ST JOHN-IN-BEDWARDINE CHURCH TOWER APPEAL

PROJECT DIARY

November 2007 – March 2012

INTRODUCTION

During 2007, each time the bells were rung, sawdust fell from bell gantry to the floor of the ringing chamber below. The problem persisted and Nigel Davis, then Tower Captain, reported it to Rev'd Christopher Pullin, vicar at that time. The bells were silenced for safety, and inspection reports regarding the tower roof, bell frame and clock were commissioned from English Heritage and the Diocese of Worcester.

The church architect, Alan Simcox of Nick Joyce Architects, was consulted. Ridout Associates, timber specialists, were brought in to assess the damage and an estimate of costs sought from Gwillam & Jones, Quantity Surveyors. The damage was extensive and the church was facing repair and restoration costs of about £200,000.

The first meeting of the Tower Appeal Committee took place on a cold February evening in 2009. We gazed at each other hoping someone would come up with, perhaps, a millionaire looking for a worthy cause, one of us to win the lottery, a specialist knowledge of horse-racing and a friendly tipster or, failing that, a plan to raise the money. There was nothing to start us off and it looked like such a mountain to climb. How on earth, where on earth, were we to raise £200,000?

This is our story ...

ASSESSING THE DAMAGE

Edited Extracts from Ridout Associates Timber Condition Survey 15th May 2008

Deathwatch beetle populations develop when the conditions within the timber present a suitable habitat. This usually follows a period of moisture ingress or general neglect of the building.

Once established the size of the population will respond to the moisture content of the timber. If the food source dwindles or the timber becomes drier the population will fall to a residual level. A residual population may remain for many years although as long as the timber does not become damp again the beetles are likely to die out.

This would seem to be the case in the tower roof. It is likely that a small population of deathwatch beetles is surviving in the rafter plates and other timbers. One area was found to have discernibly active deathwatch beetle and this plate is severely damaged, badly supported and should be replaced entirely.

Most of the oak floorboards of the belfry have suffered historic damage from deathwatch beetle (*Xestobium rufovillosum*) and furniture beetle (*Anobium punctatum*).

Specific observations:

The end of the wall plate has been hollowed by deathwatch beetle on the underside. The edges of the boards show historic decay by an unknown brown rot and have some historic deathwatch beetle damage.

Historic deathwatch beetle damage was noted in the end of the wall plate and the edges of the boards are decayed where they are in contact with the wall. Historic deathwatch beetle damage was noted in the beam bearing.

A piece of timber has been bolted to the interior face of the rafter plate. The rear surface of this additional member is decayed and damaged by deathwatch beetle. The plate behind is hollow and has suffered severe deathwatch beetle damage.

Five common rafters are badly decayed at their bases and are unsupported. A timber embedded in the wall has some deathwatch beetle damage and is hollow within the wall due to wet rot decay.

The plate supporting the flagpole fixed to the internal surface of the tower wall has decayed.

The cross-beam has decayed. The ends of the wall plates are decayed. The plate has hollowed and is severely decayed. A timber noggin set into the wall has decayed. The east wall plate has hollowed and is severely decayed.

Historic furniture beetle damage was noted in the oak common rafters and the softwood supporting frame over the tower steps. The plate is set away from the wall head and is decayed along the rear surface. The common rafters are also decayed at their bearings in this location.

The plate has active deathwatch beetle and appears to be precariously supported by a corbel that is decayed.

The rafter plates should be completely replaced: they are in poor condition and have lost a significant proportion of their volume to historic wet rot and deathwatch beetle damage. There are also several timber noggins within the walls that have lost their integrity and should be replaced with masonry. Some repairs will be necessary to a number of the rafter feet.

The common rafters have compressed the plate and then slid off the top causing a degree of roof spread. These factors have caused the NE joint of the SW - NE diagonal tie beam to drop away from the foot of the principal rafter. This requires emergency support.

As you can imagine, this report made for very depressing reading. Fletcher Developments of Droitwich put in some emergency propping, but we had to plan to repair the roof, restore the bell frame, and refurbish the clock.

Whilst the work was in progress the inaccessible areas would be inspected which was likely to give rise to further repairs and inevitable increases in time and costs.

Added to this was complexity of charitable funding. For example, English Heritage might grant for the roof repair but not the bell frame. Your Heritage might pay for the bell frame but would they pay for the clock? How long did grant offers last? Might they be withdrawn if we could not raise matched funding? We sought advice from the newly appointed DAC Bells Advisor, Mark Regan, whose invaluable fundraising experience moved us forward with the Your Heritage application. We would have to find matched funding to have any chance of a grant from either of the lottery funders. Local and national charities were researched for granting criteria and procedures.

Those who did grant are listed in the Benefactors' book. The success rate was about 1 in 8.

In the meantime, we needed to raise funds locally ...

RAISING THE MONEY

One step at a time, we moved forward.

A patron was sought and local artist David Birtwhistle kindly and actively fulfilled this post, giving kind permission to use a detail from his painting The Wedding Picture as our logo.

A request was circulated to the congregation in the pew sheets which are distributed at every Sunday service. Funds began to trickle in and we could get our letterheads printed.

We planned concerts and a publicity campaign (see press archive). The professional fundraiser Lucinda Wray-Weir, who worked for Worcester Cathedral, was consulted and gave freely of her expertise.

Tower Committee Meeting May 2011



Lively discussion about progress on the repairs.

Clockwise from centre front:

John Cole, his wife Glenis, Philip Evans, Rev'd Christopher Stuart, David Birtwhistle, Beverley Winter, Alex Kinnersley, Nigel Davis and Ron Cantrill.



Rose Ashton took the picture.



Deciding our next move ...

A leaflet was designed and distributed regularly to shops and pubs, several of which also took collection boxes.

A letter was hand-delivered to every house in the parish. We did this twice, and were amazed at the generous response of the people of St John's.

Concerts were organised and well attended. One event, organised by Ron Cantrill, was a poetry reading on Saturday 2nd April 2011 with actor Timothy West topping the bill. Ruth Reeves put on a concert by The Cradley Singers on Saturday 9th April 2011. These are just two examples of about 40 events.

The names of all the groups who performed for us are listed in the Benefactor's Book.

Our fame began to spread and donations came from as far afield as Canada.

It took two years to raise sufficient funds to start the work. Charities rarely grant if work has commenced, so any further funds had to come from local resources. The concerts continued!

Another leaflet was printed and hand-delivered to every house in the parish. This kept people up to date with the progress of the work and encouraged further donations with the slogan "Didn't donate? It's not too late!"

Publicity helped us to build funding success. The project rolled forward ...

DOING THE WORK

On Monday 31st January 2011 the Tower Appeal Committee met the architect, structural engineer, quantity surveyor and contractors at the church to plan the work of repairing our church tower roof and bell frame, and refurbishing the clock.

The main contractor was:

Croft Building & Conservation of Stafford

supported by

Berry & Co Church Bell Restoration, of Malvern Smith of Derby, church clock specialists.

The professionals were:

Nick Joyce Architects of Worcester Gwillam & Jones, Quantity Surveyors, of Worcester Stuart Derbyshire, the Parish Engineer, from Hallow Graham Projects & Consulting, Health & Safety Consultant

Reports provided by:

Ridout Associates, Timber Specialists, of Stourbridge
Graham Pledger, English Heritage Conservation Team
C M Povey, WDCRA Belfry Advisory Panel
John Dentith, DAC Secretary
David Beacham, DAC Bells Adviser

Tower Work Progress 15th March 2011

Rose, Tower Appeal Treasurer, climbed up inside the tower to watch our funds being spent!



Mark Wood,

Croft's site foreman.

Amid the spider-web of scaffolding the bells wait to be lowered.



This mark is stamped deeply into the stonework.



I can find no record of the stamp. Is it a mason's mark?



This picture was taken inside the steeple. The tower was struck by lightning many years ago, cracking the oak beam. Here you can see the metal repair put up by an agile and fearless Arthur Lee, who had to access the beam from underneath and work from a ladder.

The death watch beetle damage is extensive; this huge oak beam is quite hollow. Mark can reach right inside it.



Still inside the steeple, the wall-plate timber has sunk into the stonework.



This happens when the timber becomes very wet. It rots and releases tannic acid, dissolving the red sandstone.



Up the next set of stairs and out on to the tower roof, where the tiles have been stripped off the steeple ...

and are stacked neatly on the scaffolding, awaiting re-use. These tiles are called "dreadnoughts".



Back on terra firma via the scaffold ladders, here is Mark with our funders' signboards!



At this stage we had sufficient funds to complete the work *if no further work was identified*. Also, other situations could affect our costs. For example, we feared that unrest in Libya would raise oil prices. Metal prices were rising. We had to allocate sums for site security and additional insurance and whilst these were kept to a minimum they were not in the original budget. If we ran out of funds everyone would look – quite rightly – to the Appeal Committee and say "Why didn't you think of that?" It was our job to make sure that did not happen. So we continued to raise money, but the uncertainty of these contingencies made this one of the most difficult periods of the Appeal.

Work Progress 7th April 2011



Climbing the scaffold tower...

Don't look down!

The rotten wood is removed. This is death-watch beetle damage...





... and this is wet rot.



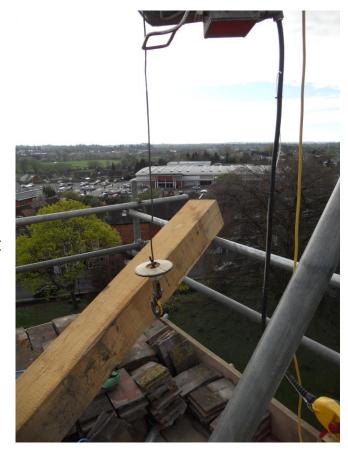
More rotten timber was hidden behind inaccessible areas. Now the whole wall plate and timber sub-structure will need to be replaced.



Here comes the new timber!

The stout beams for the new wall-plate are hoisted to the tower roof.

It takes four men to lift each piece!





The stonemason has cut a hole to take the new steel support, which is to hold up the main roof beam.

Mark found this old bottle, cocoa tin and pen-knife on the top of the roof-beam.



Tower Roof Repair Progress 31st May 2011



Although this timber looks rotten, it is just surface-worn, so is sound to be left in place.

The wooden boards are called "gutter carcassing" and will be waterproofed.

Then the roof will be felted and tiled.





The sump is sunk into the flooring to take away the rain.

The flagpole base has been restored and the pole will be replaced when roof repairs are done ...





... and the steeple is weathered but sound.



Steel beams have been inserted and secured at roof parapet level, and will support the existing wooden beams ...

... and this slot is called a "stub". It will secure a wooden beam.



Tower Roof Repair Progress at 8th June 2011

The roof repair is well under way.

The old tiles have been conserved and are almost back in place ...





... and here the corner tiles are waiting to go back on and complete the job!

The flagpole has been restored, repainted, and clamped back in place.



Tower Roof Repair Progress 15th June 2011



The rafters of the steeple have been felted with a modern breathable membrane.

The roof tiles are being replaced and will be completed next week.

A new joint replaces the rotten wood inside the steeple.



A wooden ventilation door in the belfry is just visible through the network of scaffold poles. These will be open whenever possible to maintain a healthy atmosphere and prevent the wood rotting again.





The leadbeaters hard at work!

There is only a small amount of lead around the steeple, but it ensures that rain is sealed out of the building.



The padstones in the belfry have been tapered and roughened to provide a key to hold the steel support beams in place, and to withstand the up, down and sideways forces of ringing bells.

These wheels are from the old clock. They are redundant because the clock is now electric, but they have been preserved as part of St John's church history.



Lowering the Bells 23rd June 2011

Bill Berry attaches chains to the bell ...



... and the lowering commences.

The network of chains and pulleys is called a "block and tackle". Each pull of the chain lowers the bell by only a few millimetres, so that the downward progress of half a ton of metal can be controlled and guided.



Down through the octagonal bell frame support structure ...



... and down



... through the trap





... and finally into the muniment room via the ceiling hatch.



The bell frame has been lifted from its octagonal wooden support beams by about 4'. It is held on the chains fixed in the belfry.

This octagonal structure supports the bell frame from underneath and is never seen unless the bell frame is raised.

The belfry walls and timbers are now seen, and much more repair works are found to be required to both stone and woodwork.

Bell Maintenance 16 September 2011



The bells are at floor level whilst the belfry timber and stonework is restored and the bell frame repaired.

Bill Berry greases the gudgeons on the bell fittings before replacing the worn bearings.



Worn bearings are discarded...





... and new bearings fitted.



Belfry Repair Progress at 11 September 2011

Further stonework is required in the belfry and we anxiously await the Quantity Surveyor's report.



A window sill in the belfry is prepared for replacement stone.

The new stone is hoisted into the belfry.





Brad the stonemason at work.

A completed stone window sill repair.







St John's Church Belfry Repair Progress at 11 September 2011

New red sandstone ashlars have been placed into the tower walls at belfry height.





Worn timber foundation beam at belfry height.



Steel support bracing to timbers in belfry.

We have some extra money from the Heritage Lottery Fund who have allowed us to use up the contingent element of their grant for repairs to the timber foundation beam and stonework in the belfry wall.

Worcester & Dudley Historic Churches Trust doubled their grant to us to help! St John's Feoffees agreed to release some funds, and more private donations came in.

We can move forward ...

At last the belfry is repaired and the bells can be raised. It is 25th October 2011 and we are months behind schedule because of the extra work...





...but the bells are up! St John's church can plan its ringing future!

THE TEST RING

The test-ring was held on Friday 25th November 2011. Radio Hereford & Worcester recorded the ringing and a report appeared on the BBC website, and on the Midlands section of BBC News 24.



Treble's going, she's gone ... Test Ring 25th Nov 2011 Left to right: Jenny & David Beacham (seated), Roger Hunt, Radio H&W reporter, Chris Stuart, Philip Evans, Martin Evans.

The church architect, Alan Simcox, was on hand with Bill Berry, the bell hanger, to answer any queries raised, and the ring was led by our vicar, Rev'd Chris Stuart, accompanied by Mark Regan, the DAC bells advisor, and ringing band members new and old. There were twenty people in our ringing chamber!

The test rings included rounds, call changes called by Mark Regan, Grandsire Triples conducted by Richard Pullin, and finished with a plain course of Yorkshire Surprise Major. We had a wonderful evening and it was a joy to hear the bells again after four years!

The event was attended by our patron, local artist David Birtwhistle, along with several Worcester & District Change Ringing Association members. As funders, they had to inspect the bells ringing in the gantry to ensure the work was satisfactorily completed.



Our dear delighted vicar, Rev'd Chris Stuart, about to lead the testring on 25th Nov 2011, with David Birtwhistle, Appeal Patron

Front to rear:

Beverley Winter, Tower Appeal Committee member.

Mark Regan.

John Sheehan, a St John's ringer. Martin Evans (seated), a St John's ringer.

Richard Pullin, guest ringer.



EDUCATION

We have had *over 30 applications* from people who want to learn to ring, including several members of the congregation, Worcester University students, parishioners and an entire company of Girl Guides, as well as some ringers who already have the skill and want to widen their experience.

The weekly bell practice evenings have been reinstated, commencing with absolute beginners which naturally meant that there was a discordant clangour at the first practice, and some local residents sought out the vicar to say that they had heard it, and wasn't it wonderful to hear the bells at last, and didn't they sound lovely!



Listen to me kid, and you won't go far wrong ...

Rev'd Chris Stuart instructing beginner Debi Henshaw at the first bell practice evening on 1st Dec 2011 Mark Regan shows Gemma Ward the ropes at the first bell practice evening on 1st Dec 2011



Teaching aid which shows how the bells swing and ring.





Guides at ringing practice on 24th January 2012



REFURBISHMENT OF THE CLOCK

Finally, the clock refurbishment commenced on Monday 5th December 2011, so the whole tower project will soon be complete.



Smith of Derby engineers prepare to refurbish the clock.

The chime wires are reinstated to run across the ceiling of the ringing chamber.



CONCLUSION

The Tower Appeal succeeded in raising the funds to fulfil its objectives of a weathertight roof, refurbished bell frame and working clock. It was challenging and rewarding, frightening and exhausting, but we did it. It has been a privilege to work on such an important project and we are proud of our contribution to the community.

The clock is chiming, the bells are hoisted, and we have over 30 people learning to ring them! We are really looking forward to celebrating our achievement with all our donors, the congregation, dignitaries and visiting clergy on Sunday 19th February. A peal will be rung at this event.

All this is most encouraging for the future of bellringing both at St John-in-Bedwardine and in the wider community.



Rev'd Chris Stuart gives a talk on bells and ringing to St John-in-Bedwardine Friendship Group on 30th November 2011

Further resources include and archive of reports and press photographs. See also the Benefactors' Book, and the information displays about the bells and clock.





Our website: www.stjohninbedwardine.co.uk email us: tower@stjohninbedwardine.co.uk