

Bats in Churches Conference

13 May 2016, Coventry

1. Sir Tony Baldry – Church of England perspective on the issues: communities and worship

- Church Buildings Council is a statutory body responsible for upkeep of all parish churches (c. 16,000). Around 6,500 have bats, but most have just small numbers.
- The key question is: how can large numbers of bats in churches be managed?
- Many medieval churches are attractive to bats, partly due to loss of habitat. These churches are also key assets to the community. Where there are large numbers of bats, hygiene is a particular issue.
- Example: the diocese of Exeter has around 600 churches, many Medieval, over 200 have less than 15 people in the congregation. Many volunteers spend hours each week cleaning as a result of bats, which has a huge impact on services as well as the potential damage done to historic fabric.
- The huge cost to affected churches is largely funded by weekly collections. This needs to cover cleaning, bat surveys which can cost thousands, along with other essential repairs.
- Key issue - How do we manage large bat populations? There are solutions: for example, work being carried out to seal interior and so that bats can only access the roof.
- The Church Buildings Council carries out research and provides guidance. In 2012 it helped bring together Historic England (HE), Natural England (NE), the Bat Conservation Trust (BCT), etc and raised the issue with government.
- Bats in churches present a complex problem but hopeful that there are solutions, we need to find a way to manage the situation to suit the needs of congregations, historic environment professionals and bat conservationists.

2. David Bullock - National Trust – Research results and development of approaches

- Presenting evidence gathered by Professor Gareth Jones and colleagues at Bristol University about new mitigation methods which can cause minimum disturbance to both bats and congregations. Work funded by Defra and HE.

Background

- At least 8 species of bat are known to use churches for roosting
- Approximately 60% of pre-16th century churches are estimated to contain bat roosts.
- Conflict arises when bats roost or fly internally within churches with droppings and urine causing damage to historic artefacts, a cleaning/cover up burden and restricting use of churches for worship or community functions. The research focused on Natterer's and soprano pipistrelle bats. The study showed that Natterer's bats within the same colony/roost have individual feeding areas, within 4km of the church/roosting area. Significance is they do not have any other roost site – just the churches used in the research.

The research investigated a “carrot and stick” approach experimentally, under licence by NE. This included “carrots” of heated bat boxes and three types of deterrent.

Mitigating problems: artificial bat boxes, deterrents.

- **Acoustic deterrents:** emit frequencies to deter bats. During the period of using the deterrent, the bats left or moved to another part of the church; after the deterrent, bats return but not to same levels. Did not affect where the bats went to feed as they still went to their preferred places.
- **Illuminating roost entries (light deterrent):** light is too effective, if applied to roost entrances, bats are trapped or entombed in the roost (do not go in and out) which could be devastating to bat communities.
- **Raising ambient lighting (to stop bats going to certain places in the church):** creates “no-fly zones” to preserve certain areas, away from roosts. When light is taken away, they go back. (Less effective on pipistrelle bats, which are less sensitive to light.)
- **Bat boxes:** during the study the bat boxes placed in the churches were not used.

- **Boxing in:** tested “boxing in” roosting areas around entry points, retaining roosting space but preventing access to the rest of the church. This has great potential in allowing bats to stay in churches but minimising their impact on churches. Should be explored further.
- **Conclusion:** In Norfolk, Natterer’s bats are dependent on churches for roosting. However mitigation does have an effect. May be able to move the bats to less sensitive areas in churches through careful use of these techniques, which need permission of NE to ensure bat’s conservation status is maintained. These studies refined techniques and equipment to develop a toolkit and tailored solutions for pilot churches. It also informed development of a new type of licence which is currently being trialled by NE.

3. Amanda Craig: Natural England perspective on the issues: bats and conservation

- Natural England (NE) recognises the challenges that bats raise in churches, especially the damage they cause to fixtures and historic fabric and the burdens this places on congregations.
- Some large bat breeding populations are vulnerable and important – like the buildings they roost in. We need to find long-term solutions which work for all.
- It is important to work collaboratively with professionals and congregations.
- The research already mentioned does show that there are solutions and that we need to try them out to learn more and to further refine these.
- NE has been changing its approach to licencing. Bats are important but are aware that the work which needs to be done in buildings should be able to happen with the minimum of bureaucracy.
- **HLF funding bid:** HLF funding bid was not successful this time but received some positive feedback. The bid was a partnership between NE, Historic England, Church of England, Bat Conservation Trust and Churches Conservation Trust. The partnership is keen to continue to develop solutions and to build on the momentum the project has achieved.

4. Deborah Lamb – Historic England perspective the issues: people and places

- The best long term scenario for the future of heritage is to get people to care for our historic buildings. The important issue of bats engages so many people.
- English Heritage split into two organisations (Historic England and the English Heritage Trust) in April 2015. At HE we have been working to develop and promote our brand and both organisations are doing well.
- Partnership working critical to HE and the success of the historic environment, which is why HE is excited to be involved in this project.
- Best way to protect heritage is to have it open and accessible to the local communities, especially historic churches. There are many volunteers who look after churches but they face challenges and it is important to maintain the morale of these people who are vital to the survival of our historic churches.
- We need new management methods to reduce the burden of sharing churches with bats. Solutions which are crucial to people, bats and churches.
- Historic fabric can be damaged by bats – it cannot be cleaned in the same way as other material and any damage done can be irreparable.
- There is a strong expectation from the public for churches to be open during daylight hours. The Government review into the Sustainability of Church Buildings, which was recently announced, is likely to encourage community uses.
- Many services provided by churches also rely on kitchen facilities, which can suffer from hygiene problems relating to bats.
- Congregations and those who care for buildings can feel ignored and suffer from loss of morale – especially as churches are often cared for by fewer than 10 people.
- **HE's long-term involvement:** involved in the research discussed earlier, helping to develop tailored solutions and guidance for churches; discussions with many partners to help implement new approaches; next step is to help churches and congregations to implement these solutions.
- People have shared churches with bats for centuries but recently changes mean that it is hard to sustain this relationship.
- HE wants to facilitate solutions for both bats and buildings – and particularly which raise the morale of those who look after our historic environment.

5. Julia Hanmer – Bat Conservation Trust perspective on the issues: bats and people

- At the Bat Conservation Trust (BCT) the relationship between bats and people is key. BCT work closely with networks of local bat groups, professionals and all who come across bats.
- Recognise that churches can experience severe issues with bat roosts and BCT are committed to helping to solve these issues: this means understanding both bats and the issues they present. Bat species have different requirements and will require different solutions.
- Historic decline has led to a huge loss of bat populations which has led to their legal protection. Bats are slow to recover from decline and they only have one young per year. Bats need woodland, insects and flight lines to connect them to their roosts and feeding grounds. Have different sites for hibernation and breeding.
- Churches are relied on by bats for shelter so BCT works with churches to provide support and advice. BCT runs the Bat Helpline – volunteers provide free visits and advice on behalf of Natural England. They also monitor bat populations (National Monitoring Programme) to identify trends (volunteers count roosts etc. including in churches).
- Local bat groups (at county level) also provide support – each is different and has different capacity and expertise. Some work closely with churches.
- Where there is a good partnership and where bats are understood, there is more scope to find solutions at a local level.
- There is more to be done, especially where there are large colonies of bats. There are ways to find flexible solutions with churches.
- Hoping to do new survey of bats in churches to better target help and and to measure how the issues are changing over time.
- There is an opportunity to harness the interests of churches and bat experts and to reach out to local communities, who could then all come together to help churches with bats.

6. Morning Plenary Session

Q: What work is being done on moving pipistrelles and Daubentons?

A: The recent research already mentioned has in part involved soprano pipistrelles and some work was also done, [commissioned by Defra](#), in looking at the impact of excluding them from roosts in houses; they often have multiple roost sites which other bats do not.

Q: Regarding Natural England bat licensing. Currently licences have to follow from faculty consents, which can have a negative impact on building projects. Is there thought being given to making the process concurrent?

A: The development of new licence is aimed at doing this and Natural England is doing a trial. A faculty will still be needed for any of the works authorised under a licence and applicants will need to ensure that they have permission for both.

Q: Has there been any research into the potential impact of liturgical practice (e.g. use of incense) on bat populations?

A: (Answer from James Hales) Not scientifically tested but has been suggested before (eg my work looked at 150 years of Church Times archives) and does not seem to be effective. Some historic solutions to bat problems (mainly involving poisoning bats) have inadvertently caused some of the issues we are facing today.

Q: Good to hear about partnerships at national level. Could the diocese be of help at a local level, eg making churches aware of BCT helpline etc. in disseminating information?

A: The Chair welcomed this suggestion and noted that this might be dealt with in the afternoon discussion regarding practical things which the partnership project could take on.

Q: Bat helpline – what is the process re volunteers and feeding back to BCT/NE as there have been inconsistencies in advice given by different people.

A: BCT and NE want to hear about any inconsistencies so these can be followed up. The process is that the church rings the helpline, who will (providing the works / action involved are covered in the NE free advice service remit) arrange for a licenced Natural England

volunteer to survey the church. The volunteer sends a roost report form to BCT with recommendations and BCT write an advice letter on behalf of NE. Some letters for straightforward cases are standard and are sent straight out whereas some more complex cases go to NE for signoff. Sometimes the volunteer may request in the report form that they can check over the letter to ensure it reflects the visit and their recommendations accurately. There may be further action to consider regarding volunteer/church/BCT relationship to help with this.

Q: Under low-impact licensing there are timescales and there have been some cases where projects have been delayed (e.g. through bad weather) and there is conflict with the breeding season.

A: Stephen Rudd noted that the intention is to reduce bureaucracy but at times there are issues, and difficulties do exist.

A: Sylvia Jiggins noted that in Essex there is a system where voluntary licensed bat workers and trainers represent NE on the Diocesan Advisory Committee (DAC) so they see the cases where faculty is being applied for. Have good knowledge of local churches and can advise and have good relationship with DAC. Also involved in large re-roofing projects – question of phasing the work so that it fits in with the bat seasons. Work has been able to continue if there are other known roosting spots nearby.

Q: Are all bats endangered and is there change? Would there be scope for population control?

A: BCT monitoring programme monitors 11 of 17 species and has done since late 1990s. Currently there are early signs of the beginnings of recovery and stabilisation – beginning to see a conservation success story but there is a long way to go before the populations recover.

Q: Good to raise the point of the low morale of people in the churches looking after bats. Also good to hear about potential for boxing in. It may be exceedingly costly. Where would the funds come from? The worshipping community is also important and the church is a community hub.

A: Bespoke solutions are key – boxing is one of several potential solutions. Pragmatism is needed. The partnership are looking at solutions and funding – the work to bid for HLF funding is part of this.

A: Tony Baldry – there is no one size fits all solution; we are still learning about solutions and how best to do things. As we start to work more collaboratively we will continue to learn.

7. Tim Allen – Case Study 1: impact on fabric and solutions: St Nicholas, Stanford-on-Avon

- HE has been working with St Nicholas for several years. Church keen to find some ways forward on the issue of bats in the church which would meet the historic environment needs of the church.
- Parts of church date from the 14th Century. Bat population mainly soprano pipistrelles, which are using the roof void as a maternity roost (significant site for the species). Excreta are the main problem in various areas. There are also brown long-eared bats in the roof void of the nave (low impact as they take different routes out). There is a huge contrast of impact between species, due to the routes they take in the church.
- HE and NE researched how the bats were using the church space and trialled a heated bat box in a different area of the church to see if they would use it. Unfortunately, they did not, but as this is a developing field, the knowledge is still useful. Also provided funding for cleaning to support the congregation and to provide dust sheets for the monuments. Not a permanent solution but aimed to take the heat out of the situation short term.
- Brought St Nicholas into a scheme of trials with Defra/NE research. Work taking place now – installation of heated boxes in interior and exterior of north door, arranged such as they have to go through the box to get in. Only seeing their first reactions to the bat boxes now – don't know whether they will make more use of the box in the medium/long term or seek new ways in.
- It is key to build up picture of the bats' habits and how we can have impact without negatively affecting them. As habitats have reduced in the landscape, churches have

been bearing a disproportionate load on behalf of society. There may be a need to look more closely at new developments/capacity of other habitats to maintain resilience.

8. Phillip Parker – Case Study 2: impact on communities and solutions: East of England cases

- Have surveyed 193 medieval churches in Norfolk and there are almost 700. Every church surveyed so far has evidence of bat use.
- Have categorised churches into three levels: high level bat use (20 churches with over 100 bats = 10% of survey); moderate– may be maternity roosts but the level is manageable (50 churches with 10-100 bats = 25%); low level bat use (123 churches– 60%, maybe up to 12 bats), church not always aware of the bats.
- Most common bat is the common pipistrelle, but Natterer's bats are the most numerous.

How do communities respond to bats?

- Some engage; create bat guides for church features. This is being encouraged through various models:
 - **Bat nights to engage people**, dissemination of information.
 - **Bat Champing** night (project with CCT)
- Providing alternative roost provision outside the church to encourage them. Has been successful in some cases. Bat slates inserted when the roof was repaired.
- Fund raising – can help churches with fundraising, eg bat evenings, etc. to help fund repairs.

9. Denise Foster – Case Study 3: impact on ecology and solutions: Herefordshire cases

- Part of Herefordshire Bats and Swifts in Churches project since 2014. The diocese has over 400 churches.
- The project has developed a strategy for visits through targeting churches where bats are known to roost. The project promotes the VBRV service (NE); training volunteers; provide an information pack to churches.
- The project uses three levels of survey: preliminary (call in, no appointment, make notes); full (appointment with vicar; full inspection); dusk and dawn.
- Have found a lack of awareness of NE's Volunteer Bat Roost Visitors programme, and resentment over paying fees for ecologists. Visitor service only works if you have expertise locally.
- The project has completed 61 full surveys, three dusk and dawn, five volunteer visits. It will continue monitoring work with three churches. Provide recommendations to church re wildlife (bat boxes, tiles etc.).
- No guarantee that mitigation measures deter bats; believes that local authorities could do more for wildlife when they build new houses with alternative roosting provision – may alleviate problems with old buildings.
- End of 2015 got grant from HLF to install boxes in 10 churches, display boards, bat walks and monitoring. Increase understanding of how bats use the boxes.
- Churches feel they have support and are engaging, working with the diocese and the MP. Now working with the Shropshire Bat Group too.

10. Q&A on case studies

Q: What was the cost of the bat boxes at St Nicholas?

A: Current ones supported by NE funding, £4000 for the boxes including the cost of monitoring.

Q: How do people deal with the smell?

A: Regular washing of any cloths at laundrette. Change the cloths regularly. Disposable banqueting roll is another useful alternative material. Smell held within the building as well

as fabric etc. Churches have a number of absorbent fabrics (wood, masonry, etc.) and once they have taken on the smell, it's not easy to remove.

There was a suggestion for more research into smell and process of degradation of fabric.

Q: Does every county have a bat group?

A: All bat groups are listed on the BCT website, only some groups are large enough to become fully involved with individual projects.

Q: Could NE do more to encourage the provision of roosts in new build?

A: NE are looking to increase this and it is part of the work NE do across the board.

A: Sylvia Jiggins noted that, at Stanford, have they tried making direct access from roof void for the soprano pipistrelles and believes that they would find and use new alternative entrances faster than people think.

11. Stephen Rudd – Bats in churches project: what next?

- NE and partners made bid in 2015 to HLF – the talk covers why a bid was made, what it hoped to achieve, what other work NE is involved with and where we go next.
- The bid to HLF December 2015 which was unfortunately not successful, but there are many reasons to be positive about where we are.

Why bid for funding?

- NE and partners have undertaken a number of projects which are starting to give insight into how bat issues might be managed. The partnership works well together and has gained confidence to start tackling this complex issue. All solutions are case by case and there is a dearth of individuals with the right skills to help. Engagement and community support is vital in managing such issues.
- Partnership started to think about how to take this forward at a national level and HLF seemed to be the best fit for potential funding. HLF projects address heritage, people and communities. Started discussions with them in 2014.

- Aim was a two stage project (seven years): a two year development phase and five year delivery phase. Focussing on how to reduce the impact of bats on churches and in communities without impacting significantly on the bats; aim to have guidance for solutions, building professional and volunteer capacity, engaging communities and collect data for future use. Share knowledge and best practice/good examples.
- Had to first identify churches where there is significant bat use – compiled data from CoE, DACs, Bat Helpline etc. Built map of 100 churches nationally to begin with. The project would look to direct significant resources into approximately 30 of these and use the work to refine knowledge and to become more efficient and effective so that knowledge can be passed to hundreds or even thousands of churches.
- Key is to engage communities, planned to have three engagement officers to work closely with church groups and create networks etc.
- Main reason for lack of success: insufficient funds in a competitive funding round. The partnership received positive feedback from HLF – recognise the importance and potential.

What next?

- Still great intent, still good partnership and momentum, clear need for continuation of project, national project still makes sense.
- Work not wasted and can apply again to HLF for a national bid although several options for another potential bid or a smaller bid, etc.

Bats in churches class licence

- To enable more effective management of impacts from large bat colonies in churches and historic buildings. NE is trying to cut bureaucracy; work needs to be effective and bats need to be protected. There is a trial phase at St Nicholas' Church, Stanford on Avon and NE hopes to refine the approach ready for the licence to be used more widely.

12. Facilitated session and feedback on top priorities for project partners to consider

- Sara Crofts, HLF, noted that another application would be welcomed. The strength of this event is that there are people from many groups and so knowledge sharing has been great. Nationally, the good messages are not travelling as widely as possible, would be good to consider how to share best practice and knowledge. **Shared learning to break down barriers would be a good first suggestion for the panel.**
- Stephen Rudd responded that events like this are a great step forward in breaking down barriers, there has been great engagement between sectors. This helps to identify the common ground. **It is hoped that there will be other similar events to share understanding and knowledge.**

Q: Great work is being done by local bat groups, is there a role for the various county wildlife trusts?

A: Some bat groups are already part of these and others work closely with them. Each bat group is different but they are all working with local partners.

Q: Is there an appeals procedure for bat licences?

A: There is no appeals process at the moment but NE is looking at the licence procedure.

Q: Is the bats in churches class licence given to the church or for the individuals carrying out the work?

A: Bats in churches class licence is for managing large bat populations and the responsibility is given to the ecologists carrying out the work, once they have a licence they can carry out work where they feel is appropriate but have to register the site (church) with NE and explain the reasons for it. More information on bats in churches licencing will be available soon.

Additional

An information note on the bats in churches class licence will be circulated to all attendees of the workshop and wider stakeholders before the end of July.

13. Closing remarks

The presentations and discussions today have brought up many pertinent issues, some next steps would be:

- There are changes which have been shown to affect bat behaviour – we need to know more.
- There are practical ways of management to deal with the needs of congregations. We need to communicate these better. And this conference has been very helpful in identifying the gaps in knowledge.
- There is a need for better guidance on the licencing regime.
- More communication and better training for all parties – at local and national level and for all sides dealing with bats in churches.