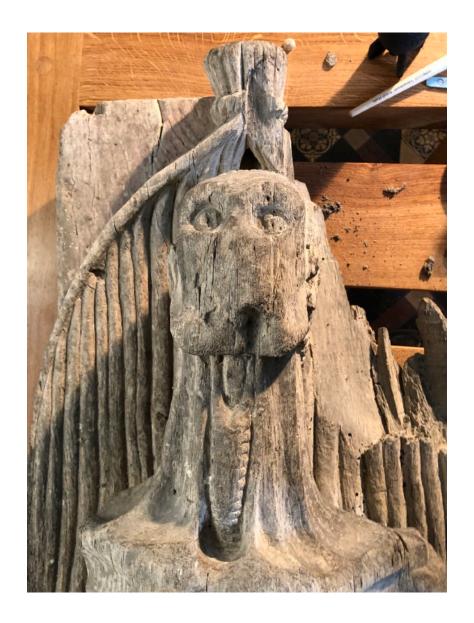
St John the Baptist church, Keyston, Huntingdonshire

Post-Conservation Report of the Fifteenth-Century Cadaver November 2021



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Preventive Conservator and Heritage Consultant

Friday 17th December 2021

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Executive Summary

Rachel Arnold (RA Conservation) carried out conservation cleaning on the cadaver effigy of St John the Baptist Church, Keyston, between Monday 20 November and Monday 27 November 2021. This work follows the conservation suggestions recorded in the Condition Survey written in December 2020, by Rachel Arnold (RA Conservation). This report examined the condition of the cadaver and explored methods for safe and appropriate conservation. The cleaning also comes after the installation of a new case which will protect the cadaver from ongoing deterioration.

The cadaver effigy is of national significance, being the most extant surviving wooden cadaver effigy in the country. Over the years it has suffered some structural loss, insect/pest damage, surface dirt and general degradation.

The purpose of the conservation work was to remove built-up, damaging dirt from the surface of the cadaver. This was primarily done to preserve the original fabric and prevent further deterioration. As an additional result, the cadaver will look cleaner and well cared for. No restoration, infilling or retouching was carried out.

This report summarises the conservation approaches, work carried out and any additional findings with photographic evidence.

The conservation work has been made possible through funding from the Cambridgeshire Historic Churches Trust.

Core data

Church and Parish	St John the Baptist, Keyston, Keyston and Bythorn, Huntingdonshire		
Address	B663, Keyston, Huntingdon, PE28 0RE		
Diocese	Ely		
Conservator	Rachel Arnold, Preventive Conservator at RA Conservation		
Contact	07791148746 / rachel@raconservation.co.uk		
Date of conservation	Monday 20 November 2021 - Monday 27 November 2021		
Report completion	Sunday 19 December 2021		
Church Representatives	Andrew and Liz Ford (churchwardens and keyholders)		
Listed Grade	I (List entry number 1267649)		
Church Heritage Record	614179		
Note on conditions during work	The conservation cleaning was carried out in mid-late November. The lighting was fair in the daylight but by 1430hours each day the light began to wane. Two work lights, one torch and interior church lighting was used to improve visibility		

Sources

Arnold, R, 'Condition Survey of the Fifteenth-Century Cadaver,' 2020

Welch, Dr Christina, 'Report on Wooden Sculpted Cadaver in the Church of St John the Baptist, Keyston', 2020.

Leaflet: Welch, Dr Christina, 'Keyston: a unique late-medieval carved cadaver sculpture' - leaflet produced for Keyston church in 2017.

Welch, Christina, 'The Theology of Late Medieval Carved Cadavers', *British Carved Cadavers*, http://britishcarvedcadavers.co.uk/theology.php, accessed Friday 18th December 2020.

Introduction

St John's church is located in the centre of Keyston, a rural village and conservation area within Huntingdonshire. It is grade I listed, with many significant architectural features and retains much of its original cohesive architectural character, particular of the fourteenth century.

The church is usually kept locked and the key is available from the churchwardens in the neighbouring house. This is partly due to the risk of theft of the cadaver, but also because of how difficult it is to make the church presentable. St John's is home to a large colony of bats and their excreta covers the whole of the church interior. As a result, most of the furniture is covered in plastic sheeting to protect it from staining caused by bat urine.

The church community are keen to improve this situation, maximise the potential of the church and encourage the wider population of the village to see it as a community asset. In Summer 2021 a series of surveys were carried out by ecologist Barry Collins (B.J. Collins Protected Species Surveyors) and plans are underway to restrict the movement of bats within the church. Following this, it is hoped that the church can be opened more frequently and events can be hosted.

Securing the preservation of the cadaver was seen as an important step toward to helping the church become a community asset. It is safe from ongoing damage and it's rarity, significance and artistic merit can now be appreciated by the wider population.



Interior of the building with pews, pulpit and other furnishings, covered in plastic sheeting.

Description of the Cadaver¹

The cadaver is oak and is the most complete wooden eviscerated cadaver in the country. It is therefore, a unique artefact and is of national, if not international significance. For this reason, it demands particular care and attention. The body is smaller than life-size, at around 3/4 length, surrounded by a burial shroud, which is knotted at the head (figure 1) and held across the genital area, by one hand.

The rest of the body is uncovered while the folds of the shroud lie around it. The body is in an evident state of decay. The ribs, spine and throat are visible while the arm has details of emaciated muscle and bone (figure 2). The torso has been eviscerated with the organs, especially the digestive organs removed (figure 3). The lungs and the bottom of the heart are just visible behind the ribcage. The anatomical accuracy and skill of the carving indicates that the sculptor had knowledge or some experience of the procedure of evisceration and had certainly seen more than one decayed body. The head is tonsured, indicating that he is a cleric.

The sculpted wood has been radio carbon dated to 1400, which means the sculpture can be tentatively placed to a date of around 1405-1415.² The deceased cleric would probably have commissioned the sculpture himself to adorn his tomb.³ A sculpture of this sort was often chosen for its symbolic and theological purpose, showing that worldly and material possessions cannot be taken into the afterlife. There are only 42 surviving examples in England and Wales. All those who commission these types of sculpture would have been very wealthy and stripping them from their wealth in this form, shows their inner spirituality, brings them in closer connection to god and more likely to be accepted into heaven.⁴

The date of the wood, expense of its creation and chosen subject matter point us toward a potential person that the memorial commemorates: the cleric William Stuckley who died in 1408.⁵

There is extant polychromy on the sculpture which is most visible in the red paint decorating the surrounding base (figures 2, 6 and 12). Red paint generally survives better than other colours, due to its chemical make-up. Welch points out that it may be possible to refine the date that the sculpture was created, to a greater degree of accuracy, within the suggested decade through gesso and paint analysis.

Significance

This artefact is highly significant due to its unique status, wholeness and extant surviving paintwork. The high quality of the carving, and its role in demonstrating the understanding of human anatomy, techniques of evisceration and preparation for burial at the time, heightens that significance. Amongst only 41 other cadavers in England which represent a specific theology in terms of attitudes to death, this is the most complete wooden eviscerated one. Its significance country-wide is well recognised and documented.

¹ Copied from Arnold, R, 'Condition Survey of the Fifteenth-Century Cadaver,' 2020

² Welch, Christina, 'Report on Wooden Sculpted Cadaver in the Church of St John the Baptist, Keyston', 2020.

³ Ibid.

⁴ Welch, Christina, 'The Theology of Late Medieval Carved Cadavers', *British Carved Cadavers*, http://britishcarvedcadavers.co.uk/theology.php, accessed Friday 18th December 2020.

⁵ PCC comments, Churchwardens accounts and leaflet produced by Christina Welch, 2017.

Condition of the cadaver

The following is a summary list of the key points from the condition survey of December 2020.

1. Display

- The cadaver is on a wooden, Victorian funerary bier. It aids ventilation but has been subject to pest activity. Being old, it may suffer from structural issues and degradation
- The cadaver is covered with a cotton sheet which prevents falling dirt. May absorb bat urine which could transfer through the cotton. It brushes against the ancient wood and paint which could damage it
- The cadaver is in the west end, which is lower and more damp than other areas in the church

2. Structural issues

- There are large physical losses and some areas that are not fully attached
- There are cracks in the wood across many areas of the structure
- The surface of the wood is soft due to age and many years of fluctuations in humidity
- The wood on the underside of the artefact is cracking
- As a result of the above the surface of the wood is vulnerable

3. Pest activity

- Many flight holes across the cadaver, but mostly concentrated around the base and the section beneath the feet, likely caused by Death Watch Beetle (flight holes 2-3mm) and Common Furniture Beetle (flight holes 1.5-2mm)
- The underside of the sculpture is much more textured and has seen more pest activity (figures 14 and 15). It is far more vulnerable with built-up frass, cobwebs and dead spiders
- One live cocooned larvae of a Webbing Clothes Moth was found

4. Surface dirt and deposits

- Thick layers of dust, denser in crevices and within the cracks or splintered areas
- Bat droppings, bird droppings, mortar/paint splashes insect wings, textile fibres and insect frass litter the surface of the wood. Some are more adhered than others
- Some of this surface dirt hides the paintwork

5. Surface decoration

- Much medieval paintwork remains despite considerable loss
- Paintwork is flaking in areas but seems to be robust (figure 16 and 12)

Conservation approach

The following is a summary list of the key points from the condition survey of December 2020 and a discussion of the actions that have been implemented since then.

Improve the environment

The cadaver has been moved to the chancel, which is less damp than the west end of the nave/ north aisle. It is an area in the church that is slightly higher, has a raised floor and is further away from external sources of damp, so should be marginally drier and give the cadaver more stable environment.

Environmental monitoring could be carried out within the church. Using humidity and temperature monitoring and thermal mapping over the course of a few seasons, an understanding of building and its performance can be built. There may be some additional and subsequent small actions that can be taken by the PCC e.g. managing water runoff, drainage and ground-drainage within the churchyard.

Bat surveys have been carried out and mitigation is planned for 2022, depending on funding. This will improve the general environment and cleanliness of the church, ensuring that it can be open more frequently, host events so that the public can appreciate and enjoy the cadaver and church interior. It will also ensure that the interior will suffer less from the damage that bat urine and droppings cause.

Storage and display

Local carpenter company was commissioned to create a bespoke enclosure/case for the cadaver. It is made from oak and perspex, with slatted base and holes at the top to encourage ventilation. This will protect the cadaver from dust, falling debris, bat droppings etc, be easy to clean and be more secure from theft or accidental damage.

The case is well finished and looks professional. It gives the cadaver an elevated presence within the chancel, to the north of the altar and makes it look well cared-for and presentable.

Cleaning

The following cleaning was recommended in the condition report and was carried out during the conservation in November 2021.

- Removing large, loose pieces of debris
- Dusting and conservation vacuuming
- Removing debris from between cracks
- Removal of strongly adhered surface dirt
- Removal of some of the frass

Details:

Task	Equipment	Description	Comments
Removal of larger pieces of loose debris	Tweezers	Lifting loose large items from the wood	This was done first to ensure that no large bits of detritus was pushed along the wood that may damage the paintwork. This was successful

Task	Equipment	Description	Comments
Removal of loose surface dirt	Variety of brushes (pony hair and hogs hair) Conservation Vac	Gentle brushing to remove loose surface deposits and to discover the stability of the surface of the wood and polychromy. Vac on low suction where there is no vulnerable paint layers.	For the most part, dust and loose surface dirt was easy to remove. But this took several repeats across the whole of the effigy because of the large quantity of dust and the fact it moved around during cleaning and between days of cleaning. The wood was soft in places and there were some splinters. Paint was vulnerable and was found to be flaking in some areas. These were more gently brushed and blown out, with dust blower. This action could have been repeated more time and more dust would have been found but the more cleaning activity that takes place, the more risk there is to the fragile wood and the paint.
Removing debris from inside cracks or open structure of the wood	Dust blower Conservation Vac Scalpel Tweezers Blunt wooden skewer	Using the dust blower, blow the loose items out of cracks, lift spider webs, insect wings etc using the scalpel and blunt skewer. Vac on low suction if necessary.	Top layers of build-up debris were removed from all crevices. This was relatively easy to achieve and was successful. On the lower edges and underside of the carving were crevices that were largely built-up with compacted insect frass. This was removed where possible, without detriment to the wood
Removal of strongly adhered surface dirt	Scalpel Firmer brushes Tweezers	Some of the bat droppings can be lifted off using tweezers. If they are very stuck they may be lifted off using the edge of a scalpel. Using the very edge of the scalpel, other surface stains including bird droppings can be lifted off.	Most of the strongly adhered surface deposits - bird droppings, mortar/paint splashes, bat droppings etc were removed by gently lifting the actual accretion. Several of them (c.5) still have some remains of the debris in physical or stain form. These could not be removed as the surface of the wood or paint beneath would be lost.

Other Findings

There are some other key findings to note while the conservation work was underway.

Paintwork (figures 12 and 16)

Small fragments of paint were found in the built-up dust. These have been saved, along with the dust, although it is impossible to identify where they came from so re-adhesion will not be attempted. It has been suggested that precise dating of the paintwork can be carried out through testing. This can be progressed if the parish wish.

Some of the pigment was powdery. Especially around the left hand side of the base of the effigy. This was brushed very minimally to reduce loss of pigment.

There were brighter areas of paint beneath some of the surface dirt.

• Insect remains (figure 11)

Buried in the crevices of the body and the shroud, were two insects carcasses. These were beneath their own webbing and were removed.

There was no evidence of living insects in the wood.

• Mortar like substance (figures 9 and 13)

There was large build up of a mortar like substance with lots of aggregate in between base and body. This is likely to have been some form of stabilisation or historical repair. It decided not to remove it entirely but scale it back slightly to make the definition clearer and remove risk of damp and pest activity

This choice was encouraged by the fact that in this area, two/three encased insect exoskeletons. It was necessary to ensure that no more were present along the rest of this build-up

Further recommendations

· Monitor the cadaver for signs of pest activity

At the very least this should be done monthly and using a torch and camera to aid visibility. Particular attention should be paid at the most active of times for insects - namely October. A simple log with photographs can be kept to help identify changes

· Monitor the cadaver for signs of structural change

At the very least this should be done when the environment in or around the church changes dramatically. If the temperature suddenly gets a lot drier or a lot wetter this could cause fluctuations in moisture in the cadaver. It is in an enclosure which would help to stabilise it, but visible inspection should still be carried out.

A simple log with photographs can be kept to help identify changes

Carry out small tasks to improve the environment within the building

Cleaning out gutters, maintaining drainage flow, allowing for appropriate drainage in the churchyard. This will help with building performance and help maintain stable levels of humidity in the church. Look for broken tiles, window panes etc. Create a calendar to help manage this (SPAB FIM calendar is useful. Found here: https://www.spab.org.uk/sites/default/files/SPAB-FiM-maintenance-calendar.pdf)

In particular, focus on late autumn, and early spring months, where there is more rain.

Conclusion

Overall, the conservation work means the cadaver is in a better state of preservation, at reduced risk of degradation from external and environmental factors and it has an improved physical appearance.

The cadaver still has the same major structural losses, scarring, insect flight holes and physical degradation. Surface dirt has been removed where possible although there are still some small areas of slight staining. These have been left due to the risk of loss to the original wood and paint. No original wood has been lost in the process of the cleaning. Paintwork has been entirely retained although some already detached fragments have been removed and saved.

The client should continue to monitor for pest activity and structural movement.

Appendices

Images



Figure 1: Right hand side of the cadaver effigy. The top portion of the arm is missing from the shoulder. The trachea is protruding out of the throat and ribcage and muscles are visible. There is a white spot (bird dropping) on the neck which is still to be removed. (19 December 2021)



Figure 2: Top right of the cadaver effigy. The top of the tied burial shroud is visible as is the painted area of the base. (19 December 2021)



Figure 3: Eviscerated torso of the cadaver effigy. Bottom of the heart is visible and all other organs have been removed. (15 December 2020)



Figure 4: Part of the left hand side of the cadaver, with evidence of the pale painted areas and of several types of surface dirt. There is dust and general debris in the cracks and also bird and bat droppings. (15 December 2020)



Figure 5: Face and top of cadaver before cleaning (15 December 2020)



Figure 6: Face and top of cadaver after cleaning (21 November 2021)



Figure 7: Feet, legs and lower section of cadaver before conservation (15 December 2020)



Figure 8: Feet, legs and lower section of cadaver after conservation (21 November 2021)



Figure 9: Back of neck where it meets the base before conservation. Showing built up layers of debris (19 November 2021)



Figure 10: Back of neck where it meets the base after conservation. Showing built up layers of debris (19 November 2021)



Figure 11: Back of neck where it meets the base during conservation. Discovery of beetle carcass within debris (19 November 2021)



Figure 12: Left side of base of effigy. The line of red pigment indicated within the red outline is powdery and vulnerable. (26 November 2021)



Figure 13: Left side of the shroud by the head. Piece of mortar like, loose aggregate (19 November 2021)



Figure 14: Right side of base with evidence of insect activity and some of the holes packed with frass. Some ares of the frass have been taken out. (19 November 2021)



Figure 15: Left of the base with extent evidence of pest activity. Notice the channels of movement from the insects. (19 November 2021)



Figure 16: Pale paintwork visibly flaking, some insect flight holes and dust/debris in crevices. (19 November 2021)

Log

Day 1

Dusting enture surface.

Focused cleaning and removal of surface accretions on face and top of chest

Day 2

Repeat dusting of area cleaned in day 1.

Focused cleaning and removal of surface accretions on cadaver's chest torso and arms

Day 3

Repeat dusting of area cleaned in day 2.

Focused cleaning and removal of surface accretions on legs of cadaver and shroud to right of head

Day 4

Focused cleaning on left hand side shroud and base

Day 5

Focused cleaning right hand side shroud base and brushing beneath cadaver

Final dust and vac List of samples

List of Samples

The most important samples contain fragments of paint and pigment that were loose in the dust on the surface of the shroud. If the client wishes, they can request this to be dated, which will give an accurate date to the polychromy decoration of the effigy. It is presumed that this is the original paintwork but note, there is a possibility that it could be later.

Sample 1: Debris from the mounting hole in the head

Sample 2: Dust including loose paint fragments from the left side of the shroud

Sample 3: Insect frass taken from the packed out channels in the right side