994), unpaginated. This was repeated in Shoesmith, Ron, *The Pubs of Hereford City* (1994), pp. 29-30, and also in Kightly, Charles, *The Black & White House Museum, Hereford. A Guide* (2017), p.5.

[19] *HJ* 20 7 27 March, 3 April 1816; *HJ* 7 Aug. 1816. The description indicates that this was part of the row of buildings on the north side of Butchers' Row.

[20] In the past this minute has been taken as indicating the start of the demolition of Butchers' Row, but as has been clearly demonstrated this had begun more than three years previously. There are seventeen names on the list but two names are paired together, namely Elliott and Wheeler, and it is known that they were in business together, a partnership which lasted from 1810 until Elliot's death in 1825; in the former year they took over the premises and stock of their former employer and there is nothing to suggest that the business was ever moved to new premises, and so had been located in the Old House since the late eighteenth century. Thomas Wheeler still owned the building when he died in 1840. (*HJ* 8 Aug. 1810 & 23 Nov. 1825) The list of names includes that of Mr. Edmonds, which probably refers to the house already purchased by the Commissioners, still occupied before its demolition, unless, of course, there was another person of the same name resident in Butchers' Row. The list also mentions Mr. Evans, and later evidence indicates that he was a tailor and mercer in a good way of business and that he occupied a double house. (*HJ* 14 Dec. 1878) So, coincidentally, the number of names seems to have been the same as the number of premises.

[21] *HJ* 16 Sept. 1818. In *HJ* 14 Dec. 1878 it was stated that the house that fell down was 'Hardwick's'. It may have been the house occupied by William Hardwick which the commissioners decided to buy in 1817, or the house occupied by Mrs. Hardwick, whose name was one of those listed in 1816. Had the term 'Cooken Row' been current at this time, surely it would have been used, rather than as given.

[22] The advert thanked the public for support for nearly 20 years, which evidence shows that he had worked all of that time in Butchers' Row. In *HJ* 18 October 1797, Thomas Fawcett, from Gloucester advertised that he had opened a warehouse for ready-made clothes 'A few doors from the Sun-Tavern, next door to Joseph White, Saddler, High-street.' This established that Joseph White's shop was on the south side of what became High Town. When Matthew Nash, saddler, set up in business on his own account in 1799 he advertised that he had served an apprenticeship with Mr. White, and that his shop was

on the opposite side in the High Street. This establishes that Nash's shop was in Butchers' Row. He was mentioned as being in occupation when his premises in Butchers' Row were offered for sale by auction on 24 May 1811. The advert (*HJ* 15 & 22 May 1811) notes that 'The Premises are held by Lease for Twenty-one Years under the Mayor and Corporation of Hereford, at a small Reserved Rent, of which Six Months are only unexpired at Lady Day last.' It seems that Matthew Nash had bought the lease at the auction.

[23] HARC BG 11/9/A/8 Minutes of the Common Council 1822-1835. Extracts from these minutes will be quoted without further references.

[24] One of the houses in which the Common Council had given up the Corporation's interest was that of Matthew Nash, saddler, discussed above

[25] This was Richard Wheeler, miller, Hereford, and not Thomas Wheeler, saddler. HARC BG 11/14/2 ff. 214 & 216. Also *HJ* 14 Dec. 1878. Richard Wheeler took over the Castle Mills from his father in 1831and after a few years moved on to Lugg Bridge Mills. See Eisel, J. C. 'The Castle Mills, Hereford', *TWNFC* (2000), pp. 58-67.

[26] The minutes of the Common Council initially stated that the houses were the property of Mr. Caswall and Richard Wheeler, but the name of Richard Wheeler was subsequently crossed out and 'Mr Davies' was written above.

[27] The *Hereford Journal* Almanac for 1879, which was illustrated by an engraving of Butchers' Row, was circulated with the issue of 14 Dec. 1878, accompanied by a long and detailed description of the Row. This included 'The north-west corner-house was occupied by two brothers—Mr. James Davies (father of our present crier), bellman and shoemaker, and Mr. Gamaliel Davies, wool stapler—Mr. Wheeler, late of Lugg Mills, having been the final occupant.' An un-named watercolour of the south side of Butchers' Row, looking west, was made after Carver's shop had been demolished. There was a gap where the third house to the east of the Market Hall had been, indicating that the demolition had already begun, and suggesting that the painting dates from *c*.1816-18. (Painting in the Resource Centre, Friar Street, accessed 19 March 2019.)

[28] The Corporation of Hereford and its Common Council had been done away with by the Municipal Reform Act of 1835, and in its place there was a Town Council, with councillors elected from three wards within the city.

[29] The commissioners had evidently let the house to Mrs. Payne as a short-term tenant.

[30] Mr Cleave was a local solicitor, successor to Thomas Bird.

[31] Both the notice of the death of Samuel Caswall and the advert by his widow appeared in *HJ* 22 Feb. 1837.

[32] Of the £500 paid for the house owned by Mr Davies, a mortgage for £200 was paid off and the remainder was put in the City and County Bank, a few yards away on the north side of High Town. (*HJ* 14 Dec. 1878)

[33] In May 1818 Mr. [Thomas] Bird was instructed by the commissioners to give notice to Samuel Caswall that he was building on the Commissioners' land in Butcher Row, and that he must desist. This row was still rumbling on in January 1819. Then in July 1822, apart from opening up doors on the north and east side of his premises, the occupiers persisted in throwing water and other offensive waste beyond a sink (gulley) that the commissioners had placed to receive the waste water. The encroachments indicated above may be the source of the unsubstantiated legend that Samuel Caswall had barricaded round his property to prevent its demolition. (Kightly, Charles, *The Black & White House Museum, Hereford. A Guide* (2017), p.10.) With the demolition of this house one of the landmarks of Hereford disappeared, as the description of Butchers' Row that appeared in *HJ* 14 Dec. 1878 referred to 'the famous pair of horns that left no mistake as to which was "Caswells ;"' Mrs. Caswall's business lasted only a short while after the move. Her last surviving son, William, who may have helped in the business, died at the age of 26 on 5 July 1837, and she herself died on 3 August 1839, at the age of 73 (*HT* 8 July 1837, *HJ* 7 Aug. 1839, *HT* 10 Aug. 1839). Her stock was bought up by J. Baker, cutler, gunsmith and supplier of fishing tackle (*HJ* 21 & 28 Aug. 1839, *HT* 17 & 24 Aug. 1839).

[34] The career of Thomas Wheeler can be traced by adverts in the local press. In 1810 he and Thomas Elliott, who had been foremen to Henry Pember, took over his house and stock in trade. In 1816 Elliott and Wheeler were trading at one of the premises in Butchers' Row, which seems most likely to have been where Henry Pember had been in business. Thomas Elliott died in 1825, and Thomas Wheeler carried on the business on his own account. (*HJ* 8 Aug. 1810, 23 Nov. 1825; BG 11/14/2 f.51)
[35] *HJ* 14 Oct. 1840. His full name was John Merrick Roberts.

Recorders, 2019

Archaeology *by* Keith Ray

This report attempts to summarise information from several sources concerning archaeological fieldwork and research carried out in the county in the past year. It encompasses reports not only on recent archaeological excavations but also technical surveys and, especially important this year, on objects of various kinds reported via the Portable Antiquities Scheme (PAS). The Report is organised into three sections, but these differ slightly from those of last year's Report. The first section provides short reports, as last year, on the results of conservation and research projects. Then a second section focuses on PAS finds, including those that have achieved national notice. This section includes this year two reports devoted to specific groups of finds. The third section outlines investigation projects that, for the most part, have arisen following the attachment of archaeological conditions to planning permissions.

The most remarkable single discovery reported this year is the 'Herefordshire Viking Hoard', a group of coins, a silver ingot, and individual precious items buried in the late ninth century AD on a rise in the landscape north of Leominster and recovered illegally by metal-detectorists in 2015. This became the subject of criminal proceedings under the Treasure Act (1996) and this explains the delay until now in reporting its contents and context. A significant research and conservation project that has progressed rapidly during the past year is the programme of archaeological investigation connected with consolidation works at Snodhill Castle in the Golden Valley. A final season of excavations took place at Dorstone Hill, where yet more of the early Neolithic causewayed enclosure was investigated, together with the uncovering of part of the Iron Age promontory fort. This itself produced an unanticipated discovery concerning the activities of the Roman army in the west of the county.

The Portable Antiquities Scheme continues to see some remarkable finds reported, and these are described here from entries submitted by Peter Reavill, the Finds Liaison Officer for Herefordshire and Shropshire. Besides the Leominster group of late Saxon objects noted above, a series of Bronze Age gold items have been found in recent years at four separate locations across the county, and these are described within a separate reporting item here. Among the other PAS series of reported discoveries, a highly unusual circumstance was a find made during volunteer church-cleaning at the parish church of St Michael at Garway.

Development-related investigations in 2019 included excavations at Grafton (an operation in advance of the building of the 'Southern Link Road' between the A465 near Belmont and the A49 south of Hereford) and further work at Wellington-Moreton Quarry. Field evaluations (in advance of planning permissions) reported here included two at Sutton St Nicholas, reflecting current development pressures affecting that village in the (reasonably) close environs of Hereford. Other projects undertaken in 2019 are either ongoing (for instance a project involving an interesting suite of discoveries on the site of the former Hop Pole Inn in Bridge Street, Leominster) or remain within client confidentiality. Hopefully, reports on such work will be included in next year's Report.

Throughout this 2019 Report, each site-based entry is identified by city, town or parish, and the site name is provided along with a six-figure grid reference where appropriate. Many of the references are to unpublished internal organisation reports (grey literature), which may be consulted in the Herefordshire Historic Environment Record database maintained by the county archaeology service at the *Herefordshire Archive and Records Centre* at Rotherwas. Others are available on the internet. The Herefordshire Historic Environment Record number is prefixed by HSM and Scheduled Ancient Monuments by their SM .number. Reference is in most cases made to the archaeological 'event' concerned (watching brief, excavation, and so on) by an EHE (Event in Herefordshire) prefix.

I would like to offer an expression of gratitude on behalf of the members of the Woolhope Club to the staff of all the organizations who have willingly provided the information that has hopefully made this report an up-to-date and useful source of information about archaeological work carried out, or reported, in the county during 2019.

RESEARCH AND CONSERVATION PROJECTS

HEREFORDSHIRE ARCHAEOLOGY

Herefordshire Council's County Archaeology Service, Herefordshire Archaeology, has continued to provide routine case-work advice (development management and countryside matters), together with HER maintenance and updating duties. In addition it has been involved with a number of community and agency based projects. The principal project throughout much of 2019 comprised further work at Snodhill Castle. Herefordshire Archaeology continued to support and work in partnership with Manchester University, undertaking another season at Dorstone Hill.

PETERCHURCH: ***A Programme of Archaeological Observation and Recording Snodhill Castle, Herefordshire*** *(NGR: SO 3223 4038); [EHE80341 ; HSM 155, SAM 1015168]*

A programme of archaeological observation and recording at Snodhill Castle, Peterchurch, Herefordshire was required in order to facilitate further structural repair to the monument. The monument is in need of repair and it is currently categorised as 'At Risk' on Historic England's *Heritage at Risk* Register. The works were required in order to provide information concerning the extent and condition of wall lengths and foundations to inform and advise the Project Architect, Nick Joyce Architects Ltd, and the main contractor, Oliver Fookes Conservation. In addition to the structural works to the castle, Herefordshire Archaeology were also contracted by the Snodhill Castle Preservation Trust to undertake trial trenching over the Keep gatehouse and the North Tower to assess preservation and extent. A watching brief was also undertaken during the construction of a set of stone steps up the western side of the motte (Plate 8.1).

During the course of these works, the main discoveries were a drain running through the west wall; part of an early curtain wall linking the north and south flanking walls; the doorway from the inside of the Keep leading to a spiral stair within the northern half of the Keep Gatehouse and much detail about the sequence of construction of the North Tower.

The west wall drain had a splayed opening on the internal face of the wall and stepped downwards as it progressed through the wall. Its original straight course had been partially blocked and it had been re-aligned with a noticeable kink to the north in order to exit the external face of the wall immediately to the north of an added foundation for either a buttress or tower.

What appears to be an early curtain wall, 1.1 metres wide (and linking together the north and south flanking walls) ran from an early stone keep, down the north and south sides of the motte. The wall forms a small section of the south curtain wall before returning to run north to link up with the north flanking wall. At its south western corner evidence for a stone building was found, comprising a stone foundation running parallel to the curtain wall approximately 3.5 metres away from it. This suggests that a building was constructed against the curtain wall at this point. Although its length was not established the retrieval of an inscribed stone fragment with the word 'DOM' incised into it (along with other undiscernible graffiti) may indicate that this was a chapel.

Only the bottom step of the spiral stair rising from the Keep gatehouse doorway remained *in situ* but one door jamb survived to a height of 0.6 metres and featured a surviving hinge pin for the door. Unfortunately 18th-century quarrying had removed much of the evidence for the exact layout of the gatehouse and as a result it remains unclear whether the spiral stair was within the Keep wall thickness or was contained within its own stair tower (Plate 8.2). Despite this the foundation line for the original stone Keep was evident. This was constructed upon a layer of vertically places stone setts and strongly suggests that the early Keep was square or rectangular in shape.

Excavations over the North Tower revealed the true scale of this feature. Not only was the tower larger than expected, but the line of the curtain wall was further south than the surface topography suggested. It is now apparent that the curtain wall is set further back from the scarp slope and that the earthwork ridge which had been assumed to be its course comprises instead spoil from the robbing of the curtain wall (Plate 8.3). The tower post-dates the curtain wall and an entrance way and underpinned wall section has been constructed in order to form a basement level. Works to empty the base of the tower, reveal its full size and conserve the stonework so that it can be left exposed will be undertaken during 2020.

DORSTONE*, Dorstone Hill* *(SO 326 424), [HSM 1551]*

A ninth season of investigations at the 4th millennium BC (Early Neolithic) hilltop site took place throughout July 2019 towards the south-east corner of Dorstone Hill. The excavation was, as previously, co-directed by Professor Julian Thomas of Manchester University and Professor Keith Ray of Cardiff University (former County Archaeologist for Herefordshire), in association with Dr. Nick Overton of Manchester University and Tim Hoverd of Herefordshire Archaeology. The project was staffed in 2019 by local volunteers and by students from (mostly) the Universities of Manchester and Cardiff. These excavations continued those of 2014-15 to the west of the 2012-13 trenches (see *TWNFC* 61, 120-2, Plates 5.7 – 5.9; *TWNFC* 62, 157-8; *TWNFC* 63, 220-1, Plate 6.2; *TWNFC* 64, 144-6, Plate 5.6, *TWNFC* 65, 158-9, *TWNFC* 66, 158-9). Access to the site in the pasture field was once again kindly granted by the Hughes family; while access to the adjacent woodland was granted by kind permission of the owners, Christopher and Sarah Finkin.

Located on the southern part of the summit of the hill, Trench 10 represented a third area excavation of the single-circuit Neolithic causewayed enclosure that had been discovered by geophysical survey in 2016. The 2019 excavation here was intended to test the composition of deposits and nature of finds at the point where the enclosure ditch swings southwards toward the southern edge of the hill on its western side. In contrast, Trench 11 was designed to investigate the large elongated earthen bank on the southeast tip of the hilltop, which had been scheduled as an Iron Age promontory enclosure, but which it was conjectured might be similar

to the three Neolithic long mounds located further north, which had been excavated in 2011 to 2017.

Trench 10 measured 20 by 10 metres in extent and was opened over the line of the enclosure ditch, further to the west than the two previous interventions, Trenches 7 and 8 (Plate 8.4). The trench contained three causewayed ditch segments that were set together closely and butted up against an area of outcropping sandstone bedrock to the west. The easternmost ditch segment (context 2344) was the deepest, with a near vertical outer edge and a bowl-shaped base. It contained a tumble of small bedrock fragments, concentrated on the outer side of the ditch, and relatively modest quantities of Neolithic pottery and worked flint. The central ditch segment (context 2338/2339) was longer, with a flatter base. It had been cut by a series of small, sub-circular recuts, concentrated around the edges of the feature, and particularly around its butt ends. Some of these also intersected with ditch cut 2344. The recut features on the southern, inner side were appreciably deeper, but none contained any finds other than groups of stones. The westernmost ditch segment was the smallest (context 2352), filling the gap between context 2338/2339 and the stone outcrop. This was itself cut by two small conical recut features on the eastern edge, and these again contained no finds.

The ditches in Trench 10 contrasted with those in Trenches 7 and 8 in a number of ways. The relatively short segments were quite different from the long stretches of continuous ditch in the other two cuttings, although there are indications that these latter had originally been composed of smaller features that had been cut through in the course of the repeated reworking of the ditch. Moreover, the finds from all segments were very limited, while those in Trench 8 in 2018 had been considerably more numerous. These had been concentrated on either side of what appears to have been an important entrance to the enclosure, facing north-north-west across the summit of Dorstone Hill. It is conceivable that this had represented the principal approach to the enclosure. In Trench 8, patches of calcareous ‘cornstone’ within the clay and sandstone had facilitated the preservation of quantities of animal bone, particularly in the ditch segment immediately to the west of the entrance. No such deposits were encountered in 2019. However, one remarkable find from the ditch was a partially worked fragment of rock crystal, apparently abandoned owing to a flaw in the material. Quantities of worked rock crystal have previously been encountered at Dorstone Hill, both in features associated with the long mounds, and in the causewayed enclosure ditch.

In the southern part of Trench 10 were two large stones. The first of these (context 2342) was a large angular bedrock fragment, which may have been deliberately quarried. The second large stone (context 2421) was quite different, in that it was much flatter and very worn. It is possible that this wear could be attributed in part to footfall, and if so it is conceivable that an earlier entrance had been located here, before it had been closed by the cutting of the diminutive ditch segment, context 2352. A much more extensive area of sandstone pavement lay at the western edge of the trench. This was dissected by a series of cracks, and on the eastern edge appeared to have been quarried, perhaps for some of the various stone features associated with the causewayed enclosure. Indeed, one substantial fragment of stone lay at an angle, apparently having been prised away from the face. Numerous small fragments of stone were concentrated in the area immediately adjacent to the rock face, suggesting that these were the by-product of localised stone extraction.

Trench 11 measured 15 metres long by 2 metres wide and, aligned east-west, provided a section across the large linear bank which cuts off a small projecting spur of Dorstone Hill at

its southeast corner. At the eastern end of this trench a 5 x 5 metre area was opened, in part to determine whether the circuit of the causewayed enclosure ditches continued through this area (Plate 8.5). The whole of Trench 11 was excavated by hand, given its location in woodland and in respect to the fact that the bank and the area to its east is Scheduled as an ancient monument (SM 1010720). In contrast the topsoil within the trenches sited over the causewayed enclosure ditches had, as previously, been removed by mechanical excavator.

To the west of the linear bank was a slight ditch, which appeared (at least superficially) to be connected with an adjacent low field-bank. Another possibility was that it was a hollowed trackway. However, the ditch proved on excavation to be considerably more extensive than anticipated. This was a two-phase feature. The earliest phase of the ditch (context 4060) was broad, with gradually sloping sides and a flat base. This had been cut through in a second phase by context 4030, a sharply V-shaped ditch with a narrow flat base. This phase of the ditch had cut right into the underlying natural deposits. A secondary fill of this cut (context 4067), contained tumbled stones, sherds of Roman military amphorae, and a (possibly silver) Roman coin.

The major linear bank feature comprised a series of dumps of clay. Beneath the bank dumps, context 4033 was a sandy clay layer and context 4034, a silt clay, located immediately above the ancient land surface. The former produced a Neolithic leaf-shaped arrowhead, and the latter was more organic, producing fragments of a whetstone and a loom weight. Beneath the bank and cut into the ancient land surface were three features: a curvilinear slot (context 4042), a flat-based linear slot (context 4043), and a sub-circular slot (context 4043). These features clearly predated the construction of the bank and ditch. East of the bank and ditch, and within the area of the spur divided from the rest of the hill, were a sub-circular gully (context 4012), associated with a small pit containing ceramics, lithics and fragments of cremated bone (4022), and four other small pits or postholes. These are considered likely to have represented a circular building, contemporary with the bank and ditch. At the eastern end of Trench 11, a probable linear ditch ran N/S along the side of the trench (4058), cut by a later recut (2036), and cutting an earlier posthole (4054).

Trench 11 confirmed that the linear feature shutting off the southeast promontory on Dorstone Hill was the bank and ditch of a small later prehistoric enclosure of some kind, and not a Neolithic long mound similar to those investigated in earlier seasons. A small roundhouse was apparently associated with the enclosure, and several features predated the bank construction. The ditch appears to have been recut in Roman times, and the presence of amphora sherds suggests that the enclosure may have been refashioned for military use. On the eastern side of the trench the probable ditch is likely to represent the return of the causewayed enclosure perimeter, running southwards toward the tip of the hill.

The 2019 season has in this way ended nine seasons of investigation of early features on the hilltop promontory site at Dorstone Hill, undertaken as part of the 'Beneath Hay Bluff' prehistory project. The work has definitively demonstrated that the former long mounds located across the neck of the promontory close to the Bredwardine-Dorstone road, originally thought to represent the line of the bank and ditches of a 4th-millennium BC Neolithic causewayed enclosure, were in fact the site of four Early Neolithic mounds built end-to-end. No trace of ditches was found, but a more remarkable story concerning the origin of the mounds emerged as a result of the series of excavations undertaken between 2011 and 2017. Three of these mounds had as their core the burnt remains of individual rectangular longhouses that were each very different from one another in design, in scale, and in the details of their

construction. In between the eastern-most two a presumed contemporary major burial chamber had been dug. Traces of carpentered timbers from the deliberately-fired structures represent the earliest evidence for such sophisticated roofed buildings in Britain. The remnants of burnt timbers and collapsed daub walls had in each case been carefully adapted and skilfully turfed-over to create contrasting forms of memorial (and burial) mound, with timber or stone retaining structures. The major burial chamber was subsequently mounded over and ditched, and in part of the ditch cremated human remains had later been buried. This mound had at some point been joined to the adjacent 'long-house' mound eastwards.

All the mounds were subsequently joined together and further cist burials were inserted. At the same time, or subsequently, votive shafts had been dug down vertically from the former top of the mounds on, and eastwards from, the major burial chamber. An equally important discovery was that a causewayed enclosure had indeed been created on the hill, but some distance south from the 'long-house' mounds around the summit of the hill towards its south-east corner. Carbon-14 dating has suggested that all this activity occurred within the span of time between around 3850 and 3400 cal BC, in the earlier Neolithic period (an ongoing programme of dating of samples from key contexts should clarify aspects of the sequence). The work in 2019 has meant that a total of at least 25% of the likely original circuit of the causewayed enclosure ditches have been examined in three consecutive seasons. It has also established that the original interpretation of the bank and ditch in the south-eastern corner of the site as an Iron Age promontory enclosure (created for whatever purpose) is correct. The surprising discovery of an apparent early Roman military phase to these defences adds further evidence for the campaigning of the Roman army in this part of the Wye valley in the decades after the Roman invasion.

HEREFORDSHIRE PORTABLE ANTIQUITIES (PAS) report from Peter Reavill

The British Museum's *Portable Antiquities Scheme* in Herefordshire is based with Herefordshire Museums and supported by Birmingham Museums' Trust. In addition to the work that has gone into the documentation and legal requirements of the 'Herefordshire Viking Hoard' (see below), 2019 has seen very considerable quantities of finds being discovered and reported within the county. Those selected for description below represent only a very small sample among the many records. In 2019 alone, the PAS documented 1603 artefacts for Herefordshire, within 590 separate records of discovery. Of these, the vast majority (74%) were metal items, while 17% were flint or stone and 9% were ceramic (including pottery) or glass.

ABBEY DORE: bronze stylus (later Early Medieval) HESH-C6C958 [1]

The discovery of this copper alloy stylus is a rare find dating from the end of the later Early Medieval period (late Saxon) or the beginning of the early Medieval date (Norman) (AD 800-1150). The stylus is nearly complete being broadly rectangular in plan with a triangular spatula shaped terminal and an iron stained broken point at the other. The handle/stem of the stylus tapers along its length. It also changes in section: at the top (by the spatula) it is oval, whereas below the mid-point it is square (with rounded corners). The spatula terminal expands evenly from the stem; its top is faceted coming to a V-shaped tip. The union between the stem and spatula is continuous and is decorated with a very stylised anthropomorphic/zoomorphic design comprising a head with a gaping mouth which grips the spatula. Applied to just the upper part of the stem are two drilled circles forming eyes. The jaw/mouth is more implied and may be

emphasised by a very slight shallow U-shaped groove on either side/edge. The stylus is a mid-green colour with a slight yellow brass-like hue; it has a well-formed surface patina which is pitted in places.

This stylus from Herefordshire is very similar to an example recorded by PAS from Elloughton, Yorkshire (FAKL-5D6B44) as well as several excavated examples from Flixborough, Lincolnshire, sharing many similarities with Pestell Type VI (Pestell; 2009, 125). Dating of these examples is difficult with few coming from closely-datable contexts. A broad later Saxon (800-1000) date is preferred. The form also has similarities to dress pins of Middle Saxon date. Finally, a further parallel from Essex (SF5707) has been dated to the medieval period due to the incised design and a dated comparison from Winchester (Biddle 1990 no. 2283), suggesting that the form continued into the medieval period. The findspot of this Herefordshire example is near to a monastic house established in the mid 12th century although it has been suggested that the monastery had been established on a much older religious site.

The artefact measures 137.7mm length, is a maximum of 17.5mm wide and 1.8mm thick across the spatula and the stem has a diameter of 4.8mm. It weighs 16.33 grams.

References:

Biddle M. 1990: *Artefacts from Medieval Winchester: Object and Economy in Medieval Winchester* Oxford: Clarendon Press

Pestell, T. 2009: 'The styli', in Evans, D.H. & Loveluck, C. (eds) *Life and Economy at Early Medieval Flixborough cAD 600–1000. The Artefact Evidence, Excavations at Flixborough Volume 2*, 123–37. Oxford: Oxbow.

GARWAY, the parish church of St Michael: enamelled Limoges mount (Medieval) HESH-9DAA6B [2]

Most of the finds reported to PAS are from people actively searching ploughed land using metal detectors. The following find, however, was discovered by chance within a parish church. It was found by a volunteer flower arranger in a void behind one of the columns at the crossing within the church. The object had hitherto been invisible due to the accumulation of considerable amounts of dirt and dust.[3]

The artefact is a cast copper alloy enamelled mount of High Medieval (AD 1150-1250) date. It is broadly rectangular in form with a smaller three-dimensional integrally cast anthropomorphic head projecting from the mid-point of the upper edge. In cross-section the mount is C-shaped with a hollow back. The projecting head is relatively small but well cast with distinct ridges representing hair or possibly a cowl. The eye sockets are sunken with the eyes themselves being dark blue/black glass pellet inserts. The nose is rounded and the mouth indistinct. The neck is slender and conjoins with the top of the mount. The shoulders of the figure slope downwards and merge with the arms which hang concealed within the draped robes and are therefore not distinguished. The figure is wearing drapery which is depicted by four sub-rectangular vertical cells, all of which have traces of a mid-blue coloured inlaid enamel. Across the breast between the drapery are a series of vertical and diagonal cells filled with light blue, white, pale green and red coloured enamels. Beneath the chin across the upper torso is a further rectangular horizontal cell of discoloured white enamel—this element conjoins the two sets of drapery and may represent a chain or closing element to a cloak. The entire surface of the front and sides of the mount are gilded—this has been rubbed/abraded in some areas around the face. The gilding clearly respects and defines the enamelled panels and

has been applied with considerable skill and craft. Looking at the gilding on the centre of the mount it is possible that this may represent a pair of clasped hands. However, surface dirt and corrosion conceal some of this detail. Two circular rivet holes pierce the body of the mount but respect the enamel panels, each hole is slightly countersunk and there is no sign of the original rivets. Each rivet hole has a diameter of *c.*2.1mm. The reverse of the mount is plain and undecorated. It is hollow with a concave surface.

The condition of the mount is very fine. It is unabraded and the surface condition is stable. Light grey-green coloured granular corrosion is present in a number of places, but this does not affect the form. On the lower edge is a distinct patch of brownish-red iron corrosion. This is likely to be from the environment in which it has lain, rather than being a product of corrosion of the piece.

The mount measures 68.8mm long, 25.4mm wide across the body and 6.0mm at the same point. It measures 9.9mm wide and 9.8mm thick across the head. The mount weighs 25.89 grams.

The mount would have originally been just one element of a much larger ecclesiastical object most probably a reliquary casket or a processional cross. This form of enamelwork was typically produced in the Limoges area in central France during the late 12th and 13th centuries. The technique is known as 'champlevé' enamelling, which involved grinding out a metal base to receive glass powder that was then fired. A variety of different items were produced from the workshops at Limoges, both commercial and ecclesiastical. They included altar crosses, relic caskets, candlesticks and marriage coffers. A similar enamelled figure was found in Salisbury (Cherry, 2001 39-42 cat No.2, fig 8) and paralleled by another in Winchester. Cherry notes that enamelled figures with two holes for attachment to a reliquary, box or cross are not uncommon finds and are likely to represent saints or apostles. Other parallels include on an unprovenanced casket in the Victoria and Albert Museum (accession number M.572-1910), dated *c.*1200-*c.*1250; on crosses from Navelsjo and Ukna, Sweden, the latter dated *c.*1195-1210, the former also to the late 12th/early 13th century (Boehm *et al* 1996, 185-186) and mounts on a chasse in the Musée du Louvre and once in the treasury of Saint-Denis, which has been dated to *c.*1225-50 (Boehm, cat. no. 113).

Unlike many artefacts of this form recorded by the PAS this example was recovered from within a medieval church where it had been deliberately concealed behind a stone pillar. A previous object—a medieval iron arrowhead (HESH-5D5059)—has also been recorded hidden in the same place. These finds should be considered as important representations of deliberate religious acts occurring at a point of change. It is hard to say when the objects were hidden. The history of the church of St Michael is strongly linked with the Knights Templar and as such both objects could be linked to this order and its fall *c.*1312. However, it is equally and potentially more likely that this represents an act at or around the time of the 'stripping of the altars' at the Reformation or during the eradication of 'Catholic' practices and idolatry in the following century. Whoever removed the mount did so with care and consideration, and the rivets have been removed carefully without damaging the mount. Likewise, they were carefully concealed in such a way that they have lain undiscovered for many a century.

References:

Boehm BD, O'Neill, J.P and Taburet-Delahaye E (eds) 1996: Enamels of Limoges 1100-1350. New York: the Metropolitan Museum of Art

Cherry, J. 2001. 'The Enamels' in Saunders, P.(ed): *Salisbury Museum Medieval Catalogue Part 3.* Salisbury: Salisbury & South Wiltshire Museum pp39-4242

LEINTWARDINE: bronze axe-head (Early Bronze Age) WMID-CC7526 [4]
Although this axe-head is very worn and incomplete it still is an important find for the county. It is formed from cast copper alloy (bronze) and is broadly sub-triangular in plan with a splayed crescent shaped blade. In profile it is broadly lentoid, with slightly tapering edges. In cross section the axe is rectangular. Both the tips of the blade and the blade facet of the crescent-shaped cutting edge have been damaged; it is uncertain if this is due to abrasion in the soil or wear through use. There is no evidence of any form of incised or cast decoration present on any surface of the axe. However, almost all the original patina has been lost through laminating corrosion. The axe is a mid-green colour; where damage has occurred, there is a light green active corrosion product present. The axe-head is best described as coming from the later phases of the Early Bronze Age and is comparable to Migdale axes (many of these tend to have narrower butts which flare at the cutting edge). These axes all fit within the earliest phases of metal working in Britain, metalworking stage II, which corresponds to Needham's (1996) Period 2 circa 2350- 2050 CAL. BC. This means that they are dated, broadly, to the same period as Beaker pottery, barbed and tanged flint arrowheads, copper halberds and gold lunulae.

The axe measures 89.6 mm in length, 42.9 mm in width at the blade end, thickness is 5.7 mm and the object weighs 77.6 grams.

Reference: Needham S. 1996: 'Chronology and periodisation in the British Bronze Age' *Acta Archaeologica* 67: 121-40

LEINTWARDINE: copper alloy toggle (late Iron Age or early Roman) HESH-08CE9E [5]
This cast copper alloy (bronze) toggle discovered on ploughed farmland in the Leintwardine area probably dates from the transition between the Iron Age and Roman periods *c.*100 BC - 100 AD (Plate 8.6). It is broadly T-shaped with the lower horizontal bar comprising two baluster-shaped knops. The front and rear faces have the remains of broken rivet holes but there is no evidence of anything remaining within the recessed socket. The faces are decorated with both cast and incised lines forming two converging wedge shapes. The recessed areas of the baluster are plain and there is a circular knop on each end. The artefact is a mid-grey green colour with no evidence of applied surface. Similar shaped Iron Age toggles have been recorded by the PAS from Sheering (BH-DF0343) and Stanstead (BH-E2B980) Essex, and Worfield Shropshire (WMID-4928F5). However, others with an iron shank contained within a rectangular socket are known from Newbald, East Riding of Yorkshire (SWYOR-2930F2) and Bedfield Suffolk (SF-3326E3). Although recorded as a toggle, the identification is somewhat uncertain. It could alternatively have formed part of a decorative linch-pin cap. Linch-pins were used to secure wheels onto carts and chariots.
The toggle has a length of 28.1mm, a width of 17.8mm and a thickness of 11.6mm; it weighs 15.3 grams

LITTLE BIRCH: decorative bronze escutcheon plate from a Roman vessel HESH-331DFA [6]
The artefact is incomplete and is a cast copper-alloy (bronze) looped handle escutcheon plate most probably once attached to a large metal vessel. It has a convex front face and concave

rear; when viewed from the top it is curvilinear to accommodate the body of the copper-alloy vessel to which it would have originally been soldered. The diameter of the vessel cannot be estimated although the curve of the mount is slight, suggesting that the vessel was of significant (for example, cauldron) size. The moulded design at the front is integral with the plate and was cast in one piece. The single loop at the top of the plate is offset from the body of the vessel by a stepped shank. It is broadly circular in plan and rectangular in section. The internal upper edge of the loop is plain and undecorated; it is heavily worn, creating a distinct droplet/pointed oval shape. The rear surface of the loop has patinated horizontal file marks. Similar marks are also present on the rear surface of the body of the plate.

The front of the escutcheon plate has a symmetrical design with an anthropomorphic cherub like mask/face and head positioned directly beneath the loop. The face is possibly female, although it is difficult to interpret, and the features are androgynous. The plate itself is sub-triangular in plan and the external edge is decorated with a cuts design creating five evenly spaced D shaped lobes. In form this is likely to be a stylised vine leaf. The head is cast in high relief and projects from the plate, is sub-circular in plan and has an elaborate hair style. The hair is depicted as a series of lobes which are cast; but may possibly also be further defined by engraving/chip carving. The hair is depicted as curled or waved and the surface of the hair is further defined by incised fine wavy lines. The face is oval in shape and each eye is an almond/lentoid shape with an offset incised/drilled circular pit positioned toward the nose representing the pupil. The upper eyelids are defined by incised lines. The nose is triangular in plan and is flattened; the cheeks are puffed and slightly bulbous, whilst the mouth is defined by a horizontal line with the edges being slightly downturned. The chin is rounded, and the neck is not depicted. The escutcheon plate is a mid-green colour with surface patina. The front face is slightly abraded. The rear has several areas of patina removed revealing a yellow brass colour; in places there is a mid-grey silver coloured applied metal - most probably lead solder for joining the plate to the body of the vessel.

Similar handle escutcheon plate attachments have been recorded on PAS. Good parallels can be seen from the Isle of Wight (IOW-AEACA5), Hockwold cum Wilton (NMS134), Grimston (NMS-88DBA4) Norfolk, Denton and Wootton Kent (KENT-409D5D), Allerdale (LANCUM-E0545A) and Tebay (LANCUM-1D9D16), Cumbria. A similar ‘cherub-like’ mask can also be seen on a jug handle fragment from Moulsoe, Milton Keynes (WMID-0503C1). Similar attachments are also known from Gaul (Tassinari 1975 nos. 125-7). A further very similar mount in the form of a female face on an escutcheon plate in the form of a vine leaves was discovered at the Roman fort at Castell Collen, Llandrindod Wells, Powys and now held in the Radnorshire Museum.

Height: 66.9mm; width: 50.7mm; thickness across the mid-point: 11.1mm; height of head: 26.7mm; width of head: 30.2mm projection of the head from back plate 4.1mm; width of loop/handle: 25.7mm thickness of loop 5.6mm; maximum thickness of leaf/back plate at the top: 7.1mm; maximum thickness of leaf at the bottom: 2.5mm. Weight: 81.58 grams.

Reference:

Tassinari, S., 1975. *La Vaisselle de Bronze, Romaine at Provinciale, au Musee des Antiquites Nationales* Paris: Centre National de la Recherche Scientifique: Gallia supplément XXIX

LITTLE BIRCH: bronze strap-end (late Anglo-Scandinavian): HESH-D19A4D [7]
A cast copper-alloy 'Winchester style' strap end of later Early Medieval (10th-11th century) date found in Little Birch parish is a relatively rare find within the county (Plate 8.7). It is incomplete, with the upper and lower faces lost. The damage appears to be ancient, given that the breaks are either corroded or patinated. Originally the strap end would have been rectangular (or tongue-shaped) with a rounded base and riveted attachment plate. The stepped attachment plate is lost and broken across the rivet holes whilst the rounded terminal has lost its projecting point. A thickened transverse rib separates the rivets from the body of the strap end. The body of the strap end is pierced with a series of irregular oval (teardrop) shaped pierced perforations. These are well formed but irregular/asymmetrical. A series of curvilinear lines are incised in the areas between the holes. The overall design was most likely to have been a debased vine- or vegetal-scroll. The fragment is a mid-purplish brown colour with a well-corroded and abraded surface patina. Similar strap ends have been classified by Gabor Thomas as his Class E, Type 1 (Thomas 2004, 2-3; Fig 4). He securely dated these through excavated contexts and stylistic parallels in manuscripts to the 10th or 11th century AD (850 - 1100). A close PAS parallel can be seen from Blofield, Norfolk (NMS-C49558).

The strap end fragment measures 47.2 mm long, 18.0 mm wide, 4.3 mm thick (2.8mm across the body) and weighs 10.0 grams.

Reference:
Thomas, G. 2004: Late Anglo-Saxon and Viking-Age Strap-Ends 750-1100: Part 2 *Finds Research Group AD 700-1700* Datasheet 33

MADLEY: bronze bucket mount (late Iron Age – Early Roman): HESH-C48191 [8]
A cast copper-alloy (bronze) bovine (bulls head) vessel or bucket mount dated to the later Iron Age/Early Roman period 100 BC-250 AD. The style of this example is more likely to be early Roman in date and attributable to a long-lived 'Celtic' or 'Native' Iron Age or Romano-British motif tradition. The mount is an irregular triangular shape in plan and an irregular triangular wedge shape in cross section. The sides of the mount are faceted, while the rear face is concave with an irregular cell-shaped depression. The front face of the mount (bull) is most elaborately decorated. The top edge of the bull's head is horizontal (being relatively flat) and is rectangular in shape. Extending upwards from this is an incomplete rectangular plate which is pierced to form a suspension loop. The upper edge of this loop is lost but the internal edges are worn through use. The shape of the head is bulbous (almost teardrop-shaped); at the widest point of the head (before the edges start to taper) two projecting horns are positioned on the front of the face. Although incomplete, both horns are oval in plan and crescent-shaped in profile, they are also conical and taper toward blunted broken tips. They each extend at right angles from the plane of the head and the tips are turned slightly upwards (as well as inwards). One horn has been broken by movement in the plough-soil. Encircling each horn is a raised cast oval shaped loop decorated with an incised median groove, the underside of each has a raised lentoid panel representing an eye. Beyond the horns, at the widest point of the head before the edges start to taper, are the ears. These are broadly oval in plan and D-shaped in cross-section. Below the ears the sides of the mount taper to form a stubby nose the base of which may be lost through abrasion. The snout is lost. There is no lower fixing plate or pierced hole on the lower part of the mount. The rear face of the mount is undecorated and relatively plain. It consists of a single cell which has a maximum depth of 4.3mm. This cell is irregular in shape broadly echoing the

exterior shape of the mount. In profile the cell is U-shaped. Above the cell is a single projecting lug, presumably used to fix the mount to a coopered vessel.

The mount is a mid-green colour with a well-formed but dusty abraded patina which covers all surfaces. The patina has been chipped in places, especially around the extremities of the mount. This is likely to be due to movement in the plough-soil. A direct parallel for this mount has not been found.

The mount measures 35.3mm length, 24.1mm maximum width, is a maximum 12.5mm thick and weighs 20.97 grams.

(Note from Keith Ray: What sounds like a broadly similar, if slightly larger, more complete and finer bronze bull's head vessel mount was excavated in 1925 from among the floors of a house fronting the 'main street' at the former walled Roman town at Kenchester: Hereford Museum accession no. 7601. This was illustrated in K. Ray *The Archaeology of Herefordshire: An Exploration*, Logaston Press, 2015: Figure 11.1, p.365. It cannot be without interest that Kenchester and Madley were, during the Romano-British period, directly connected by the Roman road which use to cross the river Wye between Old Weir and Canon Bridge).

PUTLEY: bronze penannular brooch (Post-Roman) HESH-2086A7 [9]

The final artefact selected in this roundup is of particular significance to the county because this period is hugely under-represented in the archaeological record. The penannular brooch is of cast copper alloy and date to the post Roman/early Early Medieval period (AD 450-650). The brooch is broadly oval in plan and flat in profile. The two terminals face one another forming a penannular (C-) shape. The body of the brooch is a flattened oval shape in section and is decorated with cast and incised transverse lines on only the upper face; the lower is smooth and undecorated. The two opposing terminals are irregularly cast cuboids with the removal of the corners creating a polyhedral effect. There is no evidence of applied or incised decoration on the terminal heads. The pin of the brooch is complete. It is formed with a faceted section that tapers to a sharp point. The upper section of the pin is flattened and rectangular in section; it is coiled around the frame of the brooch to fix it and is decorated with three incised converging lines. The mid-point of the pin is bent to the shape of the frame at the tip projects beyond this. The brooch is a mid-brown green colour with a polished patina which covers most of the surface of the artefact but that has been removed in places by a combination of abrasion and laminating corrosion.

The polyhedral terminals fit into Fowler's Type G among penannular brooches. However, this example does not have the more common incised decoration on the terminals. The exact dating of this form is problematic, therefore, but it probably fits the best the post-Roman period of the 5th to 6th century (Fowler 1963, 107). Similar examples are known from Llanfihangel Cwmdu with Bwlch and Cathedine, Powys (NMGW-FF0EE5), The Isle of Wight (IOW-4ECBF1), Harrogate, Yorkshire (SWYOR-6EA057) and Keelby, Lincolnshire (LIN-7866F3)

The brooch measures 29.4m length, 27.6mm width and is a maximum of 5.2mm thick (across terminals). The pin measures 38.7mm length, is a maximum of 4.4mm wide where it joins the frame and 2.5mm width at the mid-point; at the same point it is 2.3mm thick. The brooch weighs 10.16 grams.

Given the importance of this find, it is with grateful thanks that we would like to acknowledge the landowners who very kindly donated this brooch to Herefordshire Museums.

Reference: Fowler, E. 1960: 'The origins and Development of the Penannular Brooch in Europe *Proceedings of the Prehistoric Society* 26: 149-77

THE HEREFORDSHIRE VIKING HOARD: a late 9th-century AD deposit of coins and treasures

Tim Hoverd (Herefordshire Archaeology), with contributed information from Peter Reavill (PAS), Judy Stevenson (Hereford Museums Service) and Gareth Williams (The British Museum)

In June 2015, two detectorists from South Wales discovered a number of artefacts and coins in a field to the north of Leominster. They handed in a small number of artefacts, including two coins, to the Cardiff Finds Liaison Officer (PAS). However, social media indicated that there was more material from the site which had not been declared. The detectorists were interviewed by officers of the South Wales Constabulary under caution and as a result more coins were found. Their houses were raided, and they were arrested. It was made apparent that two 'coin dealers' were implicated and more coins were discovered at the houses belonging to these individuals. They were also arrested. The detectorists refused to co-operate in any way concerning the provision of evidence concerning the find spot(s). The material appears to represent a hoard of jewellery, silver ingots and coins dating from the 6th to the 9th centuries. It is highly likely that this material was buried by part of the 'Viking Great Army' in south-western Mercia in 878-9AD. It is believed that this force took over major royal estates (for instance, Reading and Chippenham) and royal/ecclesiastical estates (for example, Repton). Such a scenario might well have obtained here, given the prominence of Leominster Priory and its estates in this region at this time, and its connections with the ruling houses of Mercia.

The small portion of the hoard recovered so far includes three gold ornaments, a silver ingot and thirty silver coins. Photos recovered by police suggest that the hoard contained several more ingots, and around 300 coins. It is possible that the hoard contained other objects, but the quality of the recovered photos means that this is uncertain. The combination of intact ornaments, bullion, and a mixture of Anglo-Saxon, Frankish and Islamic coins immediately suggested that this was a Viking hoard. As discussed in more detail below, the coin evidence indicates the strong probability that it was deposited *c.*879AD, probably in connection with the actions of the 'Great Army' in south-west Mercia at that time.

The oldest item among the retrieved hoard contents is a small crystal sphere, mounted in a frame of four gold strips arranged at roughly equal distances around the circumference. These are joined at the top in a four-sided box, with a suspension loop emerging from the top, also made of gold. Comparable pendants have been found in several early Anglo-Saxon graves from Kent, Cambridgeshire and the Isle of Wight, as well as from Continental Europe. The pendant is most likely of Frankish workmanship of the 5th-7th centuries and is therefore significantly earlier than any of the other items in the hoard.

Another jewellery item is a substantial gold finger-ring, circular in the middle but octagonal on the outside, with each of the external facets decorated with an alternating pattern of a rosette (or flower) of eight pellets, and a grid of seven pellets (Plate 8.8.). This pattern is set (for contrast) against a black niello background. The ring has parallels from both England and Wales, and similar patterns are found on other Anglo-Saxon ornaments decorated in the 'Trewhiddle Style' dating from the 9th century. This suggests that the ring is broadly contemporary with the coins in the hoard.

The third gold item is an arm-ring or bracelet of oval section, decorated with five plain geometric facets, and closed by a stylised animal head biting on the terminal at the opposite end. This also has signs of decoration, but the object has not yet been fully cleaned, and the detail of the 'tail' end has yet to be determined. At present, no direct parallels have been found for the arm-ring, but the style of the animal head also points to Anglo-Saxon workmanship of the 9th century. The silver ingot is crudely cast and is typical of Viking hoards of the late 9th and early 10th centuries.

Of the coins, one is a silver dirham of the Islamic Umayyad dynasty. It was minted in AD 720/1, possibly in south-west Iran, although the inscription is not completely legible. A second coin is a Frankish silver denier of Louis the Pious (814-40). Both Islamic and Frankish coins are rare as single finds in England but are more generally found in Viking hoards of the late 9th and 10th centuries.

The remaining coins are all Anglo-Saxon. One of these is a silver penny of the Cross-Crosslets type, minted on behalf of Archbishop Wulfred of Canterbury (895-32). The remainder were issued jointly by Alfred of Wessex (871-99) and his contemporary Ceolwulf II of Mercia (*c*.874-79) (Plate 8.9). It is these coins that provide the historical context for the hoard. The neighbouring kingdoms of Wessex and Mercia had at times been rivals and at times allies, and when Alfred became king in AD871 he inherited an alliance with the then king of Mercia, Burgred (856-74). However, in 874, following three successive years in which the 'Viking Great Army' had occupied sites in Mercia, Burgred abdicated. He was replaced by Ceolwulf, who is dismissed in West Saxon sources written in the 890s as 'a foolish king's thegn' and a puppet of the Vikings, with no suggestion of any alliance.

Importantly, the coins tell us a very different story. They demonstrate a monetary-political alliance between Alfred and Ceolwulf, with shared designs, and a shared reform of the silver content. The first type issued by the two (represented in the hoard by two coins of Alfred and three of Ceolwulf) shows a Roman imperial bust on one side, with name of one of the two kings, and an images of two emperors on the reverse, symbolising the alliance. This was followed by another shared coinage, with a bust on one side and a stylised cross on the other, and this is again well represented in the hoard. Both types were rare before the discovery of the hoard, with the Two Emperors type known only from a single example of each king. However, this hoard, together with a similar hoard found a few months later near Watlington in Oxfordshire, shows that both were in fact extensive coinages, with some moneyers shared between the two kings.

In AD879, Ceolwulf disappears from the historical record, and it is uncertain whether he died naturally, was murdered, or abdicated. Alfred took control of much of Ceolwulf's former kingdom, and issued a new coinage, which remained in place for the remainder of his reign. A single example in the hoard provides a depositional date for the whole hoard of *c*.879. This date coincides with Viking activity in the region. The 'Great Army' was defeated by Alfred at Edington in Wiltshire in 878 and, following a peace treaty between Alfred and the Viking leader Guthrum, moved across the border into south-western Mercia. It remained there for a year before moving on again, this time to settle permanently in East Anglia. Although further interpretation is needed, it is likely that the hoard relates to the Viking occupation of Mercia at this time.

This material may therefore represent material paid to the Viking Army to leave Leominster and the surrounding area: in which case, it may have been buried by the Vikings on their way to over-winter at Repton. Alternatively, it might just have been part of the treasure

from the monastery that was buried in order to hide it from the Viking Army (although the presence of the ingots perhaps makes this unlikely). If it is material collected locally then it is highly likely to be associated with the monastery founded at Leominster by with Mercian patronage in AD 660 or a nearby high status/royal site. The religious centre survives today as Leominster Priory. The findspot physically overlooks Leominster town and the priory itself, thereby creating a direct physical link with the town and its inhabitants.

Given that the two detectorists refused to shed light on the findspot(s), or to co-operate in any way with the investigation of the site, Historic England funded Herefordshire Archaeology, (Herefordshire Council's Archaeology Service) to try to 'contextualise' the finds. This included establishing whether the finds were associated with any form of archaeological structures and/or deposits, such as a cemetery, settlement or other site which might explain the deposition of the finds. It was of course also regarded as important to attempt to establish whether there was more material of similar nature and date in the locality, and if possible to determine whether the material was found as a series of small, discrete, deposits or was deposited together as one single group/hoard.

The selected search area comprised several fields in which the metal detectorists were known to have operated, covering an area of approximately 50 acres. A desk-based assessment was prepared in order to document known sites of historic significance and landscape change. This identified the site of an historic cross-roads next to a natural spring. This old road network partially survives today as a series of green lanes, although some have been lost through later landscape changes. An initial survey was undertaken by drone. This made it possible to identify gaps in crop rows, possibly locating areas of disturbance related to illegal metal detecting. These were recorded so that they could be compared against later survey results once the crop had been harvested. As soon as the crop had been harvested, the entire area was metal-detected, field-walked and subjected to geophysical survey. The results from the field-walking and metal detecting surveys indicated that the entire area had previously been detected and that there was no further material relating to the finds previously discovered. Excepting indeterminate lead items, very little material was found. Equally, the geophysical survey failed to identify any potential targets relating to any form of historic buried structures. It did, however, provide information regarding the extent of Medieval ridge and furrow and the formation of headlands, and located a small number of discrete small anomalies which may have indicated the disturbance of soil at a greater depth. These areas were targeted by resistivity survey in order to determine whether they represented negative features cut into the natural soils and their locations were compared with the earlier photogrammetric survey.

As the work on site progressed, staff were asked by West Midlands Police to identify images which might be connected to the site and the finds which had been retrieved. These images were retrieved by police technicians having been deleted by the detectorists from their mobile phones. A series of photographs were identified that showed the material in the ground, and being removed from the ground, as well as two landscape photographs that by chance both referenced the corner of a field. The area identified in the photographs was the now ploughed-out historic cross-roads and the location of the nearby spring. The photographic evidence strongly suggested that the material was discovered near the spring/cross-roads and that it was all found in a single spot as a hoard. Expert examination of the finds had suggested that the patina and good state of preservation indicate that the material could have been buried within a wet environment which would fit well with the corner of the field which is by far the wettest part of the search area.

Ground penetrating radar was used over the corner of the field in order to locate areas of disturbance and this was followed up with targeted excavation. It quickly became apparent that due to the wetness of the area, the machinery used in the harvesting of the maize crop, and the subsequent cultivation and replanting with winter wheat, that all of the areas of disturbance recorded by survey related to rutting and slewing and this may well have removed any evidence of the exact findspot.

Whilst the findspot was therefore not found, the combined survey data, together with the retrieved photographic evidence, demonstrated that the material came from one single deposit. It has shown that the hoard was not associated with any cemetery or settlement but was more likely deposited in a pit close to a crossroads and near to a spring in order for it to be recovered at a later date.

After a six-week trial at Worcester Crown Court in 2019, the two detectorists were found guilty of all charges and received sentences of ten years and eight and a half years respectively. The two coin-dealers were found guilty of all charges. One was sentenced to five years, the second (due to his co-operation) was given a twelve-month suspended sentence and 240 hours of community service. The Archaeology Service, together with Hereford Museum Service and PAS, prepared a Heritage Crime Impact Assessment which was taken into consideration by the judge prior to sentencing. The reason to mention the penalties and sentences handed down to the culprits is that these were much more severe than for many previous such cases, and hopefully will serve as a warning to other detectorists who fail to gain landowner permission for their 'leisure activities' and refuse to report their discoveries.

Herefordshire Council wishes to acquire the hoard. Once the hoard has been valued Herefordshire Museum's fundraising will begin in earnest. The intention is that the hoard will be displayed at Hereford Museum so that the public and potential donors can see this remarkable find as soon as possible. The 'Herefordshire Viking Hoard' serves as a graphic reminder of the county's role and standing during one of the most pivotal and significant events of this period—the birth of England out of an alliance between the two major surviving Anglo-Saxon kingdoms and from a period of turmoil that, with a few periods of relative quiet, lasted right through to the Norman Conquest.

EARLY GOLD ARTEFACTS IN HEREFORDSHIRE: four discoveries of Bronze Age objects from across the county Peter Reavill[10]

Alongside base metal finds reported to PAS we also work closely with HM Coroner's Service in facilitating the reporting of artefacts and coins under the Treasure Act (1996). This law replaced the medieval common law of treasure trove and requires all finders of potential treasure to report them within 14 days of discovery. This Act has greatly enriched many of the museum collections within the county. In recent years a number of personal ornaments formed from gold alloys and dating from the Middle to Late Bronze Age have been recovered in Herefordshire. One of the items has been acquired by Herefordshire Museums and is on display at Hereford Museum and Art Gallery; or they are in the process of being acquired; or funding is being sought for their acquisition.

A fragment from a gold ribbon bracelet or possibly torc from Stretton Grandison *GLO-9AA7B2* [11]

The torc-like bracelet is incomplete and around a third of the original is present. It was originally created from a rectangular bar-like ingot which has been hammered and manipulated

to create the artefact. The body of the bracelet has a relatively thin rectangular section which is best described as ribbon-like. The two parallel long edges taper evenly from the break and are relatively robust being slightly thickened (hammer shaped). As the sides rapidly taper, they then expand slightly to form a funnel-like expanded cylindrical terminal. The terminal is 'sub-square' shaped in section and is folded back upon itself onto the body in a U-shape. The break on the body is irregular and ragged, possibly as a result of modern agricultural activity/ploughing. There is no sign of incised or applied decoration on any surface. The profile of the bracelet strongly suggests that at one point it had been folded or poorly rolled into a smaller shape, possibly indicating that it had been due to be recycled or more likely be put beyond use as a ritual deposit (or a part of one). The findspot supports this latter scenario obtained in this case, since the item was discovered in an area which was historically waterlogged with significant areas of braded streamlets associated with the water catchment of both the rivers Frome and Loden.

The form of this gold-work item can be closely paralleled with those found in a hoard of similarly-folded gold torcs from the Ellesborough Area, Buckinghamshire (Roberts & Tyrell 2009), a similar but much larger hoard from Priddy in the Mendip Hills, Somerset (Minnitt *et al* 2007), and three twisted gold ribbon torcs with hooked terminals from Cwmjenkin Farm, Hehope in Powys which were tangled together and crumpled into a ball (Savory 1980, 126). There are also two further Middle Bronze Age flat bronze ribbon torcs known from Somerset from the hoards at Edington Burtle and Wedmore (*Inventaria Archaeologica* GB, 44, 2: 1-2; Eogan 1983, 124-125). The distribution of this form, from the parallels cited above, suggests a strong south western British pattern which somewhat echoes the distribution outlined by Eogan (*ibid*). Dating of all these artefacts is achieved purely on their simple stylised form and the plain bar-hooked terminals: all of these strongly suggest a Middle Bronze Age date (following: Taylor 1980, 63 & plate 42d) with it being suggested that the Priddy Hoard specifically dates fromthe period circa 1300 – 1100 BC (Minnitt *et al* 2007).

(Note from Keith Ray: Judy Stevenson adds that this item has been acquired by Hereford Museum: accession number 2011-83. It has been on public display there since 2017).

A fragment of bracelet from Garway *PAS-2D3218* [12]

The Garway bracelet fragment is nearly complete. It comprises a rectangular gold band with a narrow tang or fastening hook at one end and a blunt rounded terminal at the other. The rounded end has an irregular (rough) pierced hole designed to receive the opposing fastening hook and close the item around the wrist. This bracelet has been relatively crudely folded in half at the mid-point to create the current shape. Such deliberate folding is evident in the Stretton Grandison bracelet discussed above. Likewise, the years in the Herefordshire ploughsoil have been unkind to the bracelet leaving it distorted and crumpled. The composition of the gold was tested at the British Museum using non-destructive X-ray fluorescence analysis. It indicated a surface composition of approximately 88-90% gold and 9-11% silver, the rest being copper.

The use or purpose of this band is uncertain. It could be a large ring, a slender bracelet, or an ornament with another use. It shares features in common with goldwork of probable Middle Bronze Age date, including the substantially larger Capel Isaf (Dyfed, Wales) armlets (Savory 1977), two small interlocked gold 'rings' found at Binstead, West Sussex (Varndell 1998-9, 10-11, Figure 3), a bracelet fragment from Freshwater, Isle of Wight (Basford 2014),

another fragmentary example from Northfleet, Kent (Needham 2004) and the Woolaston Gloucestershire goldwork hoard (Wilkin 2014). This artefact type has a strong national distribution along the southern British seaboard, as well as across western Britain. Like the findspot of the Stretton Grandison bracelet the place of deposition of this artefact was within, or near, a watery context, in this case the River Monnow and small streams feeding it.

An Incomplete Penannular Ring from Brimfield Hundred on the Hill Area *WAW-7873E6* [13]
The ring is complete, originally being an open ring or C-shape in plan. It is now badly distorted from movement in the ploughsoil. The ring is of a composite form, comprising three lengths of the same D-sectioned thick gold bar-like wire. The long edges of this wire have been brazed or soldered together to create a single ring with two deep V-shaped grooves. The two open ends have clear straight edges which have been neatly finished: originally it is likely that they would have been buffered against one another. Part of the upper soldered ring has been lost and traces of a recently formed jagged edge are present. Unlike the Stretton Grandison and Garway cases, the findspot of the Brimfield penannular ring is at a relatively high elevation on a north-easterly slope with far reaching views.

This form of composite penannular ring is relatively common with a distribution which encompasses most of the British Isles as well as in Ireland and France. They are often found singly as well as occasionally in conjoined groups, either as linked chains or connected around larger artefacts such as a torc or bracelet. When they are found in conjunction with these other artefacts, they tend to have an associated date within the Middle Bronze Age (*c.*1400 to *c.*1100 BC). Although the Brimfield example is a composite three-ring type, both four- and two-ring examples are also known. Other variations are also known, including examples which are cast in one piece with median grooves that imitate the soldered form. Well-dated composite groups of these rings associated with bracelets are known from Windsor, Berkshire (Varndell & Byard 2009), and Granta Fen, Cambridgeshire (Eogan 1967, Murgia et al 2014: British Museum Accession number: 1884,0520.3). The chain of penannular rings is known from a single find at Blinkbonny, Northumberland in the former collection of Rev. William Greenwell (Murgia *et al* 2014: British Museum Accession number: WG.21).

A gold penannular ring from Dorstone *HESH-E4B5D6* [14]
This item is a complete gold penannular ring that is C-shaped in plan with an irregular sub-rectangular cross-section. The ring is formed from a short length of gold rod whose external edges have been shaped to form an irregular sub-oval shape or cross-section. This rod has subsequently been shaped to form an open-ended ring. The two opposing terminals are relatively well aligned and are unexpanded and undecorated. Sub-rectangular depressions are present on both terminal faces but there is no evidence of applied foil or sheet metal end caps. On the upper edge of one terminal is a deep V-sectioned linear scratch. This is likely to have been applied whilst the rod was being measured and might indicate that the ring was cut into shape using a blade. A slight lip is present on the internal edge, again possibly being a relic of the construction process. There is no decoration present at all. Slight abrasion that has occurred while the artefact has been in the soil has resulted in surface scratches and there are compression tension lines, at right angles to the ring in plan, evident in the surface on the interior face. This suggests that the ring was formed from an oval-sectioned gold rod. The surface and terminals of the ring have been examined under high (x30) magnification and the surface of the ring is smooth and unblemished. All this suggests that the ring is formed of solid

metal and does not have a copper core and applied foil surface like some examples of this kind of artefact.

The penannular ring belongs to a relatively common class of treasure artefact which has been erroneously termed 'hair-rings' and 'ring-money'. Their use/purpose remains uncertain, although it is likely that they were personal adornments, possibly worn on the ears or nose, rather than being hair-ornaments or items of exchange (Gwilt, Lodwick and Davies 2014). The form of this example fits best with Meeks, Craddock and Needham's typology (Group Ia - Plain Gold: 2008: 17), although they note that some of these are cast. This group formed the most common/largest group within their study.

The national distribution of this form of Late Bronze Age artefact indicates that penannular rings are more common in the south and east of England with very few known in Northern Britain and Wales. Significant examples are also known from Ireland (Taylor 1980; Eogan 1994 and 2007; Raferty: 2004) and recent examples from western Britain have a distinct Irish seaboard distribution. Gwilt *et. al.* (2014) define and discuss the known Welsh examples. However, this new example from Dorstone seems to be the first example to be recorded from either Herefordshire or the wider Welsh Marches area. The findspot of this penannular ring is once more associated with water, this time being found associated with small watercourses running off the nearby hills.

References:

Basford, F 2014: *A gold bracelet fragment from Fresh Water, Isle of Wight* (*IOW-0195D2). Web* page available at: https://finds.org.uk/database/artefacts/record/id/594585

Eogan, G 1967 The Associated finds of Gold Bar Torcs, Journal of the Royal Society of Antiquaries of Ireland, 97

1983 'Ribbon Torcs in Britain and Ireland', in Anne O'Connor & D.V. Clarke (eds.) *From the Stone Age to the Forty Five*, 87-126. Edinburgh: John Donald.

1994 *The Accomplished Art; Gold and Gold-working in Britain and Ireland during the Bronze Age (c. 2300-650 BC)*, Oxford: Oxbow Monograph 42.

1997 'Hair-rings' and European Late Bronze Age Society, *Antiquity*, 71: 308-20.

Gwilt, A, Lodwick, M. Davies M. (2014) *NMGW-928F55: A gold bronze age penannular ring from St. Donats, Vale of Glamorgan*. Web page available at: https://finds.org.uk/database/artefacts/record/id/628395

Meeks, N.D., Craddock, P. & Needham, S.P. 2008 Bronze Age Penannular Gold Rings from the British Isles: Technology and Composition, *Jewellery Studies* 11: 13-30.

Minnitt, S. Roberts, B. & Payne, N: 2007 *A hoard of Middle Bronze Age torcs from Priddy, Mendip Hills – Somerset (SOM-1C2C53)* Web page https://finds.org.uk/database/artefacts/record/id/189967

Murgia, A., Melkonian, M. and Roberts, B.W 2014. European Bronze Age Gold in the British Museum

Needham, S 2004 *A gold bracelet fragment from Norfleet, Gravesend, Kent (KENT-AAA333)* Web page: https://finds.org.uk/database/artefacts/record/id/74960

Raftery, B. 2004: 'Pit 119: Rathgall, Co. Wicklow', in Roche, H., Grogan, E. Bradley, J. Coles, J. & Raftery, B. *From Megaliths to Metals; Essays in Honour of George Eogan*, Oxford: Oxbow. pp 83-90.

Roberts, B. and Tyrrell, R: 2009 *A hoard of Bronze Age Torcs from Ellinsborough, Buckinghamshire (BUC-C07E88)* Web

page https://finds.org.uk/database/artefacts/record/id/266606
Savory, H. 1977, 'A New Hoard of Bronze Age Gold Ornaments', *Archaeologia Atlantica* 2: 37-53,
1980. *Guide Catalogue of the Bronze Age Collections*. Cardiff: National Museum of Wales.
Taylor, J. J 1980 *Bronze Age Goldwork of the British Isles.* Cambridge: Cambridge University Press
Varndell 1998-9, 'Binstead, West Sussex: Two Bronze Age gold rings linked together', *Treasure Annual Report 1998-1999*, DCMS, 10-11
Varndell, G. & Byard, A 2009: *A composite hoard on penannular rings and a bronze age bracelet of Middle Bronze Age date from Windsor, Berkshire (BERK-A5FFE5)* Web page available at: https://finds.org.uk/database/artefacts/record/id/281365
Wilkin, N. 2014*: A hoard of Gold Ornaments from Woolaston, Gloucestershire (GLO-E9EC16)* Web page available at: https://finds.org.uk/database/artefacts/record/id/627280

GROUP AND UNIT REPORTS

HEADLAND ARCHAEOLOGY (UK) Ltd

BROMYARD, The Old Grammar School, Church Street, Bromyard, Herefordshire *(SO 65600 54824) [EHE 80413]*

OASIS Ref: headland3-371607

Historic building recording was undertaken at The Old Grammar School, Bromyard, Herefordshire, prior to redevelopment and the conversion of the buildings to residential properties. The survey revealed four phases of development of the structure, with historic mapping suggesting the earliest phase dated from 1835. Later alterations occurred during the Victorian and Modern periods. Little of the original internal fabric relating to the use of the building as a school remained, modern redevelopment as commercial offices having masked or swept this away. Roofing timbers and frames did survive, with the first phase of development suggesting a Post-Medieval origin.

Thomson, S. HAS 1365

HEREFORD, 32 Aubrey Street *(SO 50859 39907) [EHE 80411]*

A watching brief was undertaken during groundworks associated with the construction of an extension to the rear of this property. A partially exposed Post-Medieval pit containing dumped material was identified, as well as a red brick wall foundation (aligned east to west), and levelling material comprising demolition material. Both features are probably related to one another, and they also most likely date to the Post-Medieval period.

Archer, B. HAS 1364

HEREFORD, land adjacent to The Booth Hall, East Street *(SO 51050 39975) [EHE 80414]*

OASIS Ref: headland3-372857

Archaeological monitoring took place during the excavation by works contractors of four trenches for the installation and connection of services. For the most part the excavations revealed nothing more than modern disturbance. However, a deep deposit of mixed sands and gravels identified on the northern side of East Street, adjacent to the Booth Hall, was considered potentially to represent material associated with the former rampart. Given the limited nature of the investigations, this must be regarded as speculative. Brick and stone walls revealed on the southern side of East Street, co-incident with the frontage of the car park plot off the junction with St John Street, almost certainly represented post-medieval structures

formerly occupying the car park area.
Sear, C. HAS 1366

SUTTON ST NICHOLAS, land off Woodville Grove *(SO 53110 45363) [EHE 80403]*
OASIS Ref: headland3-345611
An archaeological field evaluation, via trial trenching, was undertaken here. The stratigraphy across the site suggested that it had historically been subject to a series of flood events. Evidence for previous activity on the site was limited to a single field boundary and drainage ditch, both believed to be of post-medieval date.
Archer, B. HAS 1345

SALFORD ARCHAEOLOGY

HEREFORD, Grafton Wood *(SO 50169 36602); [EHE80381]*
An archaeological 'strip, map and sample' excavation approximately 1.66 hectares in extent was carried out along the route of the proposed Hereford Southern Link Road in the immediate vicinity of Grafton Wood, situated 3km to the south of Hereford city centre. This yielded significant evidence for prehistoric activity, and whilst detailed analysis of the dataset in ongoing, initial conclusions can be drawn from the post-excavation assessment process.

The earliest activity, based on the pottery evidence, comprised a shallow and irregular pit containing 41 small and abraded fragments of pottery that occurred in two fabric types. These included a single sherd with an angular quartz-tempered fabric, very similar to material assigned a Bronze Age date that was excavated at Wellington Quarry in Herefordshire. The other 40 sherds, probably deriving from a single Bronze Age vessel, had grog-tempered fabric, and some appeared to display stabbed decoration.

Another fragment of the grog-tempered pottery was recovered from the terminus of a curvilinear gully, although this may have been residual as it was found in association with several fragments of Iron Age pottery. The gully was approximately 0.45m wide, extending from the southern edge of excavation and terminated just before the eastern edge, and appeared to enclose two sub-circular pits. Whilst both of these pits had been truncated by modern ploughing, their lower parts survived intact. Excavation of one of these pits yielded four worked lithics, including a complete knife of very dark brown semi-translucent flint retouched along both edges. Typologically, this flint tool is consistent with a Later Neolithic/Early Bronze Age date, although four sherds of pottery dating from the early Roman period were also recovered from the primary fill of the pit so the prehistoric material is likely to be residual. The second pit, situated a short distance to the east, contained a plano-convex flint knife of a type that has been found elsewhere in association with Later-Neolithic to Early-Bronze-Age assemblages. Again, however, fragments of early Roman pottery were also recovered from the pit.

A concentration of activity was evident in the central section of the excavated area, represented by several post-holes, a ditch and features associated with iron production that included a probable furnace base and a possible hearth. An assemblage of approximately 18kg of iron-working debris, dominated by smelting slags, was also recovered from these features, together with several pieces of the highly-fired clay lining of the furnace. The slag morphology suggests either an Iron Age or Early Medieval date for the ironworking, although the associated pottery assemblage firmly indicates an Iron Age to early Roman date. There is no previous evidence for early iron smelting in the region other than on the periphery of the Forest

of Dean on the southern edge of the region, and the excavated material provides an important contribution to the current understanding of early iron-smelting technology in Britain.

Excavation a short distance to the south of the iron-working features provided evidence for contemporary activity that appeared to have been associated primarily with domestic occupation. This was represented by several ditches, post holes and a penannular drip gully that is likely to have represented a roundhouse.

Miller, I., 2019, Salford Archaeology Report 2019/51.

TIGERGEO Ltd

SUTTON ST NICHOLAS, Land adjacent to the Linnings, Sutton St Nicholas, Herefordshire *(SO53394597).*

A trial trench evaluation at land adjacent to The Linnings, Sutton St Nicholas, Hereford comprised six trenches that were opened across the site to the top of natural deposits. These latter were in general encountered within 0.4 metres of the existing ground surface, with the only variation being in the easternmost trench, where a substantial amount of hill wash, from a steep but short west-facing slope, had accumulated. Two of the trenches contained furrows, potentially from Medieval or Post-Medieval cultivation or from later agricultural use, but no other features of archaeological interest were encountered in any of the trenches.

Lewis, D, 2019, TigerGeo Report Ref. tg_SNH191_report V1.0

WELLINGTON, Kingcup Cottage, Wellington, Herefordshire *(SO49914717)*

A trial trench evaluation at Kingcup Cottage, Wellington Marsh, Herefordshire, was required as part of an appeal against the refusal of planning permission for self-build residential development. Six trenches were opened across the site to the top of natural deposits with two of the trenches containing deposits and features of some archaeological interest. These were Post-Medieval in date and likely relate to the use of the site in the late 16th century onwards. They provided evidence for dumping/infill of an earlier mineral extraction pit/pond and a very well-constructed series of stone walls probably associated with water/agricultural management. The features tie in with evidence from the wider environs, the extensive archaeological investigations at Wellington Quarry suggesting a landscape of enclosed pasture and meadows in the Post-Medieval period.

No features earlier than the Post-Medieval period were uncovered but this may be a result of the limited depth of the evaluation trenches. Where sondages were excavated through the natural deposits (alluvial silts) the upper surface of the underlying gravel was exposed. There remains the possibility that earlier deposits and features of archaeological interest are contained within, or were cut into, the gravels.

Lewis, D, 2019, TigerGeo Report Ref. tg_KCW181_report_V1.0

WORCESTERSHIRE ARCHAEOLOGY

WELLINGTON: ***Wellington Quarry Phase 3 2018 works interim report*** *(SO 5053 4730*);
[HSM 5522, EHE 2057]

A programme of archaeological works (salvage recording) was undertaken by Worcestershire Archaeology during April-June 2018 within the Moreton South Extension of Wellington

Quarry, Herefordshire. The work was undertaken on behalf of Tarmac Limited, in advance of mineral extraction in Phase 3 of the extension.

As in previous phases of salvage recording at Wellington, an alluvial sequence covered the entire area. This comprised a reddish-brown alluvium underlying the modern turf line. This overlaid a yellowish-brown alluvial deposit largely of prehistoric date, itself overlying an early post-glacial reddish-orange alluvial unit which in turn directly overlaid the gravel mineral deposit of Quaternary origin. To the west and east sides of Phase 3, palaeo-channels of the river Lugg were recorded incised into this alluvial sequence and the underlying gravel (Plate 8.10). A thin peat-rich deposit also spread over a large proportion of the western and lowest-lying part of the area. Mapping and recording of these deposits and palaeo-channels extended current understanding of this sequence which had previously been investigated through use of Lidar, specialist geoarchaeological assessment and trenching at evaluation stage, as well as in previously monitored areas to the north.

Areas of earlier prehistoric activity were recorded on slightly higher areas of the landscape between the palaeo-channels and these traces included pits, postholes and charcoal spreads along with flint scatters and isolated finds. These features and finds are consistent with a widespread pattern of activity of this date observed at Wellington Quarry over many years and reflect regular but temporary periods of occupation and use of this valley floor landscape by Neolithic and Early Bronze Age communities (Jackson 2007; Jackson and Ray 2012).

Iron Age and Romano-British remains were also present and included two pit alignments of apparent Iron Age date. These alignments ran perpendicular to one of the palaeo-channels and probably reflect demarcation and sub-division of the floodplain in the later 1st millennium BC. One of the pits within the alignments contained a poorly-preserved inhumation, nonetheless accompanied by a wooden staff (Plate 8.11). Radiocarbon dating indicates that this is most likely of Late Iron Age date, although a very early Romano-British date cannot be excluded. A drove-way and drainage ditches were also recorded, the latter probably reflecting Roman and early post-Roman efforts to canalise and drain low-lying areas of the local landscape. All this activity was focussed on an area where the western palaeo-channel widened and a substantial quantity of imported stone had been dumped, potentially either to form a ford or to adapt the flow of an active channel.

The abundance of Neolithic and Bronze Age activity and cultural material recorded within this quarry phase demonstrates that this area of the floodplain was more widely used for seasonally-based occupation and exploitation than those immediately to the north. The relative lack of cultural material of Roman and later date indicates that by this time the area was in agricultural use with the potential ford perhaps being associated with transportation of goods and livestock across the floodplain and towards known settlements to the west and north-east.

Arnold, G 2019 Worcestershire Archaeology report 2674

REFERENCES

[1] A full artefact report on the PAS database can be found here: https://finds.org.uk/database/artefacts/record/id/900647
[2] A full artefact report on the PAS database can be found here: https://finds.org.uk/database/artefacts/record/id/951856
[3] Readers should note that the columns and crevices of the church have now been searched and there is no evidence of any other artefacts having been concealed in this way.
[4] A full artefact report on the PAS database recorded by Teresa Gilmore can be found here: https://finds.org.uk/database/artefacts/record/id/907324

[5] A full artefact report on the PAS database recorded by Jake Dolphin can be found here: https://finds.org.uk/database/artefacts/record/id/949099
[6] A full artefact report on the PAS database can be found here: https://finds.org.uk/database/artefacts/record/id/961673
[7] A full artefact report on the PAS database can be found here: https://finds.org.uk/database/artefacts/record/id/907390
[8] A full artefact report on the PAS database can be found here: https://finds.org.uk/database/artefacts/record/id/900570
[9] A full artefact report on the PAS database can be found here: https://finds.org.uk/database/artefacts/record/id/963486
[10] Peter Reavill is employed by Birmingham Museums' Trust for the British Museum's Portable Antiquities Scheme as the Finds Liaison Officer for Herefordshire and Shropshire. Email address is peter.reavill@shropshire.gov.uk
[11] This artefact was reported on by Kurt Adams – A full PAS record can be found here: https://finds.org.uk/database/artefacts/record/id/284952
[12] This artefact was reported to Mark Lodwick at the National Museum Wales: Cardiff and the original report of which this is an edited version was authored by Neil Wilkin, Curator of the Bronze Age at the British Museum. His full PAS record can be found here: https://finds.org.uk/database/artefacts/record/id/902633
[13] This artefact was reported on by Angie Bolton and Neil Wilkin – A full PAS record can be found here: https://finds.org.uk/database/artefacts/record/id/882778#3
[14] This artefact was reported on by Peter Reavill – A full PAS record can be found here: https://finds.org.uk/database/artefacts/record/id/809040

Botany, 2019

By PETER GARNER & STUART HEDLEY

PETER GARNER'S REPORT

2019 has been my last year as the county plant recorder! I have been county recorder for 17 years and during that time I have focussed my efforts at recording the plants from as much of Herefordshire as I could. I have been greatly assisted by Heather Davies and many others who have sent in records. During this time Heather and I have sent many thousands of records to the Botanical Society of the British Isles, who, in a few months time, will be publishing the Fifth Edition of *The Atlas of British and Irish Flora*. It is a large and very varied county, but I have greatly enjoyed exploring hidden corners and so many varied habitats. By the time the Sixth edition is published I will be well into my 90s, so it has been with great relief that I have been able to pass on the responsibilities of county recorder to Stuart Hedley. Not only is Stuart 20 years younger than I am, but as one of the country's leading botanists, he has a vastly superior botanical knowledge than I, in fact, I have regularly been taking specimens to him for help with identification.

Some interesting plants have been recorded in 2019:

– Yellow Bird's-nest *Hypopitys monotropa* was recorded from three separate sites in The Doward by Chris Harris in July.

– Fiona Fyshe found a new site for Bee Orchid *Ophrys apifera* at Sollers Hope in early July. There were large numbers.

– In September John and Madeleine Powell discovered a small colony of Autumn Lady's-tresses *Spiranthes spiralis* on Merbach Hill. This was a new site and I went to see them and found 10 spikes all quite close together and close to the public footpath.

– Ian Curtis has a small-holding near Kington and he rang me in mid-September because a plant of Thorn-apple *Datura stramonium* had spontaneously appeared in one of his poly-tunnels. A very unusual arable weed!

– While surveying roadside verges Suzanne Noble found the hybrid between Wood Avens *Geum urbanum* and Water Avens *G. rivale* along a roadside verge at Wigmore Rolls.

– Bullen's Bank lies between the parishes of Cusop and Dorstone and while recording this very interesting area in July, I found Bog Pimpernel *Anagalis tenella* and Water Purslane *Lythrum portula*.

STUART HEDLEY'S REPORT

2019 was my first year as the county plant recorder, having taking the baton from Peter last autumn. He will be a tough act to follow after doing so much to record across the whole county for many, many, years, for making many, many, significant finds, and for providing such a welcoming and enthusing presence on the local scene for young (and not so young!) newcomers to botany and to Herefordshire. I have enjoyed many botanical excursions in the

county since arriving here in 2015. It is nice to be living in a place which still generates new records for such threatened species as green-winged orchid and marsh valerian, and where a springtime walk in the woods is as likely to result in a find of herb Paris or toothwort as not. Recent favourite finds include a couple of thousand-year-old yews inside a conifer plantation and new sites for the large-leaved lime *Tilia platyphyllos*, one of our rarest native trees (Plate 9.1).

Looking forward, my priorities are to continue to audit under-recorded corners of the county, and to try and address taxonomic gaps, for example better recording of subspecies and the less glamorous taxa which all of us, botanists included, often draw a veil over! In my experience all species have stories written into their morphology or ecology, and the longer-established non-natives often have fascinating histories waiting to be uncovered to boot. I would like to begin the process of telling these stories.

Why are there so many hybrid oaks *Quercus x rosacea* in Herefordshire, for example that in Plate 9.2? What are our hedgerow elms, kept so neatly trimmed that they seldom if ever mature their distinctive canopies and allow us the luxury of an easy diagnosis? What are their histories? And how much blackthorn is there in the Herefordshire countryside—as opposed to wild plum and its hybrid? Whilst out last month looking at spines, flowers and leaves of our *Prunus* species I began to wonder if blackthorn was in fact all that common in my area (the Golden Valley). A neighbour caught me out and about with a ruler and asked what I was doing. I told her of my suspicion. *Oh, you're quite right,* she said with authority. *Every year I make sloe gin and I can tell you there are very few proper sloes around here. They're all a bit bigger, oval.'* I went on my way, pleased at this unexpected corroboration.

It is also a time of increasing interest in habitat restoration and plant recorders need to get better at collecting and presenting data on native and reintroduced occurrences, so that we can quantify the way we rebuild our flora. I look forward to reporting on this and other aspects of Herefordshire's vascular plants in the years ahead.

Buildings, 2019

By DUNCAN JAMES

Over the year there was the chance to look more closely at a number of buildings in the County, four of which have been selected for more detailed consideration here. Some of them were the subject of planning applications. My thanks go to all those who have facilitated access to these interesting and significant structures.

The Church of St. Barnabas, Brampton Bryan, Herefordshire.
Lat/Long:- 52.347083, -2.925549. Map ref.:- SO 3704 7251. Hereford SMR:- 194. RCHME Brampton Bryan monument 1.

Brampton Bryan is a village with a rich history centred on its 14th-century castle, the remains of which stand alongside Brampton Bryan Hall, a mid-17th century house extensively re-modelled in the 18th century and later. The third component of this intimately linked group is the church, which along with the castle, suffered serious damage during the Civil War.

The castle and the church were left as ruins, but the church was rebuilt in 1656. It is noteworthy not only for the layout, a wide, single cell plan, which reflects Puritan thinking of the period, but also the triple hammer-beam roof, a structure that one might expect to find in earlier periods than the 17th century (Plate 10.1). This is almost certainly one reason why the rumour persists that it was constructed using timber from the adjacent ruined hall of the castle. Pevsner, in 1963, did nothing to dispel the rumour when he incorrectly referred to the double hammer-beam roof of the church and stated that 'It has been suggested that the lower and more ornate timbers were taken from the castle which was largely destroyed in 1643.'[1]

Luckily in the 2012 revision of the Herefordshire volume this was all corrected; the roof gained its proper size and its Jacobean date.[2] However, the fiction that the roof came from the castle lives on. In his 1997 report on buildings, Tonkin discussed the Brampton Bryan church and other hammer-beam roofs in the County, concluding that, 'from the area covered by the roof and the area of the ruins of the castle hall it seems probable that the local tradition of the roof having come from the latter building could be correct. Thus the roof of the church could have been constructed originally in the 14th century...'[3] This 'local tradition' of the castle as a source has, unfortunately, bled out on to many sites on the internet. Even the listed building description has it incorrectly as a double hammer-beam roof.

So the purpose of this entry is an attempt to set matters right and to reinforce the Brooks and Pevsner description with further evidence to show that the roof could not have come from the castle and that it is a triple hammer-beam design with features that also make it likely to have been from the workshop of the carpenter, John Abell.

It is important to understand that the church was rebuilt during the Commonwealth so the aisled layout of the earlier building was abandoned. This left the serious challenge of putting a roof on a building with an internal width of about 37ft and a ground plan that was presumably dictated by the dimensions of the surviving church walls. For a conventional roof truss this would have needed tie-beams that were about 45ft long but this would have been a clumsy solution even if suitable timber could have been found. The hammer-beam roof was an ideal design.

So the question to ask is whether this hammer-beam roof came from the castle? It is of course possible that the castle hall did have a hammer-beam roof although there is no evidence whatsoever that this was the case. But had there been such a roof, of 14th-century date as Tonkin suggests, it would almost certainly have been a decorated structure designed to impress. It is also likely to have been above an open hearth and therefore would have retained evidence of smoke blackening.

Perhaps the most telling indication of the date would have been diagonal saw-marks on the surface of the timbers which would show that they pre-dated *c.*1530. However, the timbers used in the church have pit-saw marks, which is evidence that they were cut at some time after 1530-40.[4]

Something that is seldom mentioned in relation to this roof is the fact that the Parliamentarians laid siege to the castle twice, on the second occasion with devastating results. It was bombarded with some intensity such that a timber roof over the hall would have been unlikely to have survived without some visible damage. Shoesmith writes that, on the 9 September (1643), Colonel Lingen withdrew to Gloucester, leaving Brampton Bryan castle of which 'the roof…was so bayttered that there was not one dry room in it.'[5] The castle was attacked again in the following year using mines and artillery and that the '…whole building was then sacked and burnt…'.[6]

The suggestion that any of the timbers came from the castle is not tenable. There is no evidence that any part of the structure is re-used material as there are no redundant mortices or peg holes and no smoke or fire damage. Finally, all the (limited) decoration is certainly Jacobean and belongs to the mid 17th century.

There is the oft-quoted attribution to the carpenter John Abell and although there is no documentary evidence for this, the structure has features that would link it firmly to his workshop. The decorative motifs can all be found in his other work, including the use of pillars or half pillars set against the wall, as in Vowchurch and, at a higher level, below the roof at Abbey Dore. (Plate 10.2) There is about Abell's work a naivety and lack of sophistication, not just in his carvings but also in the structures. The roof of the Church of St Barnabas suggests that it was made by someone who had seen such a design but did not fully understand the forces involved, especially with a triple hammer-beam, although he was bold enough to give it a try.

The Church of St James, Cradley, Herefordshire.

Lat/Long:- 52.121921, -2.386952

Map ref:- SO 735 471. Hereford SMR:- 31074. RCHME Cradley, monument 1.

Although the church in Cradley was the subject of extensive restoration and remodelling in the later 19th century, early features have survived including the Norman doorway and the square, west tower. A curious feature inside the tower is the pair of tall, timber-framed screens on the north and south sides for which there seems no obvious explanation. (Plate 10.3)

The Pevsner volume refers to them as 17th century in date but offers no explanation as to their function.[7] However the Royal Commission has the following:—

'Within the ground-stage of the tower are two timber-framed walls parallel to the north and south sides, and probably of 17th century date and inserted to stiffen the structure.'[8]

The notion that timber framing would be needed, or even be effective, in stiffening the massive stone walls of the tower is hardly tenable. The frames, which have sill beams that are now mostly hidden due to the raised level of the floor, are 20ft high and they stand about 12ft

6in apart (Figure 1). At the top they support a pair of massive beams aligned north-south. Both frames have been extended in height in more recent times by an extra 4ft to support a later floor. Above this floor is a modern bell frame carried on steel beams that are located in the walls of the tower.

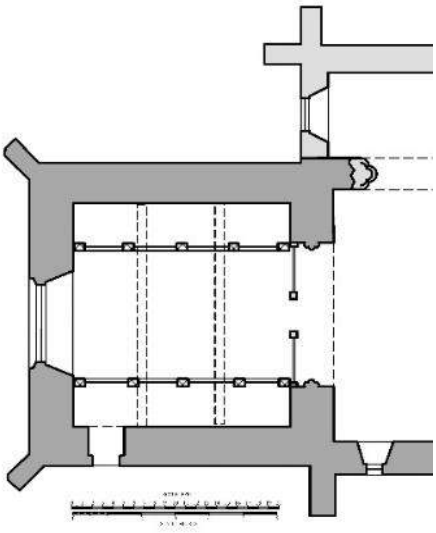


Figure 1. A plan of Cradley Church tower showing the layout of the two timber frames

The curious feature of the two primary timber frames is that neither the horizontal beams along the top of each frame nor the two heavy beams that they support, are fixed into the walls of the tower. The ends rest against, or nearly against the internal face of the walls but are not embedded in the stonework (Plate 10.4). It is an independent structure raised within the tower. Apart from Pevsner's date of the 17th century for these timber frames there have been some wild suggestions that they are from an earlier timber tower. This is most certainly not the case, but neither are they from the 17th century.

Evidence for the date of construction can be found in the method used to convert the timber. Here there are diagonal saw-marks on the face of the primary components. This means that a see-saw technique was used to prepare the timbers and it indicates that they are earlier than 1530/40.[9] It would suggest that the frames are either early 16th century in date or belong to the 15th century. It is very unlikely that they are earlier than the 15th century.[10]

Both frames have doorways but there is no clear indication that they are primary (Figure 2). The north frame has a single later door within a modified larger opening that has a rebate around the edge. This is possibly a primary doorway as there would have been no other route into the space behind.

The south frame has a blocked doorway, which is opposite the door in the north frame. It has a rebate on one side only. The present door in the frame is at the west end and it is almost certainly a later insertion, the original rail at head height having been replaced. There may not have been a primary doorway in the south frame simply because access to the cavity behind could have been gained through the small south door in the tower. This space now contains a modern steel staircase to the bell-frame.

There are many marks on the inner faces of the two frames including carpenters' assembly marks, both circles and lines, cut using a race-knife.[11] Similar marks are used widely in Herefordshire. There are also taper burn marks on the timber that, as recent research has revealed, are now thought to be apotropaic marks rather than the result of carelessness (Figure 3).[12] There are also a few Marian marks in the form of a double V, for Virgin of Virgins (Figure 4).[13]

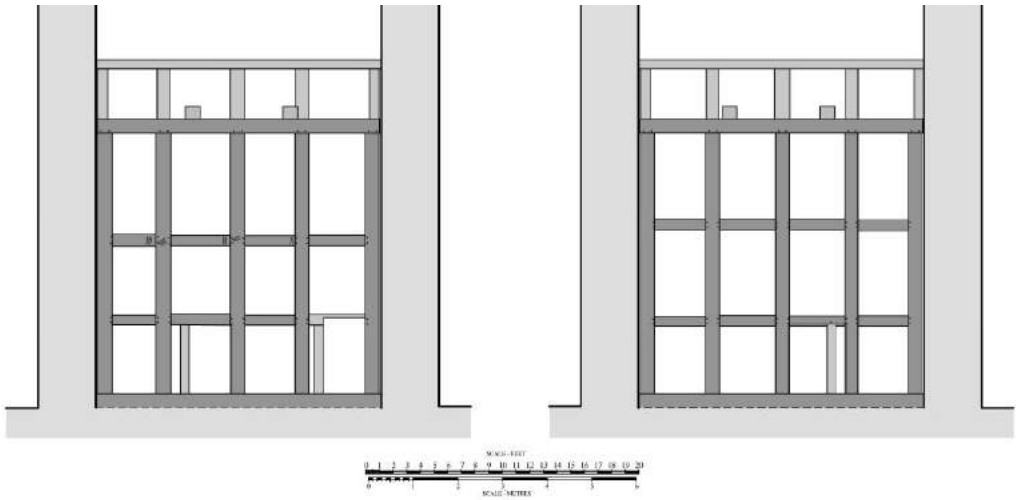


Figure 2. The two timber frames within the tower. Left, the north elevation of the south frame and on the right, the south elevation of the north frame. The modern addition to the height is shown with a pale infill

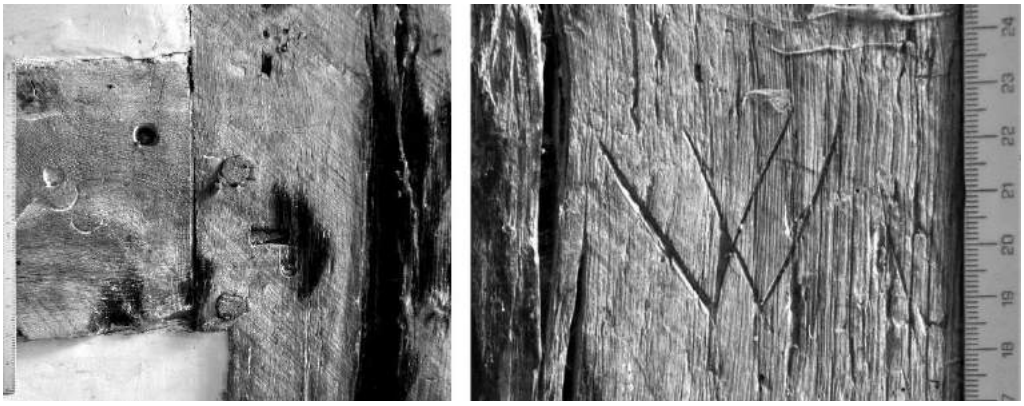


Figure 3.(left above) Ritual burn marks on the north face of the south frame. Also, clearly visible on the frame are diagonal saw marks that are indicative of an early date. Figure 4 (right above). A Marian mark cut into the south frame

It seems reasonable to assume that the frames were built within the tower to support a floor at the 20 ft level and that bells are likely to have been installed above that floor. Perhaps the significant fact is that the west tower was, as noted by the Royal Commission inspector in 1929, '…of three stages, the two lower, undivided externally, and of *c*.1200, and the top stage of late 14th or early 15th-century date and finished with an embattled parapet.'[14] However, the notes made in preparation for the published volume go a little further as follows:— 'The top storey of the west tower was added late in the 14th or early in the 15th century and the tower was strengthened in the 17th century by the building of two internal timber-framed walls apparently to stiffen the structure and obviate shaking due to the ringing of a peal of bells.'[15]

It would seem that this may be partially correct but since the frames are considerably earlier than the 17th century they may well have been added in the late 14th or early 15th century when the top storey was added. And this would have been done because the stones forming the new structure would have been bedded in slow-setting lime mortar including the rubble filling to the walls. This would have been particularly vulnerable to vibrations carried through the structure from the bells if they were not isolated in some way, which would explain the 'detached' nature of the two timber frames. An additional benefit of the frames is that they offer a more congenial space for the bell-ringers.

Duppa's Almshouse, Bridge Street, Pembridge, Herefordshire, HR6 9EP.
Lat/Long:- 52.218345, -2.893245 Map Ref:- SO 39071 58166, Herefordshire SMR 1573
RCHME Pembridge No.7

This long, two-storey timber-framed range stands on the west side of Bridge Street at its junction with the east-west routes through the village (Plate 10.5). It is listed Grade II.[16] The almshouse was founded by Jeffrey Duppa and further endowed in 1637 by his son James and also in 1661, a year before he died, by his other son, Bryan Duppa, Bishop of Winchester. The range was originally divided into six units of accommodation and was noted as such when seen by the Royal Commission Inspectors in the 1930s (Figure 5).

More recently, in the second half of the 20th century, the range was re-modelled to form four units as shown in the plan below (Figure 6). But with changing expectations concerning comfort and facilities, it has been decided by Pembridge Almshouses Charity that, in order to give this important Pembridge building a viable future, planning consent would be sought to remodel the interior to create two larger units of accommodation.

In 2004 the range had been investigated as part of a tree-ring dating project organised by the Pembridge Amenity Trust and funded by the Local Heritage Initiative.[17] The almshouse is noted, according to the board on the front, as built in the 17th century by Bishop Duppa, but tree-ring sampling of the north end of the building produced a felling date range of 1486 to 1502. Unfortunately it was not possible at the time to date, or investigate, the south end of the building, as it was occupied.

Since then, through the good offices of Pembridge Almshouses Charity, it has been possible to look closely at the south end of the range in order to attempt to understand more about this enigmatic building. This has revealed that the range has been made by re-using two 15th-century jettied crosswings that would have been brought to the site from elsewhere in the village or possibly from further afield. They have been positioned back to back but 15ft apart, the gap being infilled to create bay 5 (Figure 7). Each end of the range has a jettied first floor but the two units are of different dates. The north end, as noted above, has been tree-ring dated and this places it in the last two decades of the 15th century.[18] The south end has not been dated but on sawmark evidence it almost certainly belongs to the 15th century,[19] while structural evidence indicates that it is a little earlier in date than the north end.

There have been many alterations to the front of the building to insert windows and open the framing to insert doorways along the east side of the range. Much of the evidence concerning these changes is obscured on the exterior by thick layers of black paint. On the back of the range, (Plate 10.6) much of the ground floor framing has been replaced by stone walling and the three large chimneystacks.

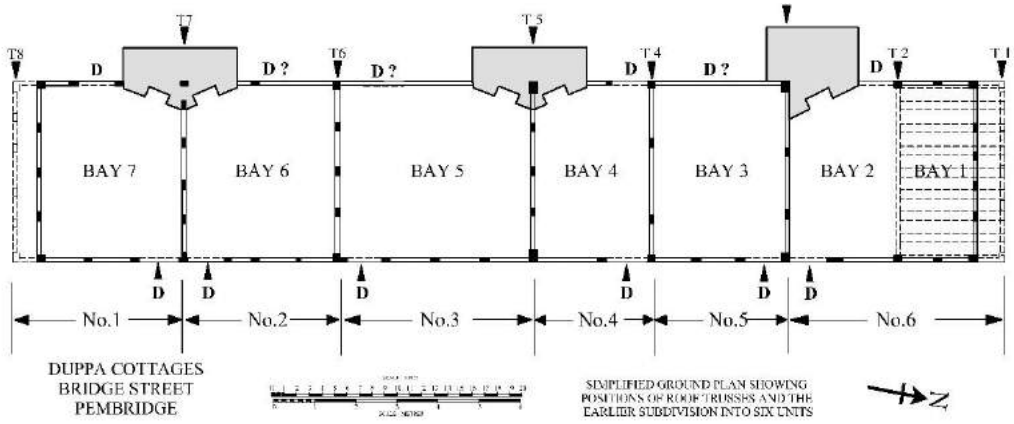


Figure 5. A ground plan showing the primary layout as six units

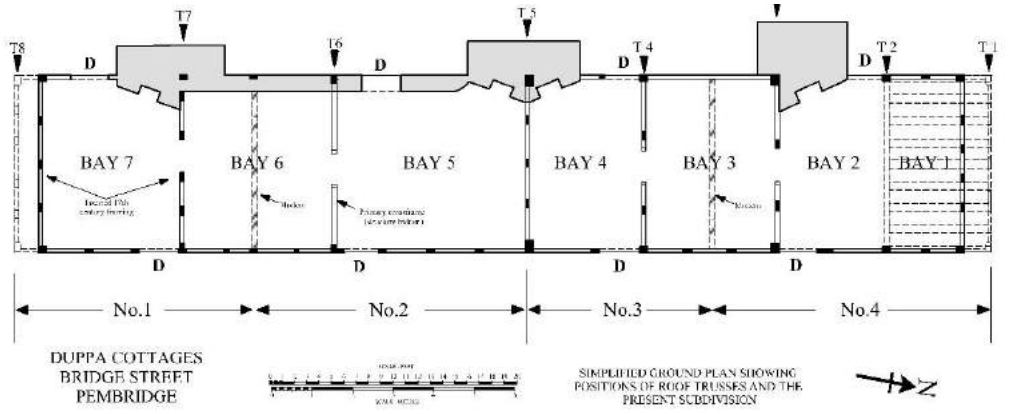


Figure 6. A ground plan showing the inserted crossframes and minor alterations to increase the size of the individual units

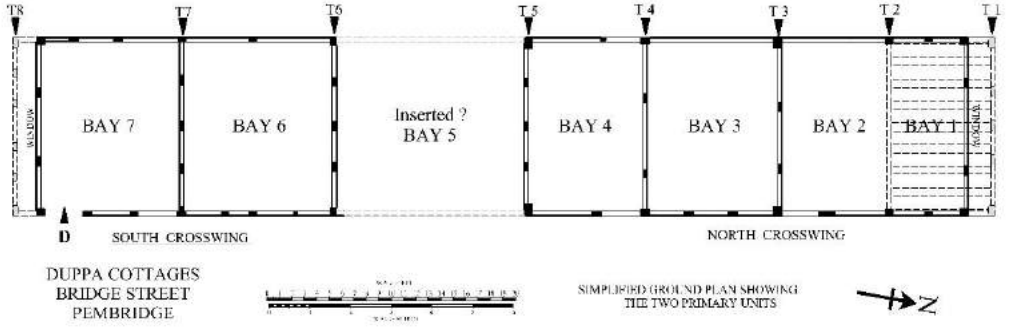


Figure 7. A plan showing the two separate cross-wings brought to the site to form the almshouse range

The building is approximately 75ft long on the ground floor and about 14½ ft wide. The first floor is jettied by about 2ft at the north and the south ends. The bays are of varied length.

The present subdivision of the building, as noted above, forms four small domestic units, which has been achieved by inserting partitions into bays 3 and 6 (Figure 6). The earlier (possibly original) sub-division of the range formed six units with the divisions following the lines of the roof trusses/partitions T3, T4, T5, T6 and T7 (Figure 5). The largest unit would have been within bays 1 and 2; the smallest in bay 4.

Both the north and the south units have been brought in from other sites. They are typical crosswings and as such they would have been related to small open-hall structures set at right-angles and since there is steeply rising land to the rear of the range, the site could not have accommodated such an arrangement. It was noted that the end of the south range appeared to be about 6 inches wider than the end of the north range so at some point an adjustment of the width was made. This is likely to have been done in the construction of bay 5, the infill bay.

The NorthUnit: Truss T1

The roof truss T1 and the framing below form the jettied north face of the bay 1 upper storey (Figure 8). There is a cambered tiebeam, the ends of which have been extended so that the eaves of the present roof are carried further out. These extended ends are fitted with later applied brackets. The posts supporting the tiebeam have flared jowls. The truss has a collar with queen posts below. The tiled roof itself has been raised to a slightly higher level, apparently by setting new purlins onto the primary ones. The present common rafters in the roof also appear to have been laid on top of the earlier (primary?) rafters.

Figure 8. The jettied north elevation of the range showing the blocked window openings

Figure 9. A reconstruction drawing of the jettied north elevation showing the likely form of the two planted-on windows

An important feature of this roof truss is that it has a single tier of trenched purlins. Below the tiebeam there is evidence for a blocked, planted-on, wide oriel window, the upper part of which would have been secured by tenons in two mortices in the face of the tiebeam (Figure 9).

The deep first-floor jetty is supported by seven wide joists and the girding beams, the latter with angled (upward sloping) ends and curved brackets below. The outer faces of the curved brackets are set flush with the sidewalls of the building. Below the brackets there are attached pillars; both brackets and pillars are chamfered.

The seven jetty joists are chamfered, with cut stops at both ends of the exposed parts beneath the jetty.[20] The jetty bressumer is hidden behind a fascia board. The jetty-plate is plain, with two mortices in the front surface, towards the lower edge, for fixing a planted-on oriel window, which would have been wider than the one on the first floor. (Shown in Figure 9). It had a sill below mid-rail level but this has been hacked back leaving weathered 'ghost' marks that show where it overlaid the studs on each side. The original window opening had been fitted with a smaller window but this is now infilled. Both window jambs are trestle-sawn, with parallel snap-offs.

Truss T2

This is an intermediate roof truss between bays 1 and 2. It has a collar with a bracket under each end and is faced up to the north – towards the jetty (Figure 10). The structure above the collar is hidden. The storey posts are chamfered, with cut stops and the wall plates on both sides are exposed.

Figure 10. Bay 2 looking north showing the intermediate roof truss between bays 1 and 2

Figure 11. Bay 2 looking south to truss T3 with its vee-struts and massive cambered tiebeam

Truss T3

Here the truss and crossframe are exposed on both sides. The upper face is towards the north (Figure 10). The tiebeam is heavily cambered, with raking struts up to the principal rafters. Beneath the tiebeam there are two mortices that mark the positions of primary door jambs for a central, 3ft-wide doorway.

Truss T4

This truss has a cambered tiebeam, which has trestle-saw marks on the upper, north, face. It is similar in form to T3 with raking struts above the tiebeam. Bay 4 between T4 and T5 is a small bay and would have been the rear end bay of the crosswing as indicated by the

orientation of crossframe T5. In view of its small dimensions the bay may have housed the crosswing staircase.

Truss T5

This truss and crossframe mark the end of the primary north range. The north face is exposed and is clearly the 'lower' face of the frame, so the south face, which is hidden by modern boarding, will be the upper face and would have formed the external face of the end wall of the primary range. The truss has raking struts above a cambered tiebeam. There is no evidence for primary or secondary doorways through this crossframe.

The South Unit

Truss T6

When visited, much of this frame was hidden by later plaster. However, the south face at first-floor level was partially exposed and it is clear that this is the lower face, thus placing the upper face towards the north. For this reason it is likely that this crossframe marks the primary end-wall of the south range. The evidence indicates that bays 6 and 7 formed a single room on both the ground and first floors. The ground-floor crossframe is a later insertion and it seems possible that the first-floor also has later framing between the bays.

Truss T7

This truss has a cambered tiebeam with queen posts rising to the collar. There is a single tier of clasped purlins. The storey posts, tiebeam and truss components are flush on the south face and there are diagonal trestle-saw marks. The south face is the upper face.[21]

On the ground floor the crossframe is a later insertion but the framing is neatly done, with a long, diagonal brace (now incomplete) from floor to ceiling (Figure 12). The majority of the timbers are pit sawn and they have been inserted at the same time as the chimneystack, very probably in the 17th century when the range was raised on the site and subdivided into six units.

Figure 12. Bay 7 looking north at the inserted 17th-century crossframe on the ground floor

Figure 13. Bay 7 looking east showing one half of a curved doorhead related to the former use of the cross-wing in association with a hall range

One of the most significant features that indicates the primary use of the south crosswing is in the east side of the ground floor of bay 7 where a curved bracket is fitted into the side of the corner post (Figure 13). This appears to be one half of a two-centred arch that would have

formed a doorhead for a doorway from the crosswing, in its previous life, into the upper end of the open hall that it served and from which the crosswing was removed.

Truss T8

This south end truss can be seen on the exterior of the range (Figure 14). There are three queen struts between the tiebeam and the collar and vee-struts above the collar. The purlins are clasped and curved braces rise from the corner posts to the soffit of the tiebeam (Figure 15). Between them there is a small, modern casement window. Otherwise the framing at first-floor level is probably all replacement work including the two small diagonal timbers. The jetty bressumer is hidden by a modern fascia board.

The ends of the substantial jetty joists are visible and these, except for one, appear to be primary. The jetty plate is probably primary although the framing below on the ground floor is 17th-century work, or later. It is pit-sawn. There would almost certainly have been a wide, ground-floor window but presumably this would not have been deemed appropriate for an almshouse, hence the replacement framing.[22] The curved brackets under each side of the jetty are above attached pillars. Unlike the north jetty the sides of the brackets are set inboard of the side of the building.

Figure 14. The jettied south end of the range with 17th-century framing inserted below the jetty

Figure 15. The south end gable showing the clasped purlins in truss T8

It is clear that the Duppa family living in Pembridge in the late 16th and early 17th century established the almshouse charity that was then augmented by Bishop Duppa in 1663. In the church is an old board, dated 1794, with the following:

> 'BISHOP DUPPA, built the UPPER ALM'S HOUSE and endowed it with the Rent of certain Lands in BROXWOOD called the COLLIERS.'

However, the building, which is earlier than the 17th century, consists of two units, formerly upper crosswings to hall houses and both of 15th-century date.

The north part of the range, bays 1 to 4, is a jettied crosswing of late-15th-century date that has been re-erected on the site. The south part of the range, bays 6 and 7, is also a jettied crosswing, but, on the evidence of the clasped purlins, of earlier date than the north wing, perhaps mid-15th century. Both units have been set up 'back to back' but leaving a 15ft gap that has been infilled to create bay 5.

Where these two crosswings came from is not known but it is likely to have been from the locality and possibly even from within the village itself simply because both frames make use of local structural methods and can be compared with others in the village that exhibit similar features. This is an important building that survives very much in its 17th century form. It is highly visible and contributes both architecturally and historically to the significance of Pembridge.

Wormbridge Court Farmhouse, Wormbridge, Herefordshire .
Lat/Long:- 51.972580, -2.834222 Map ref. NGR: SO4279830789 HSMR No. 45367

Introduction

Wormbridge Court Farmhouse, previously known as Wormbridge Court, is a two-storey, brick range laid out parallel to the busy main road passing north to south through Wormbridge. (Plate 10.7). The house forms part of the Whitfield Estate.

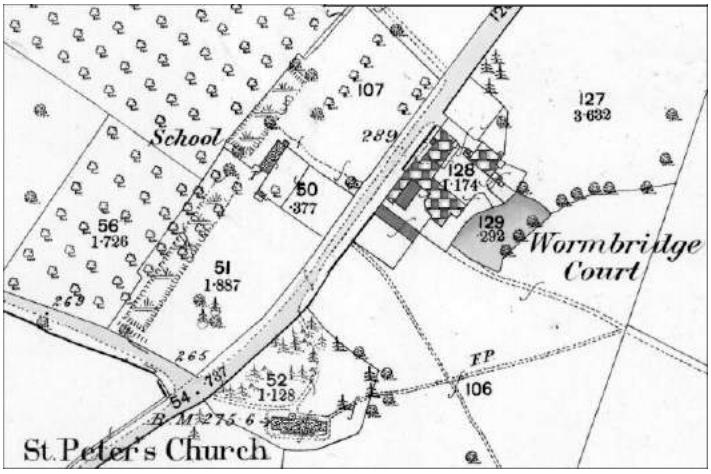


Figure 16a. Wormbridge Court Farmhouse showing it surrounded by later structures

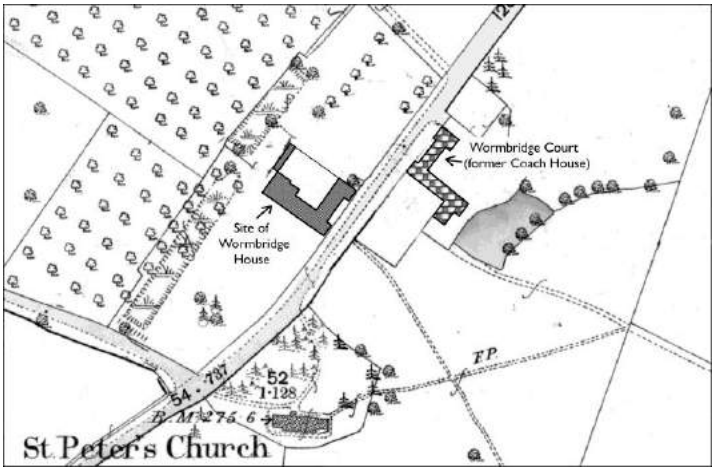


Figure 16b. A map to indicate the site of the lost Wormbridge House in relation to the lost coach house and barn

It was built in about 1700 as a coach house and stabling for Wormbridge House, the seat of the Clives, that formerly stood on the opposite side of the road until it was demolished in 1798,[23] by which time the family had moved to nearby Whitfield.

The maps show the site of Wormbridge Court Farmhouse, (the former coach house), as it was in about 1900 (Figure 16a) and as it was in about 1700 in relation to the principal house that stood on the other side of the road (Figure 16b). A ground plan, dated 1742 (redrawn) gives some impression of the size of this lost building (Figure 17).[24]

It is likely that the house had early origins, possibly as a timber-framed hall house laid out parallel with the road and that the 'upper' southern end of the building was extended to become the principal accommodation, overlooking gardens to the south. The range shown on the left side of the courtyard as the 'wash house, brew house and malt house' was drawn without any indication of doors and it is possible that it was a larger building than indicated on the plan that may survive in modified form as the present former schoolhouse on the site.[25]

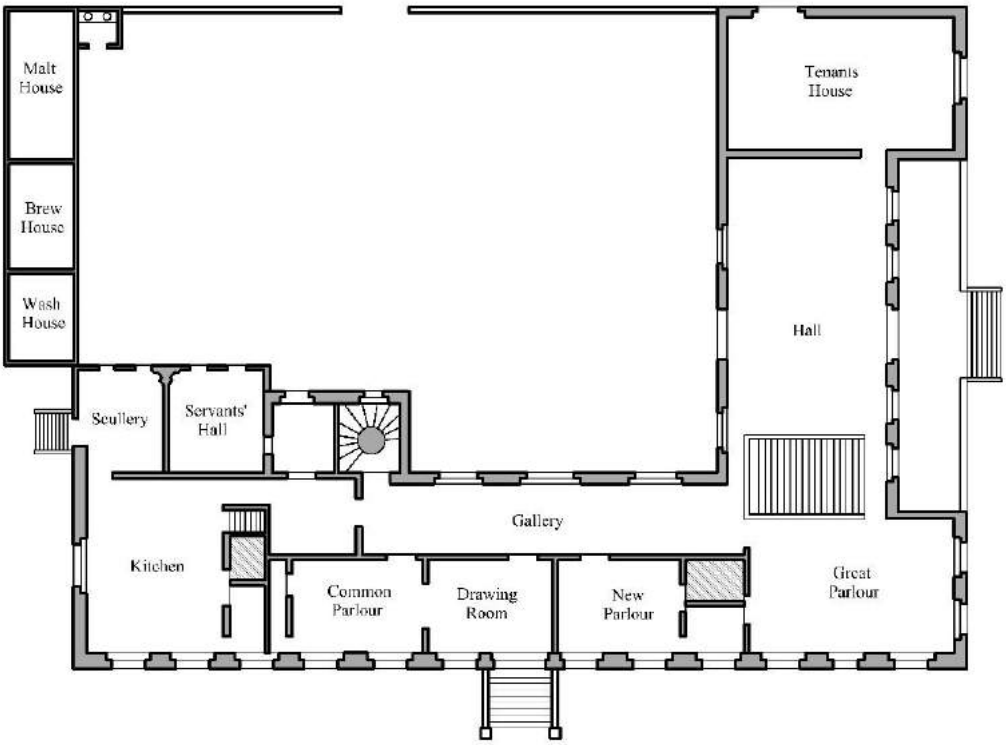


Figure 17. A ground plan of the lost Wormbridge House, re-drawn from a plan dated 1742 held in the British Museum

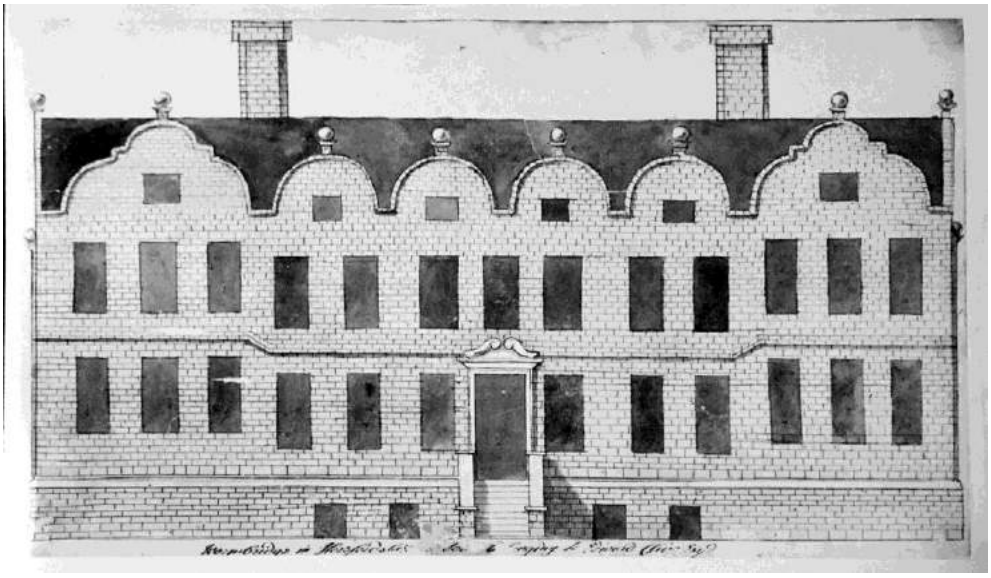


Figure 18. The south elevation of Wormbridge House in 1742. (British Museum)

The house was remodelled in the late 17th century using brick, as shown in the drawing of the south elevation (Figure 18). However, the plan and elevation drawings, which are both by the same hand and of 1742, could be by the architect and could suggest that this remodelling was a little later in date.

It seems likely that the coach house and stable range was built to complement the design of Wormbridge House and may well be of similar date to the remodelling.

Wormbridge Court Farmhouse

The building is an impressive design but once the main house had been demolished it was no longer needed as a coach house and stables so it was considered suitable for conversion into a spacious house, by creating an upper floor in the main range and modifying the crosswing to form additional accommodation.

The principal reason for investigating the building was to understand how it had been arranged when built as stables and coach house and what changes had been made to arrive at the present layout. A detailed study of the house, carried out in 2019 revealed the primary layout and illustrated the way in which it had been remodelled.[26]

The plan and reconstruction drawing show the layout of the building when it was in use as a coach house (Figures 19 & 20).

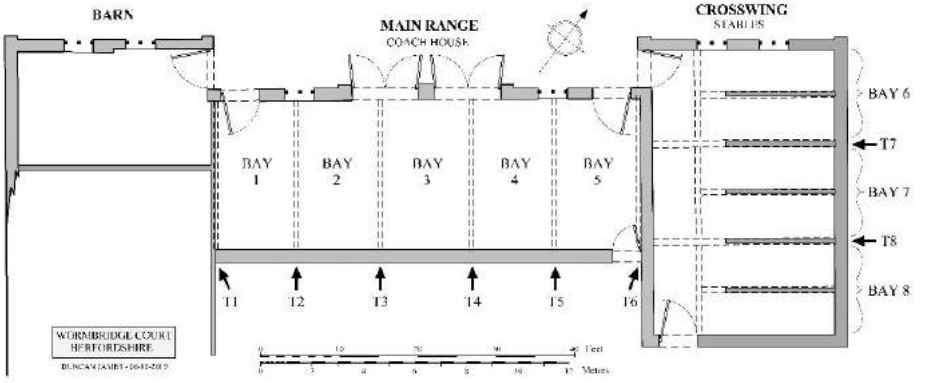


Figure 19. Ground plan of the coach house showing the primary layout of the main range with the roof truss positions T1-T6. This part of the building was a single storey with no internal sub-divisions. The three bays of the cross-wing stable range are shown with the interior sub-divided on the line of the ceiling beams to form six stalls

The main range is a single storey building with a central gable. At the north-east end of this range is a short crosswing and at the south-west end a crosswing formed by a long barn that extends back to the south-east where it is terminated by a short crosswing abutted by a large pigeon house.[27] (Figure 20). The building, including the barn, is of brick laid in English Bond apart from the pigeon house, which is in Flemish Garden Wall Bond. There is evidence to suggest that the barn was an existing timber-framed structure that was then encased in brick when the coach house was built. It is possible that the pigeon house was already in place prior to the construction of the coach house and the re-facing of the barn.

Figure 20. A reconstruction drawing of the building before its conversion to domestic use. Although only one pinnacle with a sphere survives it is likely that the six corner piers were decorated in a similar way

Along the back of the main range is a single storey lean-to forming a cat-slide roof but this appears to be a later addition of at least three phases.

As can be seen from the ground plan, the central five-bay range formed the coach house with a pair of carriage doorways each with double doors for access. It is clear that coaches would have been unhitched and pushed backwards into the building as there was no evidence for double doors in the rear wall. The coach house interior was open to the ridge of the roof and illuminated by two ground-floor windows in the front wall and the window in the central gable bringing light in from above (Figure 20).

There was also at least one window high up in the rear wall of bay 1. This survives, hidden in the attic space over the lean-to 'Room 6'; it had iron bars and was unglazed and more for ventilation than light (Figure 21). It suggests that bay 1 was also used for stabling, and the primary doorway in the northern side is of sufficient width (5ft) to indicate that this is likely to be the case. A similar width of door was also in the front wall of bay 5.

Figure 21 (left). One of the surviving window grilles high in the rear wall of bays 1 and 2

The principal accommodation for the horses was in the north-east wing which was subdivided to form six stalls, with principal access via a wide door in the return at the front of the building. The cross-wing was single storey but with an attic space where the roof structure was of three bays, two of which may have been used for accommodation, with ladder access from below. This area does not appear to have been used as a hayloft.

Figure 22. The tall dove house at the rear of the site

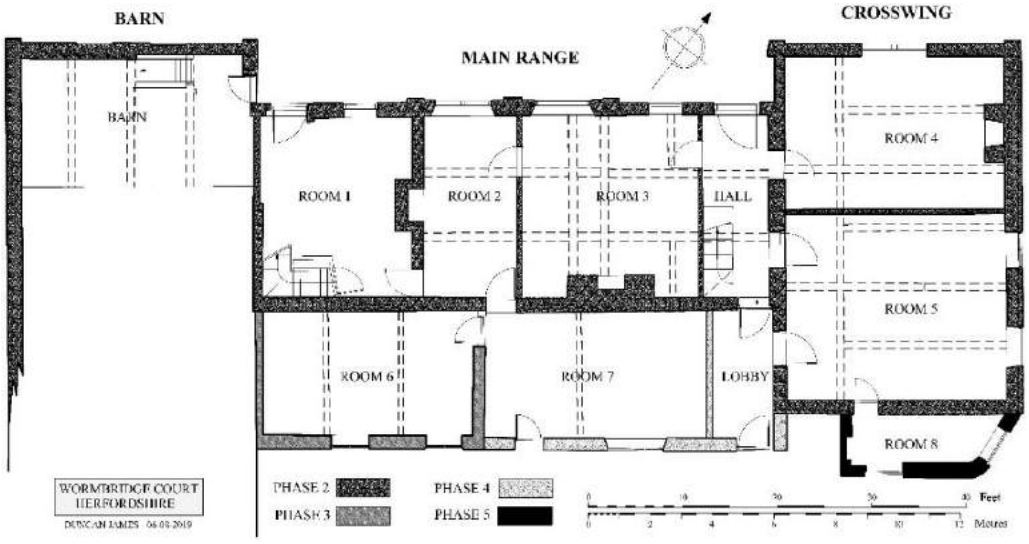
The Remodelling

It is highly likely that the conversion of the coach house into domestic accommodation took place at the end of the 18th century when the principal house was demolished.

The most difficult alteration would have been the installation of an upper storey within the main range because the roof structure was a series of six tie-beam trusses each of which had a tie beam that would have obstructed movement through the building. The solution was to fit a new tie beam above head height and attach a sling brace on each side having cut out the central part of the tie beam (Figure 23).

Figure 23 (left). One of the roof trusses over the main range showing the way in which the tiebeam has been cut and now abuts a sling brace arrangement. The half-dovetail end of the inserted tiebeam is just below ceiling level where it has been lapped into the side of the principal rafter and nailed into place

Figure 24 (below). A ground plan of Wormbridge Court Farm illustrating the present layout (excluding a few modern partitions) to show the second and subsequent phases of construction



A floor was inserted that had two pairs of axial beams, supported by two transverse beams plus the side wall of the crosswing at the north east end and at the south west end supported by a substantial new internal wall with a fireplace (Figure 24). The beam layout, which is a little curious, is above the ground-floor Rooms 2, 3 and the hallway. The beam layout over Room 1 is hidden.

At this new first-floor level a corridor was created along the south-east side that gave access to newly created rooms, a little awkwardly arranged. At the north-east end the corridor linked to the landing at the top of the principal staircase and thence to the first floor of the crosswing. The new first-floor rooms and the corridor were lit by the existing window in the central gable and two new dormer windows in the roof of the front elevation and two in the rear elevation, one of which illuminated the landing area above the hall.

On the ground floor of the main range three rooms were created, Room 3 being the largest, formed by the insertion of a pair of transverse partition walls with doors, and with a central fireplace beneath a large chimneystack in the rear wall.

Both the large coach-house doors were partially bricked up and windows inserted, one of which lit Room 2, the other, with the addition of an existing window, illuminated Room 3 (Figure 25). Room 1 made use of the existing window in the front of the building and retained the existing doorway alongside although it was slightly reduced in width (Figure 26). This room was unheated and now contains a 'back-stairs' giving access to the corridor and rooms above.

Figure 25. The two front windows that now occupy the site of the carriage doorways

Figure 26. Room 4, looking north-east at the inserted chimneystack and cupboards

Between Room 3 and the crosswing is the principal entrance Hall with, in the front elevation a wide door, the upper half of which is glazed. At the back of the hall is the main staircase, an 18th century, dog-leg closed-string design with a half-landing. The mahogany handrail is ramped so that it runs over the tops of the turned newel posts and there are square stick-balusters.

The north-east crosswing was stripped of its stalls, and a partition inserted to create Rooms 4 and 5. A chimneystack was added at the north-east end of Room 4 with cupboards built into the recesses on each side (Figure 26). The original doorway into the stable was in the return wall; this was blocked, leaving a recess on the exterior into which a seat with panelled surround was installed. A new doorway gave access from the hall. In the front wall of the cross-wing the two ground-floor windows were removed and replaced with a large, single window complete with elaborate folding shutters. Around the walls of the room a dado rail was installed with panelling below that was painted in imitation of raised and fielded panels to match the real raised and fielded panels on the cupboards, shutters and the door. The fireplace is now fitted with an ovolo moulded surround of oak that replaces an elaborate 17th century overmantel that has, unfortunately, not survived.[28]

Room 5 is the largest room. It appears to have had a service function in the remodelled house although it does not include a fireplace. Windows have been inserted in the north-east wall, one of which is on the site of a former doorway although none of these are likely to have been primary.

On the first floor of the crosswing the attic space was converted to form three rooms and a central landing area. This was not achieved without difficulty because the area was divided by two roof-trusses with tiebeams above floor level that obstructed movement between the bays. This was solved by simply cutting the tiebeams and inserting doorways, presumably with

reinforced frames to take the load and stop the roof from collapsing. The central room thus formed needed a window and this was inserted in a newly created gable in the sidewall of the crosswing (Figure 27).

Additions were made at different dates to the back of the building in the form of three lean-to structures (Rooms 6, 7 and 8) that were almost certainly intended to provide service accommodation–especially Room 7 which, situated behind the principal inserted chimneystack, must have utilised two, or possibly three of the four flues in the stack.[29]

Figure 27 (right). The north-east end of the building showing the inserted gable and chimneystack

Summary

The study of Wormbridge Court Farm inevitably leads to considerations of the principal building, Wormbridge House, and why it was abandoned and subsequently demolished. There is perhaps a telling note on the layout plan of 1742 where the large room to the north of the hall is inscribed 'Tenants House'; does this suggest that the house or part of it was let to a tenant? Perhaps the road that passed close to the house was becoming uncomfortably busy or maybe it was simply an unfashionable house, much altered over the centuries and still, at the core, an old timber-framed building. But from an account by the Revd Archer Clive an opportunity arose to purchase nearby Whitfield.[30] Had this not happened Wormsley House might still be standing.

Some of it may survive however, within the converted coach house, in the form of the many high-status doors and the panelling, and possibly the principal staircase. It seems also highly likely that the lost 17th-century carved overmantel would have come from the earlier house, installed in Wormbridge Court Farmhouse as a way of saving it.

That this coach house was built to such a high standard and sited in such a prominent position, easily visible to those passing on the road to or from Hereford, indicates how important it was to life in the big house and how it would have been used as an indicator of wealth and status.

REFERENCES

[1] N.Pevsner, *The Buildings of England: Herefordshire,* (1963), p.81.
[2] A. Brooks & N. Pevsner, *The Buildings of England – Herefordshire* (2012) Yale University Press. p.120.
[3] J. W. Tonkin, 'Buildings, 1997' *TWNFC XLIX 1997 Pt.1,* pp.137-8.
[4] D. James, 'Saw marks in vernacular buildings and their wider significance.' *Vernacular Architecture,* vol. 43 (2012), pp 7-18.
[5] R. Shoesmith, *Castles and Moated Sites of Herefordshire*, (1996) Logaston. p.60.
[6] R. Shoesmith, *Castles and Moated Sites of Herefordshire*, (1996) Logaston. p.63.
[7] See note 2. p.182.

[8] Royal Commission on Historical Monuments, England, *An inventory of the historical monuments in Herefordshire. Vol. 2, East* (1932), H.M.S.O., p.61.
[9] See note 4.
[10] Before the 15th century one might expect to see different jointing and timber conversion methods.
[11] D. James, 'Carpenters' Assembly Marks in Timber-Framed Buildings' *Vernacular Architecture*, vol. 49 (2018), pp. 1-31.
[12] J. Dean & N. Hill, 'Burn Marks on Buildings: Accidental or Deliberate?' *Vernacular Architecture*, vol. 45 (2014), pp.1-16.
[13] There is no doubt that a more detailed scrutiny of the two frames would reveal more marks of interest.
[14] See note 8.
[15] Notes held by Historic England at the National Monuments Record, Swindon.
[16] (Listing description). 'Almshouses; formerly six tenements, now four. Founded in 1661 by Jeffrey Duppa and augmented by Bryan Duppa, Bishop of Winchester. Late C19 and C20 alterations. Square panelled timber-framing with painted brick infill on sandstone rubble plinth; Welsh slate roof. Six bays aligned north/south with rear lateral stacks and four entrances to east front. Two storeys with upper storey jettied to north and south ends with curved brackets; traces of shafts to main posts. East front: four 2-light casement windows below eaves; a further four 4-pane casement windows set in panelling of timber-framing below all to first floor. Ground floor with one 2-light casement window with window to right and one with window to left to ground floor.'
[17] D. James, 'An Analysis of Fourteen Post-medieval Buildings in Pembridge, Herefordshire'. November, 2004. Pembridge Amenuity Trust.pp.15-17.
[18] *Vernacular Architecture*, **35** (2004) p.88.
[19] See note 4.
[20] The construction of the jetty is very similar to the jettied east range at Westfields, West Street, Pembridge, tree-ring dated to 1488-1498 and therefore close in date to the north end of Duppa.
[21] It was standard practice to arrange the upper faces of crosswings towards the front of the building.
[22] Although it should be noted that this south facing end wall would have been vulnerable to damage from the sun and any window may not have survived.
[23] Peter Reid, *Burke's and Savills Guide to Country Houses, Vol. 2* (1980) p.69, quoting Charles Robinson, *A History of the Mansions and Manors of Herefordshire*, (1872) p.312.
[24] The drawing, held in the British Museum, (ref. Maps K.Top.15.102.4.) is entitled "Wormbridge in Herefordshire a Seat Belonging to Edward Clive Esq." It is signed with the initials HC and dated 1742.
[25] This would fit with the suggestion in Pevsner that 'part of its service wing survives as the former school,' See note 2, p.686.
[26] D. James, Wormbridge Court Farmhouse, Wormbridge, Herefordshire. A report concerning the historic fabric of the house. (August 2019) Unpublished report for The Whitfield Estate.
[27] Robert Walker, *The Dovecotes and Pigeon Houses of Herefordshire*, (2010), Logaston. pp.160-1
[28] The description of the overmantel is as follows:- 'Wormbridge Court, house, 150 yards N.N.E. of the church, was rebuilt in the 18th century, but retains a late 16th or early 17th-century chimney-piece. The opening is flanked by Ionic pilasters with strap-work-ornament; the overmantel is of two stages and three bays, divided by grotesque figures, masks and leaves; each division has a round-headed panel with incised conventional design; the whole is surmounted by an entablature with a fluted frieze.' Royal Commission on Historical Monuments, England, *An inventory of the historical monuments in Herefordshire. Vol. 1, South-West* (1931), H.M.S.O., p.255.
[29] Three flues could have been needed for a bread oven, a fireplace and a copper for heating water.
[30] The Rev Archer Clive (1800-1877), who inherited Whitfield and Wormbridge in 1845, was a prolific diarist. He also kept a family chronicle but it is not totally clear when he began it. In his chronicle under 1796 he wrote that his father, having inherited from an aunt, '*resided the remainder of that year and the next at Wormbridge which was an old and somewhat decayed house of which all that now remains is the school and master's house which were a part of the offices. It must have been inconvenient enough according to our modern ideas as the turnpike road passed between it and the stables which are now converted into a farm house…*'. '*At that time 1796 (or 1798) she (Lady Catherine Stanhope of Whitfield) heard that my father (Edward Bolton Clive) intended to repair and add to the house at Wormbridge and sent for him telling him that she meant to sell Whitfield and that he had better buy it. After some negotiations this was done and in the following year he removed here pulled down the old house at Wormbridge and used the materials in converting the stables into a farm house and in adding to this*'. (From information via. Mr. Edward Clive).

Geology, 2019

By MOIRA JENKINS

How lucky those of us who live in Herefordshire are. There is such a wide variety of geology and so much still to research and discover.

ICE AGE PONDS

Conserving Herefordshire's Ice Age Ponds, funded by the Heritage Lottery Fund, is a partnership project carried out by Herefordshire Wildlife Trust, Herefordshire Amphibians and Reptiles Team and Herefordshire and Worcestershire Earth Heritage Trust through 2019. The project looks at the geology and ecology of Kettle-Hole and Ice Age Ponds of western Herefordshire. The Development Phase involved training volunteers to carry out pond surveys through a mixture of talks and field work to practice using techniques learnt. These volunteers went on to survey 41 ponds and identify several more. An application to the National Lottery Heritage Fund has been successful and the Delivery Phase will be carried out in 2020 and 2021. There will be opportunities for volunteering with the project and learning more about these kettle-hole ponds which date back to the end of the Ice Age.[1]

Volunteers have been taught how to survey ponds recording the grid reference, size and substrate as well as factors such as the water quality and electrical conductivity (Plate 11.1). Water quality needs to be studied over time to understand the behaviour of water in the ponds e.g. whether it is linked to groundwater. A manual for volunteers and a bespoke recording form have been produced. Before visiting a pond, a set of maps was prepared, including lidar images. Habitats of the sites were identified; this is the main part of the project.

Plate 11.1 shows volunteers standing by a kettle-hole pond on a rather dull day, preparing to take measurements as part of a training session. Kettle-hole ponds in hummocky glacial moraine are found in Herefordshire in the Wye Valley above Hereford and in the moraine banked against the hills from Kington, past Shobdon to Orleton. They are rare in most other parts of England.

The project also checks the nature of the substrate by augering and records water level by surveying the margin. University partners have been attracted for sediment studies and supervising student projects on pond hydrology and the geomorphology and glacial history of this complex and fascinating landscape. Plate 11.2 shows a core being taken in an area of moraine near one of the ponds. This core collected a specimen of peat.

Samples of peat were found at several locations. This is important as it may be possible to use this to date the sediment and give a record of changing vegetation as climate ameliorated after the end of the Ice Age. Plates 11.3a and 11.3b show the core collected and a small section of peat found at another location.

Using the information gained in 2019 there would have been displays at the Ice Age Hereford exhibition at Hereford Museum from 4 April to 20 June 2020. Also. the overall picture of change in the landscape in which the ponds sit will be illustrated by a driving/cycling trail to be published both as a colour leaflet and as an app in addition to walking trails in smaller areas.

VOYAGES IN DEEP TIME

The Voyages in Deep Time project carried out by Herefordshire and Worcestershire Earth Heritage Trust (EHT) which was supported by the Heritage Lottery Fund and the Bransford Trust has been completed.

The GeoExplore app has proved useful for collecting geological data, for simple mapping, logging and collecting site data. It has a compass clinometer, grain size tool and reference lists. Guided field trips can be attached if required—written as Word documents which are input to the app by Herefordshire & Worcestershire Earth Heritage Trust (There is a small annual charge for hosting and the initial one-off few hours to load it onto the system).

All actions are GPS located and latitude, longitude and OS references are given on screen. The app could be used for condition monitoring too. It can be found on the App stores / Google Play under Deep Time by Brooks Designs. Further information can be found on the website www.deeptime.voyage where information about the other new EHT app designed as a game of survival in deep time is also available (called Deep Time Voyager). As promised last year, Voyager apps for smart phones and tablets have been added for Bredon Hill (Worcestershire), the Malvern Hills and Wren's Nest in Dudley.

THE GEOPARK WAY

The Geopark Way is a long-distance footpath down the length of the Abberley and Malvern Hills Geopark from Bridgnorth to Gloucester. This trail follows the line of the Malvern Axis, a line of weakness in the Earth's crust along which massive earth movements have taken place over hundreds of millions of years of geological time, producing spectacular scenery. This footpath is now recognised by the Ordnance Survey as an established long-distance walking trail and is shown, currently, on their digital mapping and will be included on their paper maps as and when they are revised.

The Geopark Way guidebook, which gives invaluable background information to those walking the trail, was revised after 10 years with the new updated version being published and launched in July 2019. 'The Geopark Way, a 109-mile walking trail of Rocks, Landscape and Heritage' is available directly from the Herefordshire and Worcestershire Earth Heritage Trust or can be ordered from any good bookshop using the ISBN 978-0-9558390-7-8. Plates 11.4a shows a family walking along part of the Geopark Way where it follows the Malvern ridge. and 11.4b shows a walking group looking across from the Geopark Way footpath on Oyster Hill at the view of the Malvern Hills.

COPPET HILL

On 30 March 2019 there was a field trip for Woolhope Club and Teme Valley Geological Society members, led by Rosamund Skelton. First the building stones of Goodrich were examined. Then the 'Champion's Site at south end of Coppet Hill, a crag of Upper Devonian Quartz Conglomerate, was visited. This is shown in Plate 11.5. The Community Earth Heritage Champions Project was carried out by the EHT to encourage local communities to learn more about the geology of sites in their area and to learn about geoconservation to protect them. You can find out more at https://ehtchampions.org.uk/ch/.

Participants had a picnic on the hilltop and then looked at the lime kiln and Windles Quarry, shown in Plate 11.6. This is a quarry in rocks of the Avon Group, formerly known as Lower Limestone Shales, the lowest of the Carboniferous Limestones and which show channelling in the shallow water sediments.

WOOLHOPE DOME

A trip was led by Rowland Eustace in July around the northern part of the Woolhope Dome. In the centre of the dome, the oldest of the Silurian rocks in Herefordshire, the Llandovery Series, are exposed and three of the formations were visited. The Haugh Wood Formation was seen in a river cliff by the Pentaloe Brook as shown in Figure 1. Here there are argillaceous limestones and olive coloured shale bands. The exposures here expose an anticline cut through by a fault. Downstream is a syncline.

Figure 1. Haugh Wood Formation exposed in cliff by Pentaloe Brook

The field trip also visited an exposure of Woolhope Limestone in its type area. It is an argillaceous nodular limestone as seen in Figure 2.

The Woolhope Limestone was succeeded by the Coalbrookdale Formation, formerly called the Wenlock Shale, which was exposed in a stream section. Plate 11.7 shows the section in 2013 after heavy rain had cleaned up the exposure. The two pale bands are bentonite clay bands, chemically altered deposits of ash from distant volcanic eruptions, which fell into the sea and sank to the seabed.

Figure 2. Woolhope Limestone (Photo Kay Hughes)

GRAPTOLITE HUNTING for the Knighton sheet

In 2019, to help with the geological mapping of the Knighton Sheet 180, not yet published by the British Geological Survey, there were four more fossil- collecting trips to mid Wales with a total of 37 volunteers, most of whom are members of the Woolhope Club. Figure 3 shows work commencing at a quarry in Mid Wales, hoping to find graptolites which can help to date the rock.

Arthur Tingley, who is organising the project, reported that the fossil-hunting sessions from the previous two years have in combination successfully pinned the boundary between the Wenlock and the Ludlow running diagonally from south-east to north-west on the western side of the Knighton sheet. Although the fossils found in 2019 were more sparse, they were conclusive. Other observations and photos also helped a lot with the mapping.

The year 2019 was effectively the last year of survey, but it is still necessary to do a little more work in some areas. For example, Arthur Tingley is working with John Moseley and David Ray (Birmingham University) to look a bit deeper into the sequence around the Church Stretton Fault, where the transgression over the Church Stretton Fault line shows when the Silurian sea flooded over the uneven Precambrian rocks between Pedwardine, Nash and Dolyhir.

So, in 2020 there will be more detailed work in various patches here and there, the final drafting of the map and getting it ready for publication. Then there is the start to the writing...

Figure 3. Woolhope Club members searching for graptolites in Mid Wales

.

GULLET TOP QUARRY Unidentified Specimen

New members of the Malvern U3A geology group visited the Top Quarry at the Gullet on 16th October 2019 as part of their introduction to geology. There they looked at the unconformity between the Precambrian Malverns Complex and the overlying Silurian conglomerate. There are the remains of a pebble beach deposited on a rocky seashore in the Silurian Period. In places there is a red stained haematite coating on some of pebbles.[2] Plate 11.8 shows this layer with haematite staining.

One of the new members discovered this layer and a loose specimen which can be seen in Plate 11.9. There has been much discussion about the specimen shown in the photo. There was a suggestion that it is a bryozoan, such as *Favositella interpuncta* or an algal mat. Another idea is that the mineral haematite has coated sand grains. The pattern produced seems to be more regular than this last idea suggests. The colour balance in the photo is not as red as the specimen itself. However, in Plate 11.10 you can see that this is a well-defined thin layer coating the surface of the Precambrian Malverns Complex rock. It would be interesting to hear from anyone who has other ideas.

ROSS BUILDING SITE

Building work is being carried out on a site off Ferndale Road, Ross-on-Wye. Piles of material dug from the foundations at the site, were seen to contain fine specimens of uppermost Lower Devonian Brownstones Formation. This site is fairly near the top of the Brownstones Formation, which coarsens upwards. On the nearby Chase Hill, the overlying Upper Devonian Quartz Conglomerate and Tintern Sandstone are exposed. The Middle Devonian was not deposited in this area or has been eroded.

In the Old Red Sandstone, sediments were laid down by high-energy braided seasonal streams on a semi-arid land surface at a time of great change leading to the newly formed Welsh mountains being further uplifted in the Middle Devonian and eroded. The pebble assemblage from the cliffs along Wilton Road has been investigated and the pebbles in the Brownstones found to consist of sandstones and igneous rocks from north Wales and Anglesey.[3]

Mud clasts were torn from the stream bed and redeposited lower downstream. As shown in Plate 11.11 some mud clasts are still in place and others have been weathered out of the rock, being more easily eroded. In part of the rock, the red coloured iron oxides have been reduced to ferrous hydroxides of iron which have a grey green colour.

As seen in Plate 11.12, the rocks contain a variety of sizes and types of pebbles in a coarse sandy matrix. The quartz pebbles have been rounded, which shows that the hard material of which they are composed has travelled a great distance being rolled by the stream, knocking off angular corners. The smaller dark pebbles are of another hard rock, in this case igneous, also from the newly formed Welsh mountains. There are also red mud clasts which have not been carried far by the water. The pale clasts are calcrete, concentrations of calcium carbonate eroded from fossil soils in the Old Red Sandstone. These calcrete clasts have not travelled far, just from the nearby lowlands The rock in general has a red colour of iron oxide. When there were moister conditions or organic material this was reduced to ferrous hydroxide which has a grey green colour.

Seen from the side, the same specimen seen in Plate 11.12 is shown in Plate 11.13. This is a coarse sandstone showing current bedding formed as the braided stream changed course as it moved across the flood plain. The irregular areas of reduced sediment in the oxidised sediment may reflect where conditions were moister or there was organic material present. There may also be traces of burrowing or desiccation cracks which are seen in the Brownstones.

Plate 11.14 shows a red sandstone rock. The pale reduction spheroids in the rock occur where there was originally organic material or alteration around a mineral.[4]

MALVERN HILLS AONB SITE CLEARANCE

The site clearance programme for Malvern Hills AONB and Malvern Hills Trust continued, carried out by volunteers from the EHT and other local geology groups. This has produced very useful results, leaving sites in an excellent condition for educational purposes and visiting geologists.

At Bronsil Roadside, clearance work was carried out on one of the many Ordovician sills and bosses found to the west of the Malvern Hills intruded into the Cambrian Whiteleaved Oak Shales and Ordovician Bronsil Shales. The site cleared is on the south side of the Ledbury to Tewkesbury road near Bronsil. The intrusions are described by British Geological Survey in the Tewkesbury Memoir as spilitic andesite, amygdaloidal spilites and spilitic olivine diabases. Plate 11.15 shows typical onion skin weathering of this igneous rock which was uncovered by the clearance work. The rock, when exposed to weathering, peels off in layers.

Some clearance work was also carried out at Gardiner's Quarry and several sites in Worcestershire.

CLEARANCE WORK AT LITTLE DOWARD

On 22 October 2019, with the permission of the Woodland Trust, 12 volunteers worked to

clear the vegetation which was obscuring the limestone pavement on Little Doward. This work was carried out at the request of Jim Handley who is the 'Champion' for Little Doward, one of the sites supported by the Community Earth Heritage Champions Project organised by the Earth Heritage Trust. Figure 4 shows how overgrown the site was before the volunteers started work. There was a lot of bracken, ivy and brambles as well as moss on the rock faces. Only small areas of rock were visible.

Figure 4. The Little Doward limestone pavement site before clearance

The site is at the lower south side of the hill fort on Little Doward. The rock is the Carboniferous Gully Oolite (formerly called Crease Limestone), with bedding dipping gently towards the Wye Gorge. It is a fossiliferous rock, laid down in warm clear waters, when this area was south of the equator. This is a designated Local Geological Site, a good example of a limestone pavement which is important because it is unusual to find one so far south in the country. The rock surface was scraped bare during the ice age and has since become more and more covered with soil and vegetation.

Luckily the volunteers had a fine day in the beautiful scenery on which to clear the front face of the limestone pavement.

Figure 5. Part of the front edge of the limestone pavement after clearance

Figure 6. Eroded surface of limestone pavement which has been exposed for many years

The front edge of the pavement is now clearly visible along a width of several metres as seen in Figure 5. The clints, the slabs of the pavement, are separated by grykes, the clefts.

Figure 7. A section of freshly exposed limestone pavement with a wide gryke, formerly hidden under a layer of soil

As many bramble roots as possible have been removed. The site should remain clearly visible for a few years. A path was cleared to make access easier and it is hoped that geological parties will make use of the site now that it is in a good condition for educational visits.

Plates 11.16 and 11.17 show two of the fossil corals exposed by the clearance work. These are the colonial rugose coral *Siphonodendron junceum* (formerly *Lithostrotion junceum*). Similar specimens were found several years ago when there was an archaeological dig on the hill fort at Little Doward. The limestone pavement slopes gently downhill. Flat platforms for huts had been created by building up the site to a level surface with pieces of rock, some of which were fine specimens of coral.[5]

MINERALS IN THE MALVERNS

During a reconnaisance of sites for visiting parties from Aberystwyth University Geology Department and Leeds Geological Society, an interesting group of minerals were found which had been exposed by a small rock fall. In the future, you will be able to find out more about these when a project being carried out by Malvern U3A Geology Group is completed. The rocks of the Malvern Hills area are being studied with the aim of making information available on a website. Plate 11.18 shows crystals of the mineral barite. Plate 11.19 shows barite and

limonite (hydrous ferric iron oxide). Plate 11.20 a mineral which needs more analysis. It may be Romanechite or Psilomelane (hydrated Manganese Oxide) or more likely Goethite (hydrous Iron Oxide). Plate 11.21 shows the bright colours of iron oxides and traces of barite.

THE IMPORTANCE OF RECORDING TEMPORARY EXPOSURES

Moira Jenkins would be grateful to hear about interesting geological sites, especially those where rock is temporarily exposed, that would give the opportunity for the recording the geology before it is again covered over. She can be contacted via 'Geology' on the CONTACT US tab on the Woolhope Club's website.

REFERENCES

[1] Please contact e.andrews@worc.ac.uk if you would like to learn more or get involved.

[2] Penn, J.S.W. and French, J. 1971, Geologists' Association Guides, No.4 The Malvern Hills.

[3] Allen, J R L, 1974. Source rocks of the Lower Old Red Sandstone exotic pebbles from the Brownstones, Ross-on-Wye, Hereford and Worcester. *Proceedings of the Geologists' Association,* Vol. 85. 493-510.

[4] Lines, A.W, Parnell, J. and Mossman, D. J. 1996, Reduction spheroids from the Upper Carboniferous Hopewell Group, Dorchester Cape, New Brunswick: notes on geochemistry, mineralogy and genesis, *Atlantic Geology*, 32, 159-172.

[5] Dorland, P., Cotton, J. and Rimmington, N. Report prepared for Herefordshire Council, Little Doward Hillfort, Ganarew, Herefordshire, A Report on Excavations in 2009 and 2011.

Mycology, 2019

By JO WEIGHTMAN

It was a year of extremes, the summer and autumn bringing the hottest and the wettest weather for many years. The combination triggered amazing displays of fungi in many parts of Britain. Certainly in Herefordshire fungi were much more abundant than in recent years although the pattern was patchy across the county. Grasslands and garden lawns seem to have been the richest areas. This report starts with some of the more notable finds in 2019 and goes on to give an update on some important local rarities.

Among the 'county firsts' recorded in 2019 were an ascomycete, a poroid fungus, an agaric and a bolete. The asco *Nectria punicea* var. *ilicis* was recorded at Docklow in large numbers on the bark of a living holly *Ilex aquifolium* (Plate 12.1). The fruitbodies are red, pimple-like and less than a millimetre in diameter. *Nectria* spp are saprophytic and can be weakly parasitic. This is a first county record for an uncommon species.*

The poroid fungus was *Lindtneria trachycarpa*, a rarely seen bright orange saprophytic species that grows as a crust on fallen branches of broadleaf trees. It was found during a Herefordshire Fungus Survey Group (HFSG) foray in Halesend Wood in September.*

The agaric, i.e. a fungus with a cap and gills, a toadstool, *Lepiota lilacea* was reported from a cold greenhouse in Rushall in September (Plates 12.2 and 12.3).* The cap is pale with brown scales and may have a pinkish or lilaceous tinge. A key morphological character is the brown underside to the ring.

Finally, the bolete was one of a species complex (a group of closely related species) around *Boletus subtomentosus* (since reclassified as *Xerocomus subtomentosus*) which is now much better understood with several new species being segregated. An elderly, dry bolete collected in a garden at Bacton fortunately retained a key feature – threads of a bright yellow mycelium at the stipe base. This, combined with yellow flesh in the lower part of the stipe but not elsewhere, is characteristic of *Xerocomus chrysonemus* which is the first known Herefordshire find. I had been fortunate enough to see a younger specimen in Shropshire a few days earlier when the tomentum on the cap was still very evident.

Fungi from other parts of the globe sometimes find their way here, hitchhiking on people`s clothing, on imported plants, on the feet of birds or through their guts. Such fungal travellers occasionally find a niche in Britain. Those from warmer climes can crop up in greenhouses. A good example is *Leucocoprinus birnbaumii*, a bright yellow tropical or subtropical species first reported in Britain from a hothouse near Halifax in 1785 and long known in the greenhouses at the Royal Botanic Gardens, Kew (RBG Kew) and elsewhere. In July it was found at Rushall in a plant pot brought into the house from a cold greenhouse and became the first known sighting in Herefordshire (Plate 12.4).

A fungus from New Zealand was found under yew in the churchyard at Cradley at the end of October and a second colony under a cypress at Shobdon in December. This was the Scarlet Berry Fungus *Paurocotylis pila*, a hollow truffle-like species, initially subterranean or partly so but which by maturity has pushed up through the soil and lies exposed on the surface (Plates 12.5, 12.6.). In its native habitat it is found under *Podocarpus* trees which have red fruits that are attractive to ground-feeding birds. It is thought that the birds mistake the fungus for fruit and then act as carriers. *P. pila* was first seen in England in 1973 in the northwest, is

well established in the Orkneys and is now spreading southwards. These two finds are the first and second Herefordshire records.

Updates

Mycelium is very long lived providing a site is not disturbed but its fruitbodies depend on climatic conditions so are not necessarily produced every year. In 2019 the sites of several nationally notable species were monitored and re-recorded by the original finders.

Battarrea phalloides, a southern European species, which was first recorded in the county in 2018, and reported in the *Transactions*, fruited again at the site in Ross. In February 2019 seven fruitbodies were found under a hedge close to the A44 at Docklow, so there are now two locations for this rare species in Herefordshire. A Mediterranean species, it is likely to have been favoured by the recent hot summers. Listed as Endangered in the 2010 *Red Data List of Threatened British Fungi.*

Polyporus umbellatus first recorded in 2016 produced a number of clumps in its southern wood. It should continue to thrive providing that the sclerotium from which it arises remains undamaged. Listed as Rare in the 2010 *Red Data List of Threatened British Fungi.*

Podoscypha multizonata grows on the ground under oak as a large rosette with brown fans (Plate 12.7). Nationally very uncommon, it has been recorded from just four locations in Herefordshire. The site on the Croft Castle Estate has been monitored since 2005. In 2019 the fruitbody was rather small when checked and perhaps immature.

A new site for an uncommon Herefordshire species

Geopora sumneriana is an occasional species that starts life as a hollow sphere half buried in the ground under cedar (Plate 12.8). In March the top splits open in a star-like manner revealing the opalescent hymenium or spore-bearing layer. This beautiful cup may be overlooked as not many people explore the ground under cedar in early spring. In Herefordshire it has been known at Hampton Court since the mid nineteenth century, How Caple churchyard and Sutton St Nicholas. In 1983 it was recorded at an unspecified site in Ross. In April 2019, I was contacted by a lady who had seen it in her garden in Ross for two consecutive years. The grid reference was very similar but not identical to that given for the 1983 find. One can only surmise that perhaps the earlier one was slightly inaccurate—or that there are now two sites in Ross for this fungus.

In October 2018 a member of HFSG sent me photographs and then her collection of a white agaric she had seen trooping on wood chips under willow *Salix* sp at Coddington. It was small, entirely white with a prominent sharp umbo (central bump) which on some of the caps was yellowish (Plate 12.9). There was a good ring on the stipe (stem). As the fungus appeared to be one of the rarer species of the genus *Leucoagaricus*, it was sent with a tentative determination to RGB Kew. Colleagues there were in agreement with *Leucoagaricus sp* but found no satisfactory match as to species. The material was accordingly retained as unknown and sent for DNA analysis. The results which came in June 2019 were astonishing. This was an albino form of a brown-spored species, *Galerina marginata*.* This albinism was not restricted to fruitbody colour as spore colour and ornament were lost as well. This explains the confusion with *Leucoagaricus*. *G. marginata* is a common species, usually saprophytic on fallen dead trunks and branches, in this instance taking advantage of the easily available nutrients in the chipped wood. In this albino form, it is rare in Britain, only two other examples being known.

The above account has focussed on notable species but in order for the county records to be balanced, it is vital that common species are also reported and recorded. The Herefordshire records are forwarded annually to the County Records Centre and to the Fungus Records Database of Great Britain and Ireland (FRDBI). Please do contact me with your records however humdrum. They may also be exciting.

NOTES

Specimens marked with * have been deposited in the Fungarium at the Royal Botanic Gardens, Kew.

Ornithology, 2019

By RACHEL JENKINS

The 2017 ornithology report focussed on bird sightings across all the county, while the 2018 report centred on Herefordshire gravel pits, which provide a key habitat for many of our birds and migrants. This 2019 report will focus on another watery environment, namely Herefordshire rivers and embankments, which have suddenly come to the forefront of attention as I write this during the worst floods in recent history in Herefordshire.

It has become easy to appreciate how much of Herefordshire was once an inland sea. In the north of the county, the river Teme flows east along the Herefordshire-Shropshire border, passing round Ludlow and eventually joining the river Severn at Worcester. For the major part of the county, the river Wye provides the main system of drainage, and this system can be broadly divided into three main sections: the Lugg in the north, with its tributaries the Arrow and the Frome, joins the Wye at Mordiford, on the western edge of the Woolhope Dome. The middle section is the central artery of the Wye itself which flows into the county from the west, via Hay-on-Wye, and travels east to Hereford, just before the confluence with the Lugg. After this the river swings south to Ross-on-Wye and the Wye Gorge, before it passes out the county towards the Bristol Channel. In the south, the Monnow and its tributaries such as the Dore flow south-east from the Black Mountains to join the Wye at Monmouth.

The Wye is one of the most important rivers in the UK for nature conservation. It is an important migration route and wildlife corridor, as well as a key breeding area for many nationally and internationally important species. The river supports a range of species and habitats covered until now by European Directives and those listed under Schedule 5 of the Wildlife and Countryside Act 1981. Much of the lower valley is an Area of Outstanding Natural Beauty, while the upper valley is equally stunning, and Herefordshire's rivers have inspired both poets and painters for hundreds of years.[1]

The Wye is protected by two Sites of Special Scientific Interest, one covering the Upper Wye above Hay-on-Wye, and one covering the Lower Wye downstream to Chepstow. The Wye abuts a range of other SSSIs in England and Wales, including the Gorges of the Upper and Lower Wye. River bridges and river banks are good vantage points from which to spot birds. Particularly fruitful riverine sites are Castleton and Winforton, Monnington-on-Wye, Weir Garden, the river bridges in Hereford, Holme Lacy Bridge and Mordiford Bridge, the embankment near the Bunch of Carrots, Hole-in-the-Wall, and Ross-on-Wye, all of which have become severely flooded and dangerous to access over the last week or two.

Bird sightings for the months of 2019 from the main Herefordshire riverine sites are summarised below, taken from the Herefordshire Ornithological Club (HOC) website.[2] An important caveat, as before, is that these data are not derived from systematic surveys, but rather from members of the public submitting their sightings on to the website and therefore, while giving some useful indication of what can be found in specific places at different times of year, these sightings do not give accurate estimates of bird populations. Thus there is likely to be considerable under-reporting, bias towards sites which receive regular visits from recorders, and possible misidentification too.

Swans and geese

The Mute Swan breeds extensively along the Wye. Many also spend the winter here and may be seen in large flocks (up to 100 birds) in winter, grazing grassland. The Whooper Swan breeds on tundra across the Northern Paleartic, but winters here and one was seen at Hoarwithy in early January by the Wye. January was also a good month to see Canada Geese, Pink-Footed Goose (one) and Grey Lag Goose (one pair) at Castleton, next to the Wye. Canada Geese were in fact present all the year round at riverine sites such as Bunch of Carrots, the Weir gardens, Castleton and Winforton, Mordiford Bridge, Holme Lacy Bridge, Wilton near Ross-on-Wye, Mancell's Ferry, Preston-on-Wye, Caradoc, river Wye, and Monnington-on-Wye. Grey Lag were also reported at Castleton in May.

Duck

Mallard and Goosander (Plate 13.1) in small groups are a frequent sight on Herefordshire rivers all year round. Wigeon were seen at Castleton and Winforton, and Monnington-on-Wye in January. Shelduck (Plate 13.2) were reported in May at Caradoc, river Wye, and in fact bred for the first time this year at Kenchester (Plate 13.3). There were sightings of Mandarin Duck, either singly or in small family groups, between January and September along the rivers and again in December, at Bunch of Carrots, Telford (river Teme), Caradoc (Wye), Weir Garden, Ross-on-Wye sewage works, Wilton Bridge (Wye), the river Monnow, Castleton and Winforton. A pair of Pochard were seen in April and December at Caradoc (Wye) and Monnington-on-Wye. A pair of Wigeon were seen in January at Castleton and Winforton and at Monnington-on-Wye.

Game birds

Red-legged Partridge were seen at Bunch of Carrots in April and at Hole-in-the-Wall in May. Pheasant in small numbers were seen all year round at all the riverine sites. Woodcock were seen at Castleton and Winforton in January,

Cormorants and Herons

Cormorants and Grey Heron, either singly or in small numbers, were reported in all months except February and March along Herefordshire rivers. Little Egret were reported throughout the year along the rivers, and a Great White Egret was reported at Castleton and Winforton in April.

Grebes, Rails and Coots

Little Grebe, also known as Dabchick, was reported at Monnington-on-Wye in January, Sink Green (Wye) in February, and Wilton, Ross-on-Wye in November, either singly, in pairs or small family groups. Great Crested Grebe was reported in Hereford on the Wye in December. A Water Rail was spotted at Preston-on-Wye in July (Plate 13.4). Moorhen were recorded all year round along the rivers, but Coot were only reported at Monnington in July.

Birds of Prey

Red Kite were reported most months from the river vantage points. Goshawk was reported in May at Lyepole, on the Lugg. Single Sparrow Hawk were reported at Monnington-on-Wye in January and February; the Weir Garden in April; at Winforton, Wilton, Lyepole, Ross-on-Wye in May; at Castleton, Hampton and Goodrich in August, Holme Lacy Church and Castleton in

September; Weir Garden in October and Bunch of Carrots and Hereford in December. Buzzard were seen throughout the year, either singly, or in pairs or small family groups of three. Kestrel seem to be diminishing in numbers, possibly from competition for prey from Kites, but were reported from the river Monnow at Monmouth in January; Hereford cycle bridge in February; Bunch of Carrots in March; Mordiford Bridge and Wilton Bridge in May; Mordiford and Bartonsham in June; Hampton in August; Canon Frome by the Lugg in October; Mordiford (Wye) in November and Bunch of Carrots in December. A pair of Hobby were seen in May at Weir Garden; with one at Castleton and one at Bunch of Carrots in June.

Waders

Oystercatchers were seen at Castleton and Winforton, singly or in pairs, between April and July and one at Weir Garden in May. Little Ringed Plover was seen in Castleton and Winforton in April and at Leintwardine on the river Teme in May. Winter flocks of Lapwing were seen at Castleton, Winforton and Weir Garden in January; at Ballingham (Wye) in February and at Castleton and Winforton in March. Snipe were seen at Castleton and Winforton in January and at Sutton St Nicholas (river Lugg) in September. Curlew were reported at Sink Green (Wye) in February; Bunch of Carrots in March, April, and May and at Castleton and Winforton in May and June. Common Sandpiper were seen at Mordiford, Castleton and Winforton, Wilton (Wye) in April; Wilton, Mordiford and Leintwardine (Teme) in May; river Monnow below Allt-yr-ynys rail bridge in June; Castleton and Winforton in July; Hampton (Lugg) in August and at Leintwardine (Teme) in December. Green Sandpiper was seen on the Teme in January; at Marden (Lugg) in February; at Walford (Teme) in March; at Sutton St Nicholas (Lugg) and at Wergins Bridge (Lugg) in September and at Leintwardine (Teme) in October.

Gulls

Black-headed Gull were seen all year round along the Wye, from Ross up to Castleton and Winforton, sometimes singly, or small groups and in large flocks in winter. Common Gull, either singly or in small numbers, were reported at Ross Sewage Works on the Wye in February, at Kerne Bridge in March, Bunch of Carrots and Ross in November and at Ross in December.

The Lesser Black-backed Gull is found throughout the year all along the Wye vantage points, either singly or in flocks up to 85 birds. Small groups of Herring Gull were seen in April, July and August at Bunch of Carrots, Holme Lacy (Wye) in September and Bunch of Carrots in October and November.

Pigeons and Doves

Wood Pigeon and Stock Dove were present along the rivers throughout the year. Collared Dove were seen singly or in pairs at Bunch of Carrots in January, April, May, June, July, and December; at Leintwardine (Teme) in March and September and at Wilton, Ross-on-Wye, in October. Feral Pigeon were seen at Ross (a flock of 53) and Castleton and Winforton (a flock of 14).

Owls

One Barn Owl was reported at Winforton (Wye) in February, and at Lower Bullingham (Wye) in February. Little Owl was seen at Bridge Sollars in July. Tawny Owl was reported at Castle

Green in Hereford in January, at Weir Garden in March, and Castleton and Winforton in April.

Cuckoos

Single Cuckoos were seen and heard beside the Wye at Fownhope in April, at Weir Garden and at Bunch of Carrots in May.

Swifts, Swallows and Martins

A Swift was reported at Aymestrey (Arrow) on 30th April; small numbers at Bunch of Carrots, Ross-on-Wye, Hole-in-the-Wall, and Wilton Bridge in May; at Burrington Bridge and downstream, riverside at Aymestrey, and Castleton and Winforton in June; at Castleton and Winforton, Preston-on-Wye and Monnington-on-Wye in July and at Wilton, Ross-on-Wye in August.

One Swallow was seen on 3rd April at Bunch of Carrots, and small numbers thereafter at Mordiford, Ross Rowing Club, Castleton and Winforton (Wye); in May at Weir Garden, Bunch of Carrots, Wilton (Wye), Wilton Bridge and Mordiford Bridge; in June at Castleton and Winforton, Weir Garden, Monnington-on-Wye, and Wilton, Ross-on-Wye; in July at Castleton and Winforton, Weir Garden, Preston-on-Wye and Wilton-on-Wye; in August at Castleton and Winforton, Bunch of Carrots, with 18 at Hampton (Lugg), 20 at Whitney-on-Wye and Monnington-on-Wye and in September at Home Lacy, Castleton and Winforton, Leintwardine (Teme) and Bunch of Carrots.

Small numbers of House Martins were seen in April in a riverside garden in Hereford (Wye), May at Wilton (Wye), Ross-on-Wye sewage works, Wilton Bridge, Hole-in-the-Wall, Mordiford Bridge, Bunch of Carrots; in June at Castleton and Winforton, Mordiford, in July at Monnington-on-Wye, Bunch of Carrots, and Preston-on-Wye; in August at Mordiford, Hole-in-the-Wall, Whitney-on-Wye, and Monnington-on-Wye; in September at Leintwardine (Teme), Home Lacy (Wye) and Castleton and Winforton and in October at Wilton (Ross-on-Wye).

Nine Sandmartins were seen on 29th March and again in early April at Bunch of Carrots (3), Mordiford (5), Ross rowing club (50), Castleton (150) and Winforton (400) ; in May at Weir Garden, Bunch of Carrots, Wilton (Wye), Hole-in-the-Wall and Ross; in June at Castleton and Winforton, Weir garden, Bunch of Carrots, Burrington Bridge and downstream; in July at Wilton, Ross-on-Wye, Bunch of Carrots, Castleton and Winforton and Weir Garden; in August at Bunch of carrots, Castleton and Winforton, Mancells Ferry, Hampton (Lugg), Whitney-on-Wye, Wilton at Ross-on-Wye, sometimes in small numbers and sometimes in large numbers.

Kingfisher, Woodpeckers and Corvids

Kingfisher, Green and Great Spotted Woodpecker were seen throughout the year at all riverine locations, as were Carrion Crow, Jackdaw, Jay, Magpie, Rook, and Raven, singly, pairs or small family groups.

Smaller birds are also plentiful at all the riverine sites throughout the year, including Blackbirds, Blackcap, Blue Tit, Bullfinch, Chaffinch, Chiffchaff, Coal Tit, Dunnock, Goldcrest, Goldfinch, Great Tit, Greenfinch, Grey Wagtail, House Sparrow, Mistle Thrush, Nuthatch, Redwing, Robin, Song Thrush, Starling, and Wren. Single starlings were reported in

January at Monnington-on-Wye and at Castleton and Winforton; in February at Weir garden and the Ashperton Canal; in March at Leintwardine (Teme); in April and June at Bunch of Carrots (Wye); in October at Wilton, Ross-on-Wye; in November and December at Bunch of Carrots. Single Dipper (Plate 13.5) were seen in January at Redlake, west of Leintwardine, Monmouth (Monnow) and Pembridge (Arrow); in February at Lyepole (Lugg), Dwm farm on Monnow, Waterfall in Olchon valley; in May and June, and September at Lyepole and in December at Olchon House Farm on the Monnow and at Leintwardine, Teme Bridge. Small groups (1-10) of Fieldfares were seen at Monnington, Castleton and Weir Garden in January; Burrington Bridge and downstream, Ross Rowing Club and the Ashperton canal in February and again in December large flocks of up to 160 birds were seen at Bunch of Carrots, Mordiford and Monnington. Garden warbler were seen and heard at Bunch of Carrots, Wilton Ross-on-Wye, Ross sewage works, Hole-in-the-Wall, Castelton and Winforton (Wye) in May; at Bunch of Carrots, Castelton and Winforton, Lyepole (Lugg) Ross sewage works in June; either singly or in pairs. One Lesser Whitethroat was seen at Castleton and a pair at Hole-in-the-Wall in April. Linnet were seen at Castleton between March and September and at Bunch of Carrots in April and June. One Marsh Tit was seen at Monnington in January and three at Lyepole (Lugg) in May. Meadow pipit were seen at Castleton in January, March, April, June, and October; at Bunch of Carrots in April, October and November. A single Pied Wagtail was seen at Kerne Bridge in March; two at Winforton in April and single ones at Weir Garden in June; at Bunch of Carrots and Wilton, Ross-on-Wye in August and at Bunch of Carrots, Symonds Yat and Wilton, Ross-on-Wye in October. Redstart were reported at Weir Garden in April, at Weir Garden and Castleton and Winforton in May, and at Mancell's Ferry in August. Reed Bunting at Bunch of Carrots, Ross-on-Wye sewage work,s7 Mordiford Bridge, Hole-in-the-Wall, and Ross-on-Wye in May; at Bunch of Carrots and Castleton and Winforton in June; at Bunch of Carrots, Preston-on-Wye and Winforton and Castleton in July, at Monnington-on-Wye, and Ross-on-Wye in August and at Wilton, Ross-on-Wye in October. A single Reed Warbler was reported in May at Ross-on-Wye sewage works. Four Siskin were seen in January at Monnington-on-Wye.

Skylark were reported present at Leintwardine (Teme) and 14 at Castleton and Winforton in March; one and two at Bunch of Carrots and 18 at Castleton and Winforton in April ; three at Bunch of Carrots in May; one and two at Bunch of Carrots, 11 at Castleton and Winforton, one at Burrington Bridge and downstream in June; six at Castleton and Winforton in July; one at Bunch of Carrots and four at Castleton and Winforton in August; two at Wilton, Ross-on-Wye, two at Bunch of Carrots, and eight at Castleton and Winforton in October and one at Bunch of Carrots in November.

One Spotted Flycatcher was seen at Lyepole (Lugg) in May and June, one at Monnington in July, and One at Castleton and Winforton in August. One Stonechat was seen at Bunch of Carrots in October. One Treecreeper was seen in January at Ross-on-Wye and Monnington-on-Wye, at Eign (Wye) in May, at Weir Garden in August, and at the Bunch of Carrots in December.

Two Whitethroat were seen at riverside, and one at Bunch of Carrots in April; at Bunch of Carrots (three), river Clun Meadows (one), Marlow (one), Hole-in-the-Wall (three), and Ross-on-Wye sewage works (one) in May and at Burrington Bridge and downstream (one), Bunch of Carrots (one), Castleton and Winforton (one) in June.

Small numbers of Willow Warbler were seen at Castleton and Winforton, and Wilton

(Wye) in April, and at Castleton and Winforton in May and June and Weir Garden in September.

Small numbers of Yellow wagtail were seen at Castleton and Winforton in April, May, July, and August. Single Yellow Hammer were seen at Weir Garden and Bunch of Carrots in April; Marlow (river Clun) in May and at Burrington Bridge and downstream in June.

RARITIES

Rarities reported across the county during 2019 include *Swans and geese*: Bewick Swan, Whooper Swan (Plate 13.6), Greenland Whitefront, Pink- footed Goose and Brent Goose. *Duck*: Ring necked Duck, Common Scoter, Chiloe Wigeon and Garganey. *Game birds*: Indian Peafowl, Reeve's Pheasant and Lady Amherst's Pheasant. *Herons*: Great White Egret and White Stork. *Birds of Prey*: Honey Buzzard and Osprey. *Waders*: Little Stint, Ruff, Sanderling and Wood Sandpiper. *Gulls*: Caspian Gull, Ring-billed Gull, Caspian Gull, Kittiwake, Little Gull and Gannet. *Owls*: Long eared owl. *Corvids* : Chough (2nd county record). and *Smaller birds*: Black Redstart, Cetti's Warbler, Snow Bunting, Waxwing and Wryneck.

WATER QUALITY

Two particular issues of concern in these river habitats are firstly the water quality in the rivers, and secondly the general decline in the insect population, which affects insect-eating birds. As in many of the UK's rivers, water quality on the Wye is negatively affected by diffuse pollution, increased siltation and increasing nutrient levels, in particular phosphate. Over recent years the Wye has suffered severe algal blooms, the longevity of which is of great concern. This is a complex problem with many factors involved: increased nutrients entering from farms and sewage treatment works, climate change and the effects of phosphate stored in soil and sediments. Current monitoring of phosphate levels in rivers is unsatisfactory, and work is underway to try to improve data and understand better the reasons for this now annual blight. Improving soil conservation and reducing soil loss to waterways, by changing land management farming practice, can offer some mitigation. The siltation affects the quality of both fish spawning and aquatic invertebrate habitat, and increased phosphate and siltation together negatively affect aquatic invertebrate populations. and increased phosphate and siltation together negatively affect aquatic invertebrate populations.

The general decline of insect populations has been reported in a number of surveys over several years, and in 2019 Francisco Sanchez-Bayo and Kris AG Wykhuys analysed 73 long-term insect surveys that had shown decline, most of them in the US and Western Europe.[3] The authors reported an annual 2% loss of biomass. They wrote that the review revealed dramatic rates of decline that may lead to extinction of 40% of the world's insect species over the next few decades; that Lepidoptera, Hymenoptera and dung beetles (Coleoptera) are the taxa most affected; four aquatic taxa are imperilled and have already lost a large proportion of species and that habitat loss by conversion to intensive agriculture is the main driver of the declines. Agro-chemical pollutants, invasive species and climate change are additional causes.

The findings of the review have been questioned as overly gloomy on methodological grounds, but the Intergovernmental Science-Policy platform on Biodiversity and Ecosystem Services reported its assessment of global biodiversity in 2019.[4] Its summary for insect life was that 'Global Trends in insect populations are not known but rapid declines have been well documented in some places...The proportion of insect species threatened with extinction is a key uncertainty, but available evidence supports a tentative estimate of 10%.' Such falls in

insect populations will of course directly affect insect eating birds, and are thought to be directly responsible for example for recent declines in house martins.

The British Trust for Ornithology organises the Waterways Breeding Bird Survey which has been running for over 20 years and shows significant declines in many species, greater than trends for the same species in the bigger Breeding Bird Survey.[5] This suggests a cause related to waterways, possibly water quality, food availability or predation such as American Mink, as well as changes in river flow, substrates, adjacent habitat and human interference.

Until recently, conservation science has been concerned with how quickly biodiversity is being lost, and how we can bring back degraded ecosystems to known 'healthy' baselines. However, the intensity and rapidity of global environmental changes have pressed many practitioners and scientists to realise that some species are being pushed far beyond their traditional ranges and some ecosystems far beyond their limits. It is being argued that, in many places, it makes little sense to force the restoration of historical conditions, given the expected changes in environmental conditions in the coming years. In such situations, conservation discussions have started to focus on rewilding, allowing the emergence of novel ecosystems, and at the same time, aiming to secure successful co-existence between humans and nature.[6]

NEST BOX RECORDS

Pied Flycatcher Nest Box Recording Scheme, collated by Beryl Harding.

Table 1: Nest box occupancy by any species over the last nine years.

	2019	**2018**	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**
Sites recorded	25	25	26	27	27	23	26	26	26
Boxes available	849	825	813	871	866	731	741	805	820
Boxes used	492	478	378+	504	451	414	453	478	521
% used	**57.9**	**57.9**	**46.5**	**57.8**	**52.1**	**56.6**	**61.1**	**59.3**	**63.5**

Note: The % used is the overall average for the total 25 sites but hides quite a variation of take up in individual sites which can vary between 30% -80%.

Table 2 : Species Results for 2019 compared with 2018

Species	**Sites**		**Nests**		**Eggs**		**Fle'gd**		**Success**	
	2019	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018
Flycatcher	**13**	12	**101**	108	**674**	520	**429**	400	**63.6%**	76.9%
Blue Tit	**25**	25	**194**	211	**1816**	1666	**1326**	1216	**73.0%**	72.9%
Great Tit	**25**	24	**174**	158	**1326**	972	**889**	684	**67.6%**	70.3%
Coal Tit	**1**	1	**1**	1	**9**	9	**7**	9	**77.8%**	100%
Nuthatch	**5**	4	**12**	7	**75**	36	**49**	32	**65.3%**	88.9%
Redstart	**2**	0	**3**	0	**20**	0	**6**	0	**30.0%**	0

One Nuthatch site produced 1 nest but nothing further.

Annual Flycatcher Results

[Records from 2000 -2019 are entered in HWT & HOC databases, apart from 2001 when no recording took place due to foot & mouth restrictions, the figures below continue to date.]

2010	12 sites	82 nests	539 eggs	404 fledged	74.9% success

2011	11 sites	87 nests	543 eggs	354 fledged	65.2% success
2012	9 sites	75 nests	477 eggs	425 fledged	63.7% success
2013	14 sites	135 nests	773 eggs	563 fledged	72.8% success
2014	11 sites	86 nests	473 eggs	304 fledged	64.2% success
2015	16 sites	114 nests	744 eggs	436 fledged	58.6% success
2016	17 sites	120 nests	666 eggs	401 fledged	60.2% success
2017	13 sites	144 nests	774 eggs	430 fledged	55.5% success
2018	12 sites	108 nests	520 eggs	400 fledged	76.9% success
2019	13 sites	101 nests	674eggs	429 fledged	63.6% success

All ringing results of chicks, adults and retrapped adults are forwarded to the BTO.

The weather was benign for the start of the nesting season but turned wet and cold before many birds had fledged. However, some *brood sizes* were up in number and increased *numbers of chicks* survived, although overall *success (defined as numbers of chicks fledged/numbers of eggs)* was less in 2019 compared to 2018 for pied flycatchers. Survival rates of chicks of blue tits and great tits were largely unchanged.

REFERENCES

[1] Lumby J, *Poems and Paintings of Herefordshire and the Neighbouring Marches* 2017, Logaston Press.
[2] http://www.herefordshirebirds.org/HOC/Sightings.html.
[3] Sanchez-Bayo, F., and Wykhuys, K.AG,Worldwide decline of the entomofauna: A review of its drivers. *Biological Conservation*, Volume 232, April 2019, pp.8-27.
[4]https://www.eaere.org/policy/ecosystems-biodiversity/ipbes-2019-global-assessment-report-on-biodiversity-and-ecosystem-services/.
[5] https://www.bto.org/our-science/projects/wbbs.
[6] Petorelli, N., Durant S.M, and du Toit, J.T. (Eds), *Rewilding*, Cambridge University Press, 2019.
Tree, I., *Wilding-the return of nature to a British farm*, Picador 2018; Macdonald, B. *Rebirding –Rewilding Britain and its Birds*, Pelagic Publishing, 2019.

Weather, 2019

by IAN PORTER

Month	Max temp shade °C	Min temp shade °C	Rainfall mm	rainfall lay mm	Days with rainfall
January	8.8	-5.5	33.0	10.4 (26th)	6
February	13.3	-3.9	64.5	17.1 (8th)	7
March	16.1	1.7	70.4	17.8(5th)	11
April	22.7	1.1	75.9	35.1 (4th)	9
May	21.1	3.3	86.1	29.2 (8th)	9
June	28.8	7.8	241.0	59.9(7th)	11
July	30 0	10.6	43.4	17.8 (19th)	4
August	16 7	8.9	62.7	20.6 (9th)	8
September	12.8	7.2	123.2	25.9(23rd)	10
October	16 7	3.3	196.9	67.8 (25th)	16
November	12.8	0.0	153.4	27.9 (l4th)	17
December	10.0	-1.1	133.4	22.6 (20th)	14
Total			**1283.9**		**122**

Highest day temperature	30.0°C	27th July
Lowest night temperature	-5.5 °C	30th January

Records started in 1976 Wettest year with 1283.9mm (50.54inches)
Various records broken in 2019: Wettest month June with 241.0mm (9 45inches)
Wettest day October 25th with 67.8mm (2.67 inches)

Weather Summary 2010 to 2019

Year	Total rainfall in year mm.	Wettest day mm.	Date	Days with rainfall	Highest temp °C	Lowest temp °C
2010	**585.7**	47.0	August 25	102	28.3	-9.4
2011	**498.9**	18 3	October 27	105	27.8	-5.6
2012	**1007.4**	67.3	September 23	141	27.2	-7.8
2013	**821.9**	30.7	September 21	116	28.9	-4.4
2014	**1018.3**	44.2	October 13	152	28.3	-2.8
2015	**768.4**	27.9	August 14	120	30.0	-3.3
2016	**874.8**	523	November 21	112	31.6	-4.4
2017	**796.3**	36.1	May 11	100	30.0	-6.1
2018	**870.2**	32.8	September 20	99	29.4	-6.7
2019	**1283.90**	67.80	October 25	122	30.0	-5.5

Recorded by I.K. Porter at Greening's Acre, Little Birch Height 500ft / 152m

Book reviews, 2019

By

HENRY CONNOR AND DAVID WHITEHEAD.

***Henry Matthews, Viscount Llandaff: The Unknown Home Secretary*, Roger Ward, (2017, Fonthill Media Limited, 96pp., £16.99)**

Henry Matthews, Viscount Llandaff (1826-1913) was the grandson of Colonel John Matthews of Belmont in Clehonger.[1] His father, also Henry Matthews, was a *puisne* judge (a judge of a superior court inferior in rank to chief justices) in Ceylon, where Henry junior was born. His mother Emma was the daughter of William Blount of Orleton and descended from an old Catholic family. After the death of his father, when Henry was only two, Emma took her three children to Paris where they were brought up in the Catholic faith. Henry took a degree at the Sorbonne and then moved to University College London (debarred from Oxford and Cambridge by his religion), before being called to the Bar at Lincoln's Inn.

At the end of his life Henry was buried, by permission of the parish priest, with full Catholic rites in the Anglican family grave at All Saints' Church, Clehonger. He also has a memorial plaque in Hereford Cathedral. However there is no mention in this book of any other connection with the county. He died unmarried and the Viscountcy lapsed.

Roger Ward gives a good account of Matthews' very successful career as a barrister. He gives an even better description of his political career, both in Birmingham where he had to contend with the divisive Joseph Chamberlain and especially following his unexpected promotion to Home Secretary in Salisbury's government, for which office he had been recommended by Lord Randolph Churchill. It was one which made him the first Catholic since the reign of James II to hold office as a Minister of the Crown. Ward is sympathetic to the difficulties faced by Matthews as Home Secretary. Churchill's fall from grace so soon after Matthews' appointment left him in a difficult position as a liberal Conservative in Salisbury's much more robustly Conservative Cabinet. The eloquence which had characterised Matthews' success at the Bar did not translate to the floor of the House where he faced prejudice as a French-educated Catholic, especially as he was a staunch supporter of Catholic rights throughout his career.

Moreover he held office at a time of Fenian unrest, the unsuccessful attempts to catch the Ripper murderer and great social unrest including the Trafalgar Square Riots of 1887; times when it would have needed the Wisdom of Solomon not to have upset one faction or another. Perhaps Salisbury kept him on as a useful whipping-boy because, in the face of much criticism, Matthews survived as Home Secretary for six years, a record matched only by Chuter Ede and Theresa May.

Clarification is needed on two points relating to Belmont in this book. It was not Wegg-Prosser's father but his great-uncle who bought Belmont from the Matthews family. Secondly there is no evidence that Henry Matthews senior owned extensive lands in the county as debts had forced the sale of virtually all of the family estate soon after the death of John Matthews in 1826.

There is a dearth of place names in the Index and, by some quirk, all the page numbers in the Index are two numbers higher than the pages to which they relate. Otherwise the book is very well written and is 'a good read'.

Henry Connor

[1] Connor H, 'John Matthews of Belmont (1755-1826),' *TWNFC* 66 (2018): pp.98-108.

***The Rare Plants of Herefordshire* by Les Smith, Peter Garner and Mark Jannink (Trollius Publications, 2019), vi +187pp, many colour plates & figures. ISBN 978-0-953971-89-3. £25.50.**

Among the many interests that the Woolhope Club has lost (or delegated) to other organisations is botany or more simply, plant hunting. I have in front of me, bound in a familiar dark green, *A Flora of Herefordshire* (1889), by William Henry Purchas and Augustine Ley. The cover is embossed with the Club badge, which rather ironically reflects its geological interests. Today the emphasis of the Club is upon archaeology and antiquarianism albeit there are sectional recorders for botany, mycology and ornithology. Nevertheless, no self-respecting member of the Club would deny at least a passing—and in some a passionate—interest in the flora of the county. On field days there is often a splinter group whose concentration fades when an over-enthusiastic specialist waxes eloquently about medieval mouldings or squints, and they are often found admiring an interesting plant growing on an adjoining wall. Specialism, except in small doses, is the enemy of the Woolhope Club since most of us aspire to imitate those well-educated amateurs of the late 19th century, like Dr. Bull and the amazing Edwin Lees. There was a time when the Club hosted a flower show and men like Bull and his close friend, the architect Thomas Blashill, would exhibit for the Club a collection of floral rarities from their neighbourhood. Often Club meetings would be diverted from the main item on the agenda by the appearance of a strange plant, perhaps dredged by Sir George Cornewall from a pond at Moccas. Clearly, this would not be tolerated today when even the publication of rarities—birds, flowers and butterflies—is frowned upon if the location is mentioned. This is a debate which is pertinent for this excellent volume, where there appears to be few reservations about the naming of sites, albeit without precise locations.

The Rare Plants of Herefordshire is an A4 volume with a stunning photograph of *Epipactis palustris*, Marsh Helleborine, on its cover. The entry for this plant is on page 54 and is very succinct: 'An orchid of neutral to basic fens and other damp ground. Vulnerable to improvements in drainage and dense vegetation encroachment'. It is regarded as a native and first noticed in the county by the polymath, the Revd John Duncumb, in the introductory volume of his *History and Antiquities of Herefordshire.* Ironically, Duncumb was a local delegate of the Board of Agriculture and the promoter of agricultural improvement, which within two centuries would limit the Marsh Helleborine to a few stations in the county. On the other hand, as the brief entry suggests, that neglect was equally dangerous and the colonisation by native woodland would be equally detrimental to its survival. By implication only a pre-industrial society would provide the conditions for the Marsh Helleborine's survival. This would be a community that cropped its osier and willow rods regularly and sparingly grazed the wetland with cattle. Those young people urgently requiring us to limit global warming would find much ammunition in this book.

Again these issues are briefly covered in the introduction to the book, the authors making explicit in a few brief paragraphs what we all know and fear. However, whereas most of us wring our hands and turn our back on the obvious, the authors of this volume have provided

another yardstick. They have brought together 280 rarities, which at some point in the past have been seen in the county, sometimes in abundance. Remarkably, only seven of these may no longer be present. This might be read as an optimistic sign but above all else it reflects the enthusiasm of hundreds of observers who have registered their findings in one way or another, and which eventually end up on a record card at the Herefordshire Biological Record Centre at HARC, Rotherwas. The four closely-typed pages giving the names of the recorders is a measure of the enthusiasm for Herefordshire's flora, sustained over two centuries. As the authors pointed out, they trod a tedious and lonely path in analysing this data but it was built on the shoulders of individuals who took the trouble to report what they saw in their gardens and on their walks in the countryside.

You may think that you are not interested in the botanical rarities of the countryside but this is an attractive book to have on the proverbial coffee table. The quality of modern colour printing has advanced in leaps and bounds in recent years and is wonderfully exploited here. Not all varieties are illustrated but after every few pages, you are treated to a cluster of beautiful images, reproduced at a reasonable size. This is a book you might return to over and over again, even after the most mundane walk. Who would have expected to find *Acroptilion repens* Russian Knapweed on the weedy margins of Hereford railway station or *Adiantum capillus-veneris* Maidenhair Fern growing on a disused railway bridge at Ledbury? Of course, you will also regret that you did not buy a copy of the *Atlas of Vascular Plants of Herefordshire* (2001), which provided the distribution maps. When social isolation ends I am off on a walk along the Sapey Brook—one of the cradles of the Picturesque in Herefordshire—to see the 'plentiful' Marsh Helleborines.

A fuller and sharper review of the book can be found in *The Flycatcher* 85 (March, 2020, pp.62-4) written by Stuart Hedley who has taken over as plant recorder for Herefordshire.

David Whitehead

***Heritage Apples,* Caroline Ball, (Bodleian Library, Oxford, 2019), 250pp. £25.**

Caroline Ball informs us that less than 2% of surviving English apples are grown in commercial quantities, notwithstanding that the national Fruit Collection at Brogdale, Kent has 2000 living varieties. This, in itself, is only a small sample of many more that have disappeared. Commercial cultivation is based upon high yield and shelf-life, not taste. Consequently, transitory delights only survive in cottage gardens and the walled gardens of country houses.

The reading of Bull's *Herefordshire Pomona* (1876-85) marked the author's 'road to Damascus'. She ascribes its gestation to the enthusiasm of the Woolhope Club and wryly notes that even in Bull's time, few of the apples described were available in the shops of Hereford. On the other hand, the apple enthusiasts in the Woolhope Club were spurred on in their enthusiasm for local apples by the appearance in local shops of new commercial apples grown in the United State, Canada and France. She is very complimentary about the 'sheer beauty of the *Pomona'* and its tastefully rendered watercolours, by Edith Bull. Her new book is a 'medley of the *Pomona* apples still worth growing today', with an appendix of new apples not noticed by Bull. Therefore, if you have never been fortunate enough to inherit a first edition of the *Pomona* (or even its recent reprint), this in an inexpensive way of acquiring a local classic.

There are nearly 100 pages of plates, accompanied by a page of text, detailing history and the modern state of cultivation and availability. Part of the present reviewer's misspent youth took place at a public house called the Wyken Pippin, located in the suburbs of

Coventry. I now know that it was named after a 'pip', brought from the Netherlands in the early 18th century and sown in his garden by Admiral Thomas Craven. It's a tip-bearer and apparently needs careful pruning. The last section of the book provides useful information on choosing your trees, cultivation, storing, pests and diseases and 'where to see, taste and buy heritage apples'. There is a list of modern growers—but not one in Herefordshire—but a glowing tribute to the Marcher Apple Network and 'one particular organisation in the Marches'—the Woolhope Club.

David Whitehead

The Scudamores of Kentchurch and Holme Lacy **by Heather Hurley (Logaston Press, 2019), i-viii + 231pp illustrated ISBN978-1-910839-38-6. £12.95.**

Heather Hurley set herself an ambitious task. Anyone with even a passing interest in the history of Herefordshire will have encountered the Scudamores of Holme Lacy, especially in the Early Modern period, the age of the Reformation and the Civil War. Indeed, the first Viscount, John, has at least four biographies devoted to him, all of which are acknowledged at various times in this book. For these writers the attraction of John Scudamore is the part he played in the reign of Charles I and the subsequent Civil War. Judiciously, the author of this book avoids the great debates relating to the politics of the period. The clue to her approach is found in the second line of her title 'of Kentchurch and Holme Lacy'. There is obviously a niche for a local author, with a local market in mind, if her personalities are firmly rooted in their houses and surrounding estates, as well as local politics.

The Kentchurch Scudamores are the senior branch of the family, and yet far less attention has been paid to them by national and local historians. Like many families in West Herefordshire, the Harleys, for example, they were a Marcher family with interests, both dynastic and political, on both sides of a fluctuating frontier. With the help of the American family historian Warren Skidmore, the author charts a clear path from Ralph (born *c.*1040 in Normandy), a knight of Alfred de Marlborough of Eywas, who probably settled at Corras on the Monnow soon after the Conquest and flourished thereafter. They were a freebooting family, plundering the monks of Dore, involved with Glyndŵr and the Lollards but wrong-footed by the Wars of the Roses, supporting the Welsh Lancastrians when the future for most of the Herefordshire gentry lay with the Yorkists, and by default, the Tudors. Although they held from the 15th century one of the borough seats of the city of Hereford in Parliament, they never found enrichment via the Tudors albeit the park at Kentchurch came from the crown after the dissolution of the preceptory of the Knights of St John at Garway. Property disputes and recusancy until *c.*1600 restrained their involvement in public life. The family kept a low profile during the Civil War, but in 1649 John Scudamore was serving as a Parliamentary Sequestration Officer, a rare moment of collaboration with the government albeit the women of the family retained their recusant sympathies. Like their Holme Lacy cousins, in the 17th century they became interested in iron production, using the neighbouring swift-flowing rivers and the timber resources from their estate.

The family suffered a severe set-back in 1736 when William Scudamore was declared a lunatic and the estate was placed in trusteeship. He did not die until 1741 and had no direct heirs so the line switched to one of the Rowlestone Scudamores—a minor of 14 years called John. He died in 1796 and his son, another John, went to war in 1793 and although he returned in 1796 and implemented grandiose plans for both the estate and the Court, the services of the architect John Nash were employed. He died suddenly in 1805, leaving another under-age heir,

John Lucy Scudamore. Trusteeship once again became necessary, which had one advantage for the author, creating a paper trail of correspondence and surveys, produced by the trustees and used extensively for this study. From the mid 19th century the story has an Irish dimension as a result of John Lucy's heir marrying into the Dacre Lucas family of Castle Shane, Co. Monaghan, whereupon Kentchurch was tenanted until February 1919 when Castle Shane was destroyed by an accidental fire. The family returned and the story ends with the great flood of 1959, which inundated the Court.

Where the story of Kentchurch is mostly local and domestic, Holme Lacy is set on a much broader canvas albeit the origins of this branch of the family is more obscure and later than their cousins at Kentchurch. Again it's a story set in Welsh Herefordshire since in the Middle Ages the large parish of Holme Lacy was divided between a Welshry to the west, where Philip and Richard Scudamore are found in the 15th century, and an Englishry, owned by the cathedral at Hereford in the east. As is well-known the family fortune was made by Sir John Scudamore (d.1571) who hitched himself on Thomas Cromwell's wagon and became the chief instrument of the new Protestant Tudor monarchy in the Welsh Border. There were no traces of recusancy in this branch of the family and John ousted the church from the Englishry and built a prodigy house on the original site of the de Lacy manor. He married his son to one of the leading families of Worcestershire, the Pakingtons of Hampton Lovett. Thereafter, the Scudamores of Holme Lacy were at the epicentre of English social and political life and regularly courted by the monarch. The family history from here on is well known but also well told, acknowledging where necessary the published works but also dipping into the archives, mainly found in national repositories. There are useful vignettes of the Scudamore ironworks and their abiding interest in the river Wye, cattle breeding and cider. The first Viscount's hesitant involvement in the Civil War is referred to but without analysis. He paid his fines to the Commonwealth and in 1671 with his income and status only slightly diminished his grandson John succeeded him, his standing in local society hardly diminished it seems by the experience of the Civil War. He married into the top rank of the English aristocracy—the Cecils—and rebuilt Holme Lacy House as a 'French chateau'.

Throughout, there are occasional sorties into the household accounts that survive from this period but, as a rule, the focus remains upon social life, which becomes most interesting and fraught when the last viscount was killed in a riding accident in 1716, leaving an infant daughter, Frances (1711-50). She was in turn succeeded by another infant Frances (1750-1820) who tried to repair the dynastic fortunes of the family by marrying Charles Howard, later the 11th duke of Norfolk but died without heirs after a long period of insanity. The two women—Frances and Frances—held the estate for 103 years. It's a sad story of exploitation and decline, told well with vignettes delving into the estate, the house and its enrichments. As a postscript the final chapter is on the 19th century Stanhope Scudamores who were always slightly detached from Herefordshire social life. Like their namesakes at Kentchurch they had substantial interests elsewhere and suffered from declining agricultural interests in the late 19th century. There is a lot more in this book but as a story of two families and their houses, this is a very good read and will probably never be bettered by a local author.

David Whitehead

Index, 2019

Since the issue of the 2018 *Transactions* all previous volumes have been available to Club members on the Club's website, non-members not being able to access the previous ten years' issues. They can thus be searched using a simple search mechanism as well was by the website's SEARCH function. This has made it possible to simplify the printed index, saving time in compilation and in the website's index upload process. The index is now strictly alphabetical, the only concession made has been to index personal names, as before, by surname first. However, personal names of living people are not in the index for privacy reasons. The index entries include those for non-numbered Contents, List of Plates and List of Figures pages. Note that the colour plates are paginated from 300 and appear in the index.

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

Plate 1.1. The draft design of the Woolhope Club badge (left) showing geological structure of the Woolhope Dome at the top and a geological specimen collecting bag and hammer at the base. The current design (right) is depicted on the president's medal of office

Plate 1.2. Colour-tinted postcard of Barrs Court Station, Hereford in the early 1900s. The Club is first recorded as using a train during the field meeting of 18 July 1854

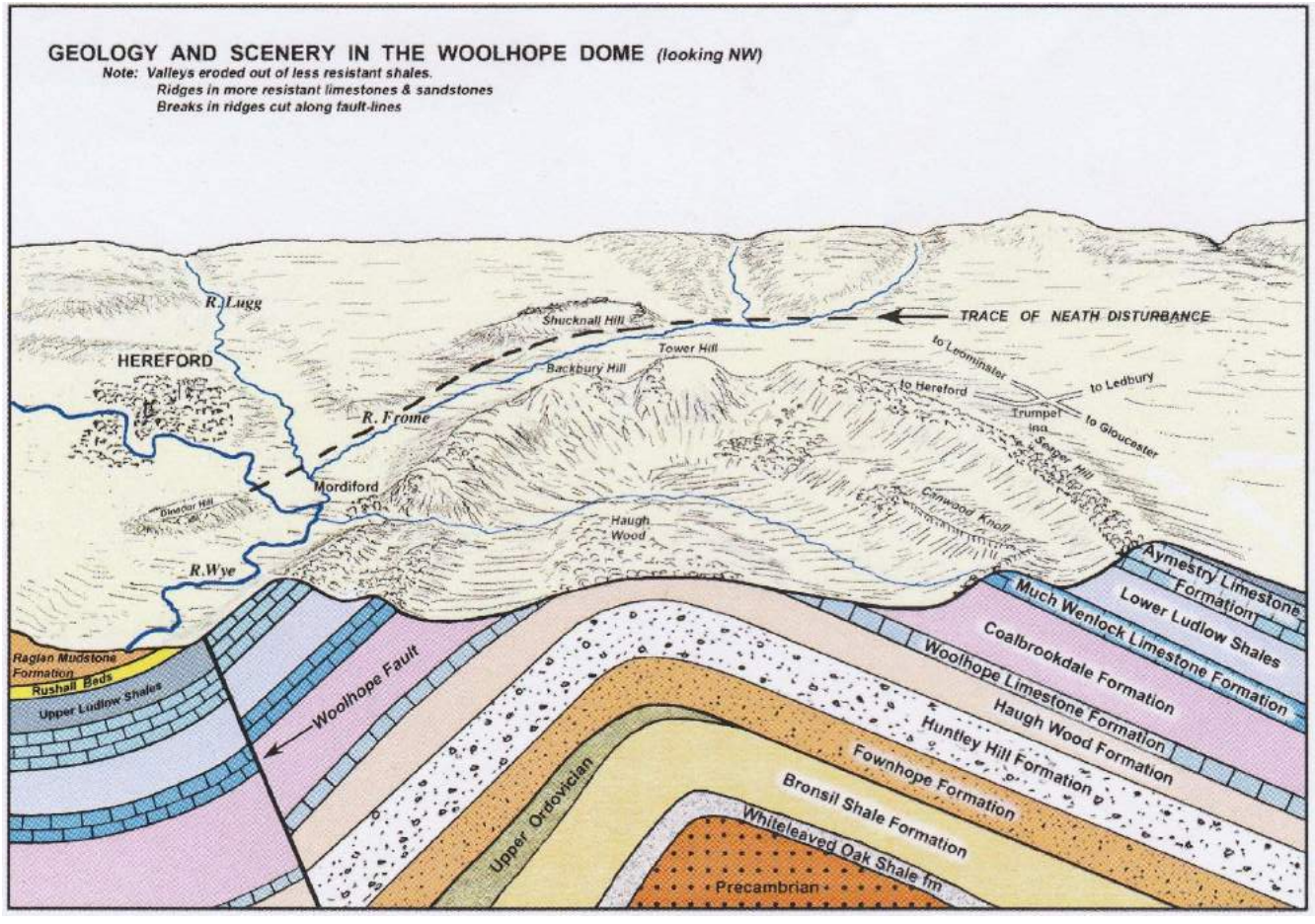


Plate 1.3. Cross section of the anticlinal Woolhope Dome showing the relationship between its geology and its scenery. Drawn by Gerry Calderbank from a conceptual sketch by Dave Green

Plate 1.4. View over the north-west of the Woolhope Dome showing the underlying anticlinal structure with its concentric circles of limestone outcrops marked by the wooded areas. The site of a large landslip in 1575, named The Wonder, is in the left of the foreground. (Aerial photo: Derek Foxton)

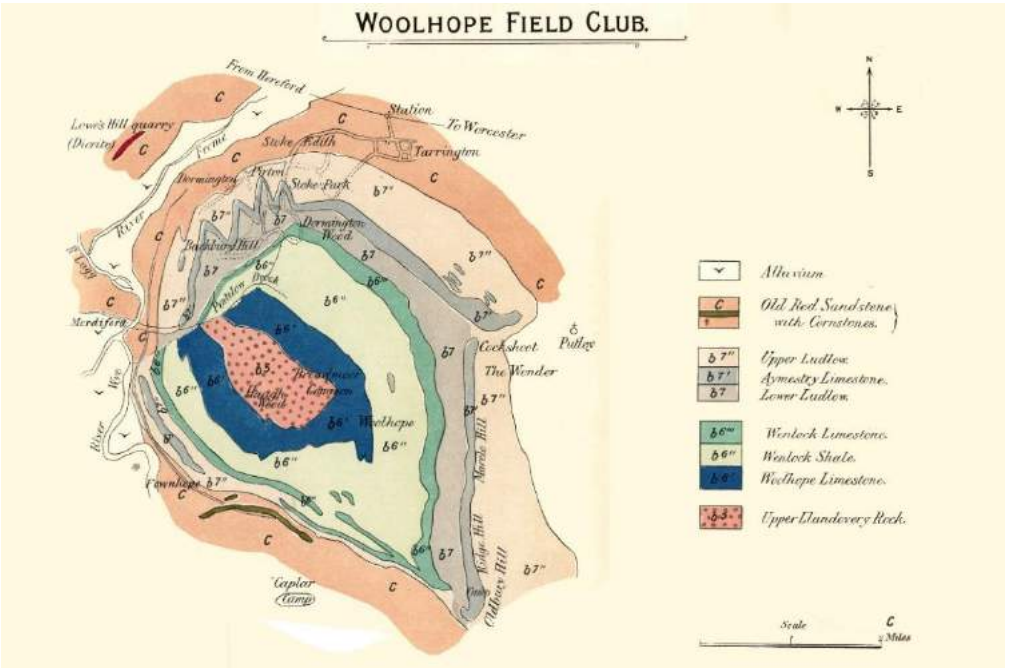


Plate 1.5 Geological map of the Woolhope Dome. (G.H. Piper TWNFC (1891) pp 164-168)

Plate 1.6. A solitary rugose coral from the mid-Silurian Much Wenlock Limestone (Photo: John Payne)

Plate 1.7. The clear notch within the early Silurian Woolhope Limestone at Rudge End Quarry is a thin bentonite clay band which represents a degraded volcanic ash. Close to the centre is a minor fault cutting up through the face in a vertical direction (Photo: Moira Jenkins)

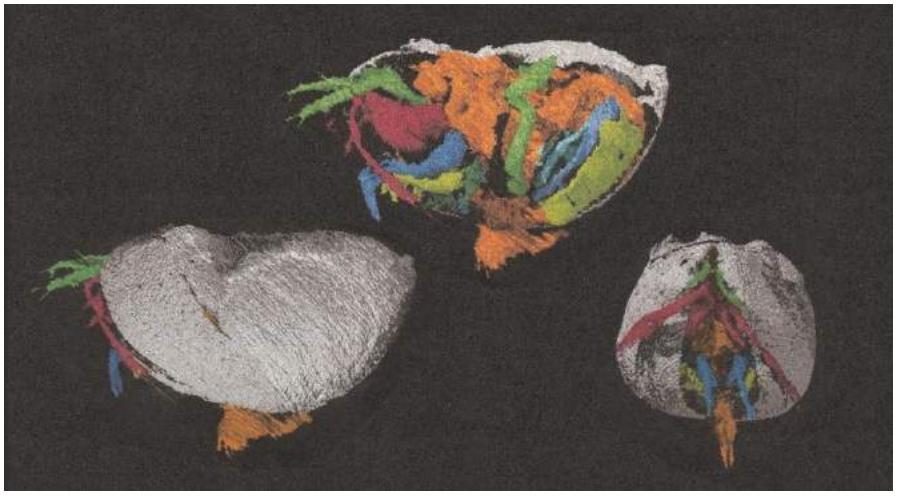


Plate 1.8. Male ostracod *Colymbosathon ecplecticos* Siveter *et al*., 2003 from the Herefordshire Lagerstätte. False colour image showing the specimen without shell (top), with shell (left) and an anterior view (right)

Plate 1.9. View south-east over eastern edge of the Woolhope Dome. The twin wooded ridges of the Aymestry Limestone (left) and the Much Wenlock Limestone (right) are clearly seen. Perton Quarry is in the foreground (centre left). (Aerial Photo: Derek Foxton)

Plate 2.1. The Club Oak in early 1998 (© Éilis Kirby)

Plate 2.2. The Club Oak on the occasion of the Club's visit in 2019 (©Gisèle Wall)

Plate 3.1 (left). In 1929 Mrs Louisa Luard became the first female Mayor of Hereford. This fine hand-retouched photograph of her in the mayoral robes was taken by Vivian of Hereford. (Hereford Civic Museum)

Plate 4.1 Bredwardine Bridge as it is now. (Rosalind Lowe)

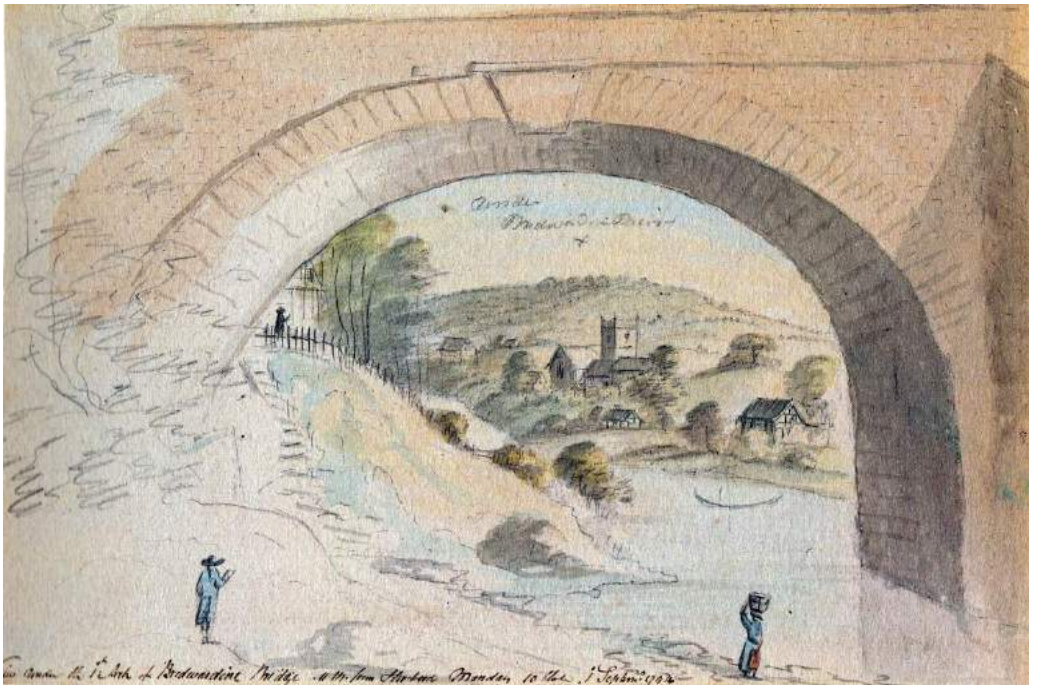


Plate 4.2. James Wathen's watercolour of Bredwardine Church, through an arch of Bredwardine Bridge, from upstream, painted in 1794. This shows the situation before the flood of 1795, which may well have damaged the buildings close to the river. (Derek Foxton collection)

Plate 5.1. 1815 1st edition OS map by Thomas Budgen showing The Old Shop, Lingen

Plate 5.2. Two views of the possible toll house at The Old Shop, Lingen

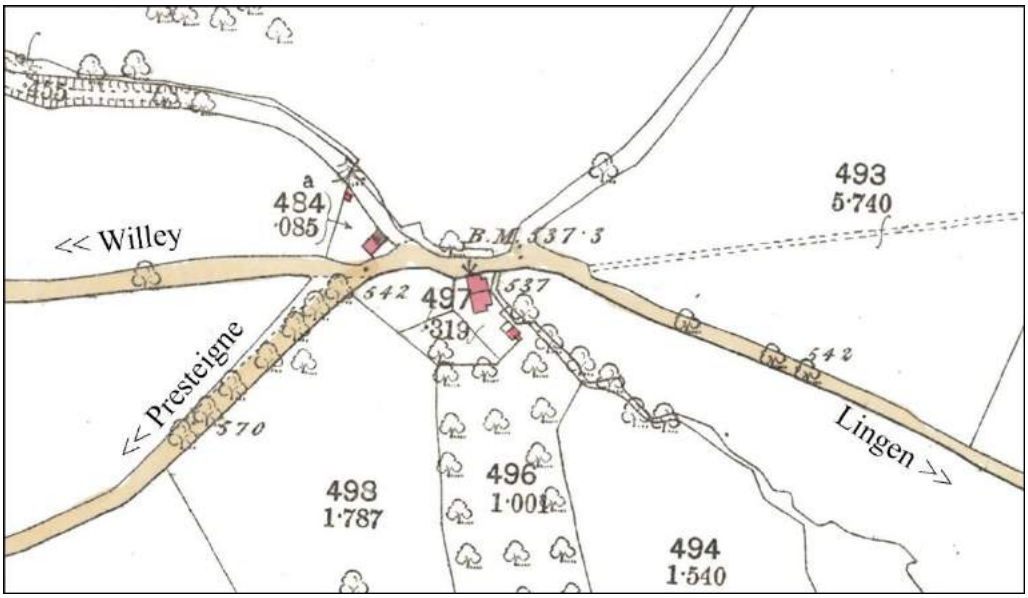


Plate 5.3. 1885 OS map of The Old Shop, Lingen, showing the dwelling in plot 484

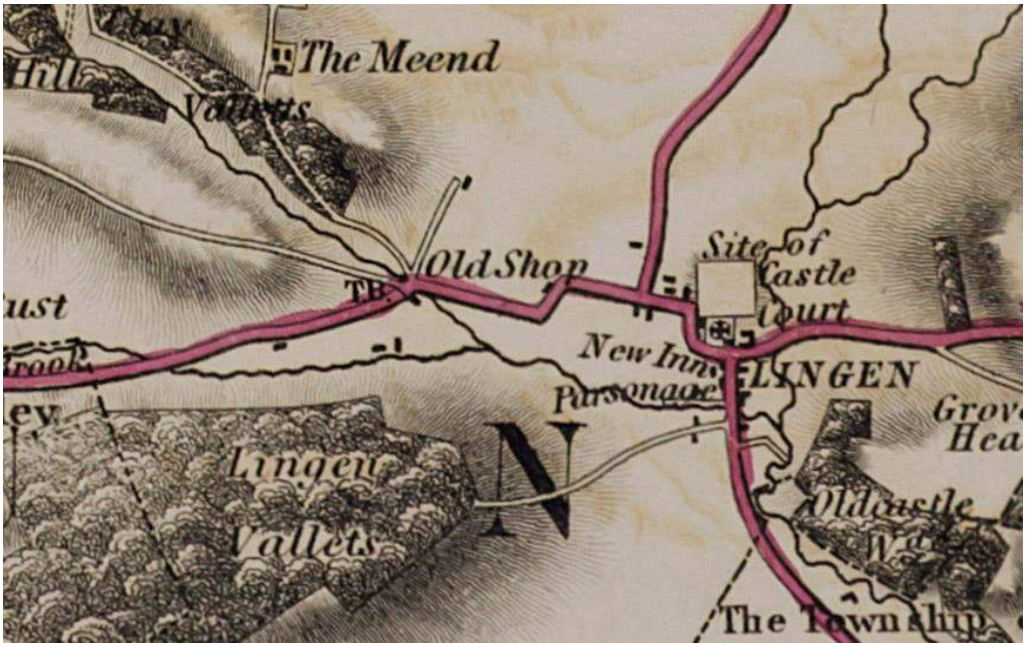


Plate 5.4. Bryant's 1835 map of The Old Shop, seeming to show a toll house (or toll bar) on the Presteigne/Willey road

Plate 6.1. St Michael's Church at Moccas, set in parkland and seen from the north, from the roof of the Court (D. Whitehead)

Plate 6.2. St Michael's from the south-east – a two-celled church with an apse. The masonry carefully restored under the supervision of George Gilbert Scott junior in 1870 (D. Whitehead)

Plate 6.3. Sketch from the south-east in 1850 by Charles Walker. The church festooned with ivy—'counterfeit neglect'—to enhance the view of the church from the Court'. (Hereford City Library)

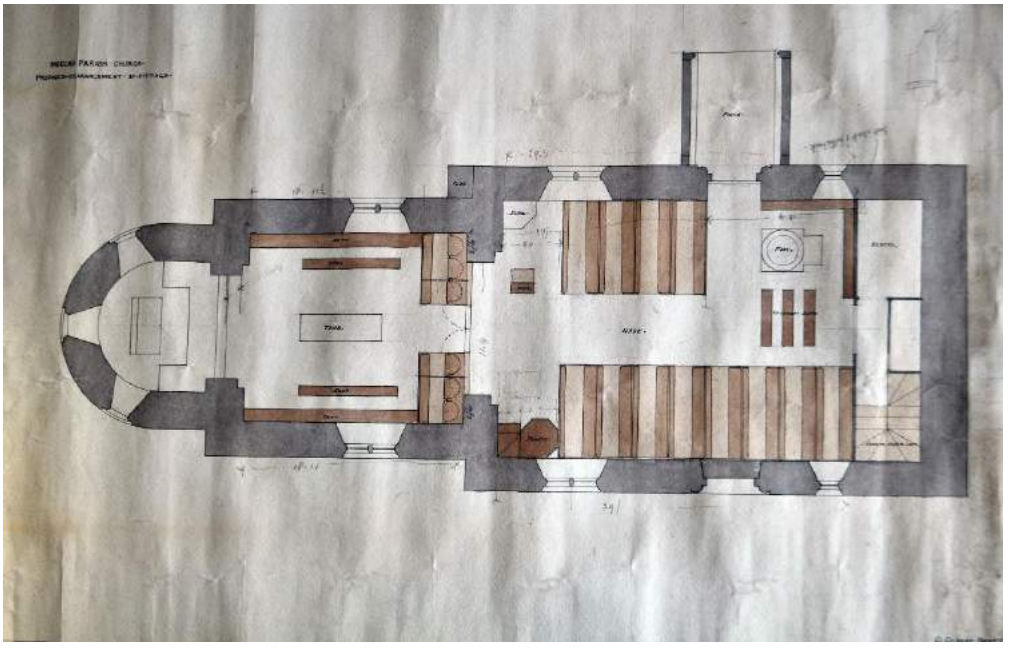


Plate 6.4.George Gilbert Scott junior's sketch plan showing the 'proposed rearrangement of the fittings' (1870)' (HARC, AF57/17)

Plate 6.5 (left). Scott's severe treatment of the apse; interpreting his clients' zeal for a setting reflecting the early church. The altar rails from the redundant church at Willersley are a 20th-century afterthought. The window is by Hardman & Co. of Birmingham c.1871 (D. Whitehead)

Plate 6.6 (below).The decorative climax of St Michael's Moccas. The relatively large organ was provided by J.W. Walker & Sons but the setting is entirely by G.S. Scott junior. The structural work was carried out by Franklin and Sons of Deddington, Oxon and the decorative scheme is by Charles Eamer Kempe. (D. Whitehead, 2017 before restoration)

Plate 7.1. The Old House, Hereford, the only survivor of Butchers' Row and now a museum. (Derek Foxton Collection)

Figure 7.2. Part of James Wathen's sketch of Butchers' Row, dated 7 June 1798. On the left of the Old House is Golden Alley, while the building to the right was the first of the complex to be demolished. (Derek Foxton Collection)

Plate 7.3. Cooken Row, as sketched by James Wathen on 17 August 1797, Golden Alley to the centre. (Derek Foxton Collection)

Plate 7.4.John Varley's watercolour of the south side of Butchers' Row, painted in 1802. (Paul Mellon Collection)

Plate 7.5 (above) The well-known watercolour by David Cox, painted from the same view-point as that by John Varley. This was almost certainly composed from preliminary sketches: although initialled and dated 1815, by that date the premises to the right (east) of the Old House had been demolished. (Derek Foxton Collection)

Plate 7.6 left) A naïve drawing of Butchers' Row, looking west. This must date from *c*.1816 as the house at the east end has gone, and there is a gap where the Old George formerly stood. (Derek Foxton Collection, from the original in the Resource Centre in Friars Street Collection)

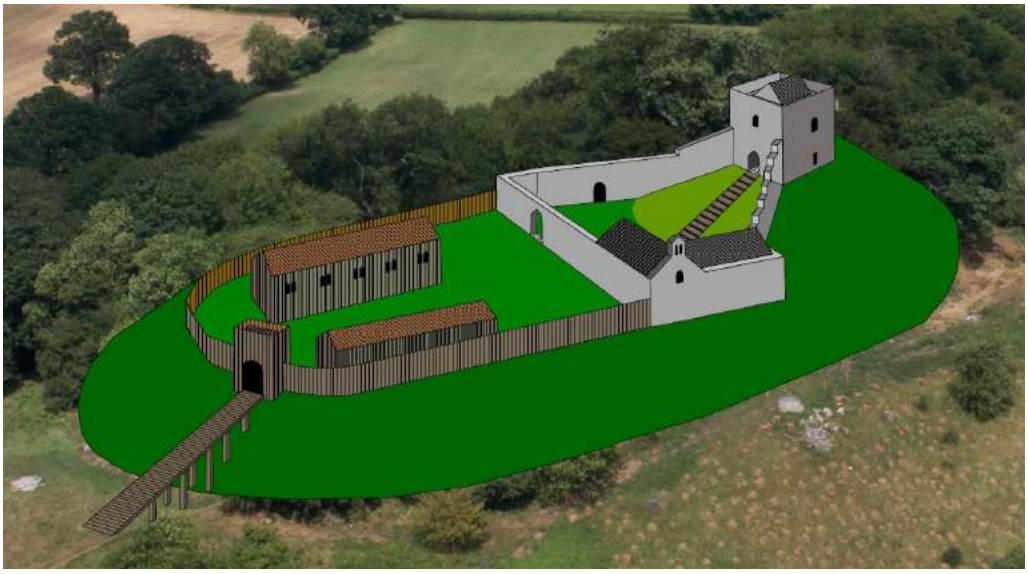


Plate 8.1. Snodhill castle, 2019: reconstruction of the castle at c.1100AD, based upon the earthworks and the excavations so far completed. (Image © G. Crooks, 2020)

Plate 8.2. Snodhill castle, 2019: remains of the doorway and spiral stair in the Keep (3D image; scale in metres)

Plate 8.3. Snodhill castle, 2019: vertical photographic plot of north tower as exposed during excavation

Plate 8.4. Dorstone Hill, 2019: Trench 10 excavation of Neolithic causewayed ditch segments viewed from the north (image, Adam Stanford, Aerial-Cam) .

Plate 8.5. Dorstone Hill, 2019: Trench 11 excavation across bank and ditch on south-east spur of the hill (east to left; ditch to right; composite image, Adam Stanford, Aerial-Cam)

Plate 8.6. Leintwardine Iron Age/Romano-British copper alloy toggle: HESH-08CE9E

Plate 8.7. Little Birch late Anglo-Scandinavian bronze strap-end: HESH-D19A4D

Plate 8.8 (left). Herefordshire Viking Hoard: gold finger-ring

Plate 8.9 (below). Herefordshire Viking Hoard: Coins issued jointly by Alfred of Wessex and Ceolwulf II of Mercia

Plate 8.10. Wellington Quarry, 2019: stone dumped in a palaeo-channel to create a ford, probably in the Romano-British period

Plate 8.11. Wellington Quarry, 2019: inhumation burial accompanied by a wooden staff; placed in the top of a pit in one of two pit alignments, probably in the late pre-Roman Iron Age

Plate 9.1 *Tilia platyphyllos* large-leaved lime in a hedgerow, its character somewhat obscured by trimming

Plate 9.2 This ancient oak in the Golden Valley is typical of the oaks in the area in that it appears to be of the hybrid between our two native species, *Quercus x rosace*a. But what is the balance of taxa elsewhere in the county?

Plate 10.1 (above). The lower two hammer beams of the unorthodox triple hammer-beam roof in Brampton Bryan church

Plate 10.2 (left). The 17th-century decorated top to one of the supporting pillars in Brampton Bryan church

Plate 10.4 (above) Behind the south frame showing that the two north-south beams don't engage with the wall of the tower although they achieve an indirect link through an arrangement of beams above

Plate 10.3 (left). Looking west into the tower of Cradley church showing the timber framing on the north side

Plate 10.5. Duppa's Almshouse (Duppa Cottages), Bridge Street, Pembridge, looking north

Plate 10.6. The rear elevation of the range showing the three large chimney stacks. Note the higher ground level that had to be cut back to create a level platform for the building

Plate 10.7. Wormbridge Court Farmhouse seen from the north

Plate 11.1. Some volunteers receiving training from Professor Ian Fairchild and Beth Andrews by the side of a kettle-hole pond

Plate 11.2. Coring which successfully collected peat from an area near a pond (Photo Giles King-Salter)

Plate 11.3a. A core containing peat at the base

Plate 11.3b. A specimen of peat collected

Plate 11.4a. A family walking along the ridge of the Malvern Hills on part of the Geopark Way

Plate 11.4b. A Malvern U3A group walking on Oyster Hill looking at the view of the Malvern Hills

Plate 11.5. Coppet Hill, Goodrich: Upper Devonian Quartz Conglomerate crag

Plate 11.6. Avon Group formerly Lower Limestone Shales, showing a channel formed in shallow water

Plate 11.7. Two bentonite bands in Coalbrookdale Formation mudstones

Plate 11.8. Layer with haematite coating at boundary between Precambrian and Silurian, Gullet Top Quarry (Photo Patrick Aydon)

Plate 11.9. Gullet Quarry Specimen (Photo John Payne)

Plate 11.10. Gullet Quarry Specimen, alternate view (Photo John Payne)

Plate 11.11. Mud clasts were torn from stream bed; some still in place, some weathered out because mudstone is more easily eroded

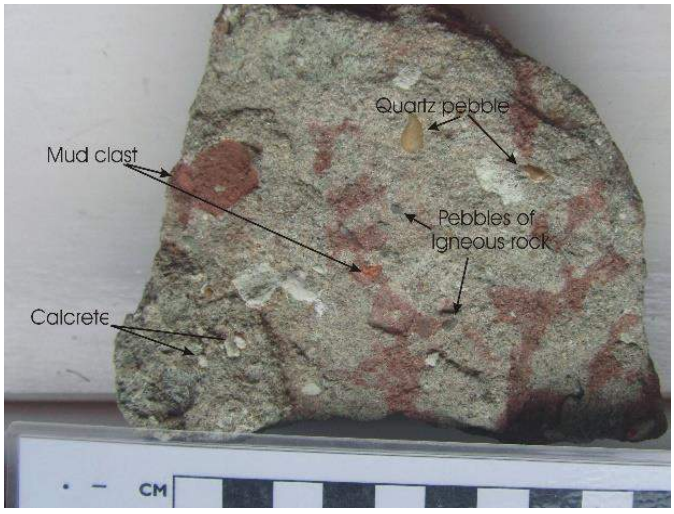


Plate 11.12 Unsorted sandstone with pebbles

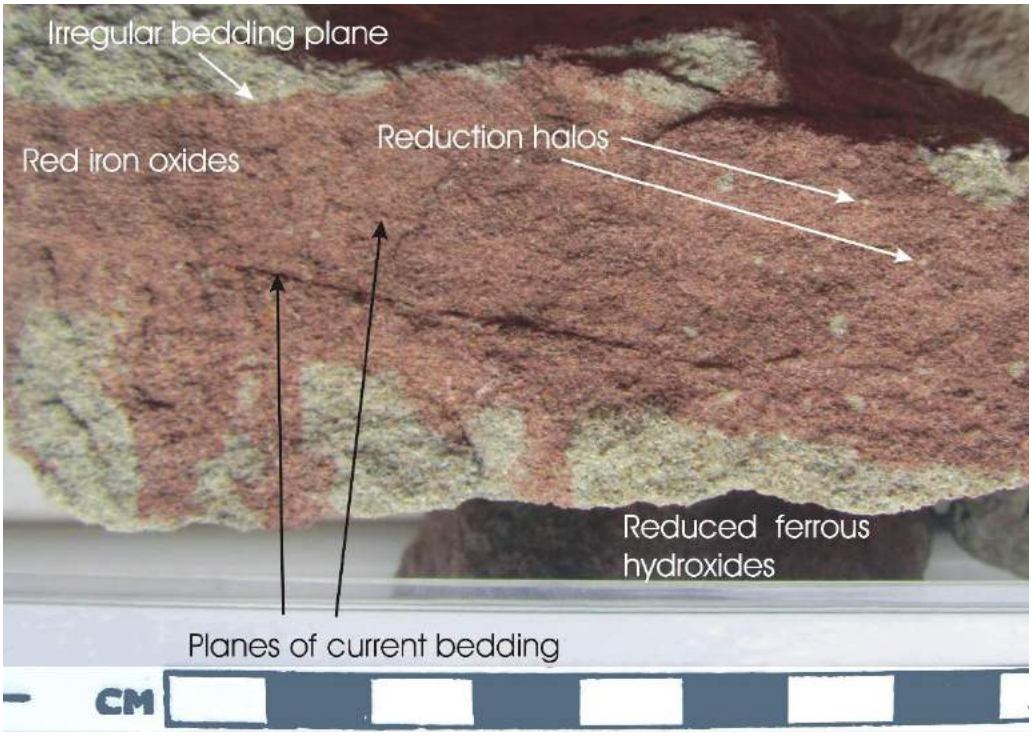


Plate 11.13. Coarse sandstone with red areas which have been oxidised and pale areas which have been reduced

Plate 11.14. Brownstones Formation with reduction spheroids

Plate 11.15. Onion skin weathering (Photo John Payne)

Plate 11.16. Fossil coral, Little Doward (Photo Jim Handley)

Plate 11.17. Fossil coral, Little Doward (Photo Jim Handley)

Plate 11.18. Barite crystals

Plate 11.19. Barite and Limonite

Plate 11.20. Barite and Manganese Oxide

Plate 11.21. Bright colours of iron oxides

Plate 12.1 *Nectria punicea* var. *ilicis* shown emerging in tight clusters through the bark of a live holly at Docklow (photo © Will Watson)

Plate 12.2. *Lepiota lilacea*. A collected specimen showing the scaly cap and lilaceous pink tinge of the underlying flesh (photo © Jo Weightman)

Plate 12.3. *Lepiota lilacea*. A collected specimen showing the brown underside of the ring (photo © Jo Weightman)

Plate 12.4. *Leucocoprinus birnbaumii* growing in a plant pot kept in the house (photo © Jean Wynne-Jones)

Plate 12.5. The Scarlet Berry Fungus *Paurocotylis pila* in habitat, Bishop's Castle, Shropshire (photo ©Rob Rowe)

Plate 12.6. *Paurocotylis pila*, a collected specimen showing the white flesh inside (photo © Cherry Greenway)

Plate 12.7. *Podoscypha multizonata*. A characteristic large rosette. Croft Castle 2015 (photo © John Bingham)

Plate 12.8. *Geopora sumneriana*. The typical half-submerged fruitbodies growing under cedar in March in a garden in Ross-on-Wye (photo © Wendy Salter)

.

Plate 12.9. *Galerina marginata*. The sample collection of a very rare albino form, showing the sharp umbo on the young specimens (photo © Cherry Greenway)

Plate 13.1 Goosander (by kind permission of Mick Colquhoun of HOC)

Plate 13.2 (above) Shelduck family

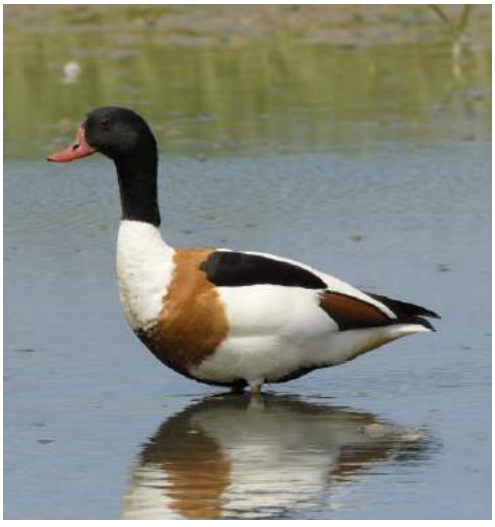


Plate 13.3 (right). Shelduck

(by kind permission of Mick Colquhoun of HOC)

Plate 13.4. Water Rail (by kind permission of Mick Colquhoun of HOC)

Plate 13.5. Dipper (by kind permission of Mick Colquhoun of HOC)

Plate 13.6. Whooper Swan (by kind permission of Mick Colquhoun of HOC)

Plate 13.7. Pied Flycatcher eggs (Rachel Jenkins