



Historic England Research

Discovery, innovation and science in the historic environment

Our heritage beneath the waves



Historic England

Issue 07 | Autumn 2017

I'm pleased to introduce this, the seventh, issue of our *Historic England Research* magazine, which continues to reach an increasingly wide audience.

Following our last themed edition on the Stonehenge landscape, this one returns to our normal portmanteau approach. But, in doing so, I hope it serves to illustrate the wide ranging character of the research undertaken or sponsored by Historic England. In this issue alone we span landscapes that range from the submerged, the urban, the designed and the uplands. We also address a number of topics where research is breaking new ground and challenging mainstream perceptions of heritage, whether by illuminating the tragic story of *SS Mendi* and the significance of Jewish cemeteries, or through crowd-sourced research on the heritage of the LGBT community.



In examining the SEAHA project and introducing our new [Research Agenda](#), we also return to a theme explored in issue 2 – our increasingly close relationship with the higher education sector. Earlier in the year we were delighted to learn that this relationship had been further cemented when Historic England was accorded Independent Research Organisation status with the UK Research Councils. This testifies to the quality of the research that we undertake and allows us to join the 19 other bodies also accorded that accolade: organisations described by Professor Andrew Thompson, Chief Executive of the Arts and Humanities Research Council, as the UK's ‘cultural crown jewels’.

I hope you enjoy this latest addition to the series and, indeed, previous issues of the magazine – which are which are available to download from the [back issues webpage](#).

Steve Trow

Director of Research, Historic England

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‘We Die Like Brothers’

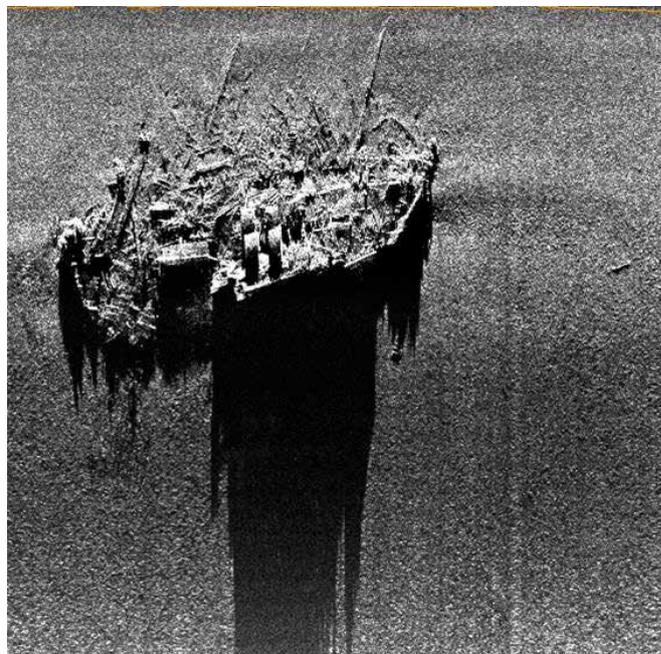
Linking First World War archaeology with equality and social justice.

In the cold darkness, the Liverpool troopship *Mendi* is steaming slowly through dense fog south of the Isle of Wight, sounding its whistle to warn nearby ships. It is just before 5am on the 21st February 1917 and the *Mendi* is en route from Cape Town to Le Havre in France.

It is a year of deep war with no end in sight and the ship is carrying 824 South Africans vital to the British war effort. The atmosphere is tense – German U-boats have made the English Channel a very unsafe place for shipping.

Captain Yardley has just left the bridge when he hears an urgent warning being sounded. Rushing back, a huge impact knocks him off his feet. As he gets up he sees a much larger steamship backing away into the fog, leaving an enormous hole in the side of his ship. Very soon after he gives the order to abandon ship. The flooding *Mendi* slips below the waves in just 20 minutes. Very few of the lifeboats can be launched and most of the crew must jump into the sea and cling to primitive life rafts. Yardley walks calmly into the water as the bridge submerges and manages to cling to a lifeboat.

The crew of HMS *Brisk*, the *Mendi*'s Royal Navy escort, are all action. Doubling back, they launch boats and begin to look for survivors. However, search lights bounce uselessly back off the fog and the task of locating and recovering survivors is slow and exhausting. Inexplicably, the other ship, the relatively undamaged Royal Mail steamer *Darro*, offers no assistance. In the meantime, the cold water has begun its work of killing the men in the water. That February was unusually cold and what has caused misery on the Western Front is now lethal to the men in the water. Out of more than 900 on board, just 267 survive. Captain Yardley is amongst those lucky few, pulled from the water just before succumbing to hypothermia. At the subsequent Inquiry, Captain Stump of the *Darro* is blamed for causing the accident and was heavily censured for his failure to help the survivors. He offers no convincing explanation for his actions that night.



Sonar image of the *Mendi* in 2007. © Wessex Archaeology

In a Britain numbed by war, the loss of the *Mendi* briefly caused a stir but was then forgotten. In South Africa, the loss of so many men might have been expected to be more acutely felt. However, the ship was not carrying white fighting troops, but non-combatant labourers of the South African Native Labour Corps (SANLC). The government of the Union of South Africa, a recently created dominion of the British Empire, was not greatly concerned for the interests of its poor and disenfranchised black citizenry. It was not about to acknowledge their contribution to the war effort for fear of upsetting the delicate balance of power that ensured the privileged position of the white minority. It maintained a stony silence towards the SANLC and the men of the *Mendi*. Aided by cynical British indifference, they ensured that black South African veterans did not even receive the British War Medal given to other participants in the war. Despite this, memory of the *Mendi* disaster was preserved in black communities and commemorative events were held which became the focus of growing black political activism. An inspiring story emerged that one of the black leaders on board, the Reverend Dyobha, had instilled courage in the men on the sinking ship by exhorting them to carry out a ‘death dance’ and to “die like brothers”.



South African Deputy President Cyril Ramaphosa speaking in support of the *We Die Like Brothers* project at Delville Wood in 2014. © Graham Scott

The wreck and commemoration

The wreck of the *Mendi* was rediscovered in 1974 by the Isle of Wight diver Martin Woodward. It became a happy hunting ground for other divers looking to recover interesting souvenirs such as brass portholes. It did not receive any significant archaeological attention until 2006-8, when a desk-based assessment and geophysical survey were undertaken by Wessex Archaeology, with support from the then English Heritage. The site was subsequently designated under the Protection of Military Remains Act. Whilst this provided some assurance that the site was protected from interference, the wreck then fell into something of a no-man's land in terms of funding. No further work took place.

Archaeology, however, had not forgotten the site. The impetus for further work proved to be the 1914-18 Centenary Commemorations. Since the end of apartheid, remembrance of the *Mendi* had been embraced by the government of the new 'rainbow nation' as a major commemorative event. The injustice done to the survivors

and the *Mendi's* association with the fight against white minority rule meant that it became a symbol of the fight for equality. This association between the *Mendi* and themes of equality and social justice were not lost upon the then UK Prime Minister David Cameron, who chose the *Mendi* as an example of how our First World War heritage could be used to speak about contemporary social issues and reach audiences that heritage traditionally struggled with.

In 2014-15 Historic England had the foresight to support, with the endorsement of both national governments, a voluntary group of heritage and creative professionals and avocational divers who were intent on helping the much-visited South African National War Memorial at Delville Wood on the Somme to create 'We Die Like Brothers', a permanent exhibition on the *Mendi*. Opened in 2015, this was the precursor to a much-needed replacement of the memorial's disrespectful apartheid-era displays. The exhibition's web presence, [a free education resource pack](#) designed by Wessex Archaeology for UK and South African schools, subsequently went on to be short-listed for the Europa Nostra awards and was praised by the South African Ambassador to Paris as an exemplar of how Europe and Africa could co-operate over their shared heritage.

Marking the centenary

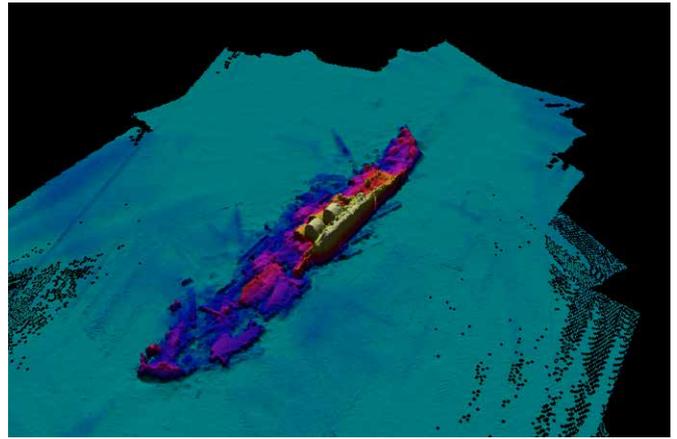
This success encouraged Historic England to mark the centenary of the sinking of the *Mendi* with a new book. Published in February 2017, *We Die Like Brothers: The Sinking of the SS Mendi* has been written by John



South African Navy Honour Guard on board SAS *Amatola* during the Act of Remembrance over the *Mendi* wreck site on 21st February 2017. © Graham Scott



Second Sea Lord and Chief of the Naval Staff, Vice Admiral Jonathan Woodcock OBE with Martin Woodward, finder of the *Mendi* wreck, on board the SAS *Amatola*. © Graham Scott



Three-dimensional bathymetric survey image of the wreck in 2017. © Royal Navy/Ministry of Defence (courtesy of Lt Cdr Marc Taylor, RN)

Gribble of the South African Heritage Resource Agency and Graham Scott of Wessex Archaeology, the two archaeologists who had been responsible for the original assessment and who had been closely involved in the subsequent exhibition project. Although books have been written about the *Mendi* and SANLC before, this is the first to integrate what is known about the archaeology of the wreck into the story.

The centenary commemorations have involved a major series of events organised by the South African and UK Governments and the Commonwealth War Graves Commission, involving a wreath-laying ceremony on site and fighting ships of both navies. The involvement of the Royal Navy has also meant that archaeologists could restart their investigations. Naval hydrographers on board HMS *Gleaner* have carried out a high resolution multi-beam bathymetry survey of the wreck, the first significant archaeological data set to emerge since 2008. John and Graham, who became the 'talking heads' for heritage during the intense media interest that surrounded the commemorations, hope to maintain this momentum. By working with the Ministry of Defence and with local groups, including the Shipwreck Project of Weymouth, they hope to carry out further remotely operated vehicle and diver surveys before the centenary of the Armistice. In the meantime, Historic England is supporting an enhanced education pack, to be rolled out to all Key Stage 3 and equivalent South African schools.

Authors



Graham Scott
Senior Technical Specialist
and Dive Superintendent with
Wessex Archaeology.

Graham is a highly experienced marine and aviation archaeologist. He has been involved in *Mendi* project work since 2006.



Susan Hayward
Project Curator with the
National Trust.

Susan is co-leader of the *We Die Like Brothers* exhibition project and is a senior museum professional, currently working as a project curator for the National Trust.

Three-dimensional visualisation of HMS *Falmouth*

Bringing a First World War shipwreck back to life.

HMS *Falmouth* was a Town Class light cruiser sunk by U-boats in August 1916. To commemorate its centenary, Fjodr Ltd, a maritime heritage consultancy company engaged in marine historic environment management, worked with Historic England to create a new digital model of the wreck.

HMS *Falmouth* is a relatively well-known wreck site just off the coast of East Yorkshire, near Bridlington. Even though the basic details of its history are quite well known, the overall significance of the ship has been overlooked. Fjodr proposed a project to Historic England to examine the story of HMS *Falmouth* and to raise awareness amongst the wider public who visit or live at the coast but are not aware of their heritage just offshore.

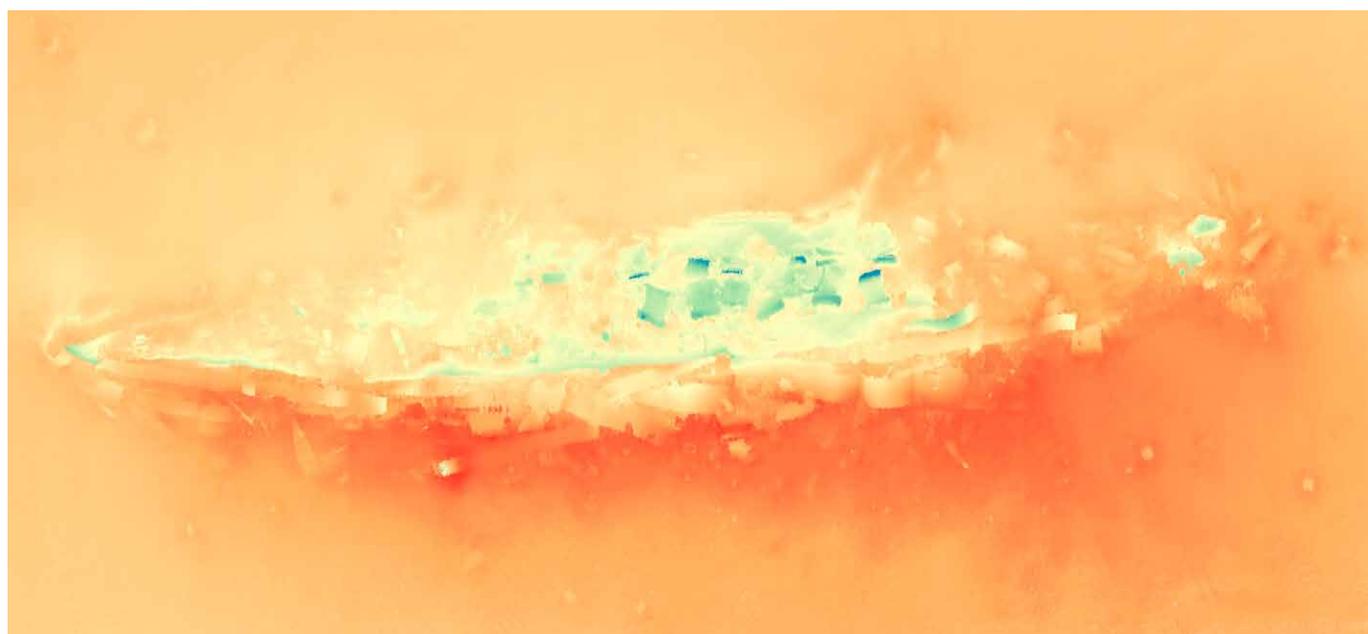
The Town Class light cruisers – of which the wreck of HMS *Falmouth* represents the only known remains – were very active in many of the campaigns and engagements of the First World War. HMS *Falmouth* itself

fought in the Battle of Heligoland Bight in August 1914 and was in the thick of the action at the Battle of Jutland in May-June 1916 as the flagship of the Third Light Cruiser Squadron. Shortly after engaging a Zeppelin, HMS *Falmouth* ran into a U-boat trap in another pivotal action on 19 August 1916 and was torpedoed.

Gathering the evidence of the wreck

Creating a three-dimensional visualisation was not part of the original project. It arose opportunistically and with only a short timeframe available before the results of the project were due to be launched to coincide with the centenary of the loss of HMS *Falmouth*.

By good fortune, the Maritime and Coastguard Agency (MCA) was planning a high-resolution survey as part of their Civil Hydrography Programme to improve navigational safety off the Yorkshire coast. The MCA agreed to add a survey of HMS *Falmouth* to their programme. The survey was carried out by the MCA's survey contractor MMT and made available in May 2016.



High-resolution bathymetric survey of the wreck of HMS *Falmouth* by MMT. © Crown copyright



Underwater photograph showing one of ten V-shaped boilers that provided steam for HMS *Falmouth's* turbines. © Mike Radley

The survey is excellent and has captured many details of the wreck. Although there has been a great deal of degradation, features can be identified and related to original drawings and to photographs of the remains on the seabed. Obtaining such a detailed survey is itself a major contribution to better understanding the survival and significance of the wreck and will provide a focus for further work.

A second piece of good fortune concerned the builder's model of HMS *Falmouth*. Fjordr became aware of a model of HMS *Falmouth* in the collections of the

Imperial War Museums (IWM). The model was a large-scale builder's model which is presumed to have been made by Beardmores (*Falmouth's* builder) in 1910-11. The model became part of the Imperial War Museums' collection after the First World War.

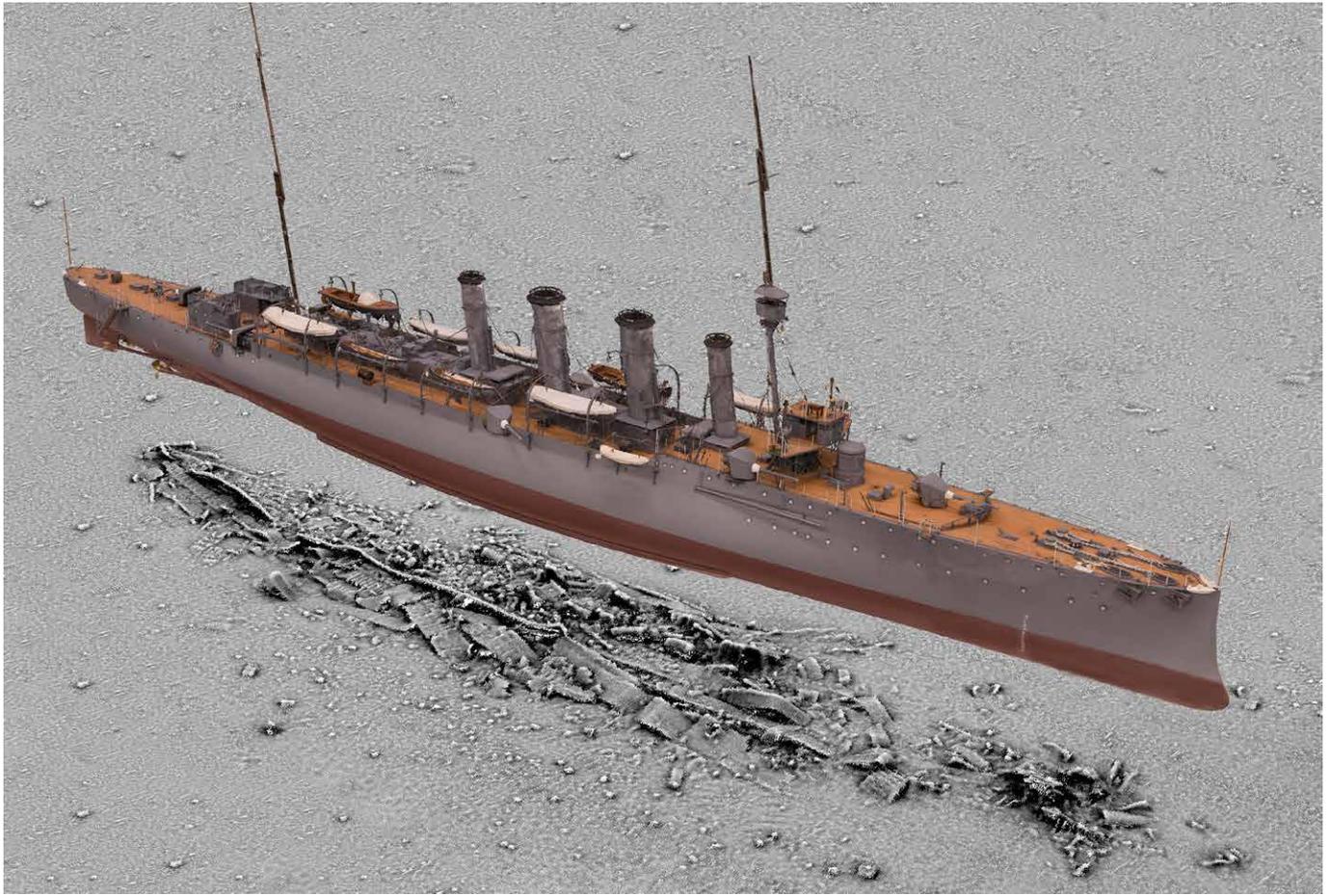
Creating the three-dimensional visualisation

With the results of the wreck survey, and knowing about the model, the idea came about to try and combine both into a single three-dimensional visualisation that juxtaposed the wreck with the original ship and could be made available to the public. Historic England's own Geospatial Imaging team joined with Fjordr to acquire three-dimensional data from the physical model and to develop the visualisation.

The IWM kindly provided access to the model at their store at Chatham Historic Dockyard. The Historic England Geospatial Imaging team visited the Dockyard on two days in mid-June 2016 to record the model using a Leica ScanStation P40 terrestrial laser scanner and by multi-image photogrammetry using a Sony ILCE-7RM2 camera. The aim of the laser scanning was to provide control for the multi-image photogrammetry. The model was scanned from six positions with an average point spacing of 3mm. The scanner did not cope very well with the rigging but there were plenty of points on the hull that could be used for control.



The model of HMS *Falmouth* in the IWM collection at Chatham Historic Dockyard. © AJ Firth / Fjordr



Three-dimensional visualisation of HMS *Falmouth* juxtaposing wreck and builder's model. © Crown copyright

The final model was generated from 891 overlapping photographs. The photographs were taken from as many different angles as possible to achieve complete coverage of the ship. Each image is 40Mp resulting in a 120Mb TIF file, giving 104GB of image data. The photography was processed using the multi-image photogrammetry software RealityCapture, which also allows the integration of laser-scan data. Even using a high-end workstation with 128Gb RAM and specialist graphics cards, the processing and editing took several days.

Although the photogrammetry produced a better result than the laser-scan data, the model still required a lot of cleaning. Nonetheless, the still images from the visualisation were ready in time to include in the design of a [fold-out leaflet](#) distributed to museums and Tourist Information Centres. A [simplified model](#) was made available publicly using the web application Sketchfab, where the visualisation was accompanied by text with links to further information. Annotations were added to highlight features of the ship and the wreck, and to tell the story of the seven torpedoes that sank HMS *Falmouth*.

The visualisation on Sketchfab was made public to coincide with a media release – '[Jutland Wreck Brought to Life](#)' – in time for the centenary of the attack on HMS *Falmouth* on 19 August 2016. A link to the Sketchfab visualisation was also included in Historic England's own [web page](#) on HMS *Falmouth*.

Images from the visualisation featured in the extensive press coverage of HMS *Falmouth*'s centenary, both in print and online. The online versions of many newspapers embedded the Sketchfab visualisation within their pages, adding to impact and connectivity. Since being published, the visualisation on Sketchfab has received almost 19,000 views.

Reviewing the project

Creating a three-dimensional visualisation from such a detailed physical model was very demanding, especially within the short timescale available from data acquisition to printed output. Although it has limitations, it contributed very significantly to the overall objective of raising awareness of HMS *Falmouth*,



Officers taking a break aboard HMS *Falmouth*, including Sub-lieutenant Pears (seated on stowage bin, at left). © John MacDonald

especially through the media. The visualisation will continue to serve as an intriguing conduit for people to find their way to more detailed information about HMS *Falmouth*. Hopefully, together with supporting material, it will also generate further interest locally, creating social and economic benefits through tourism and recreation, for example.

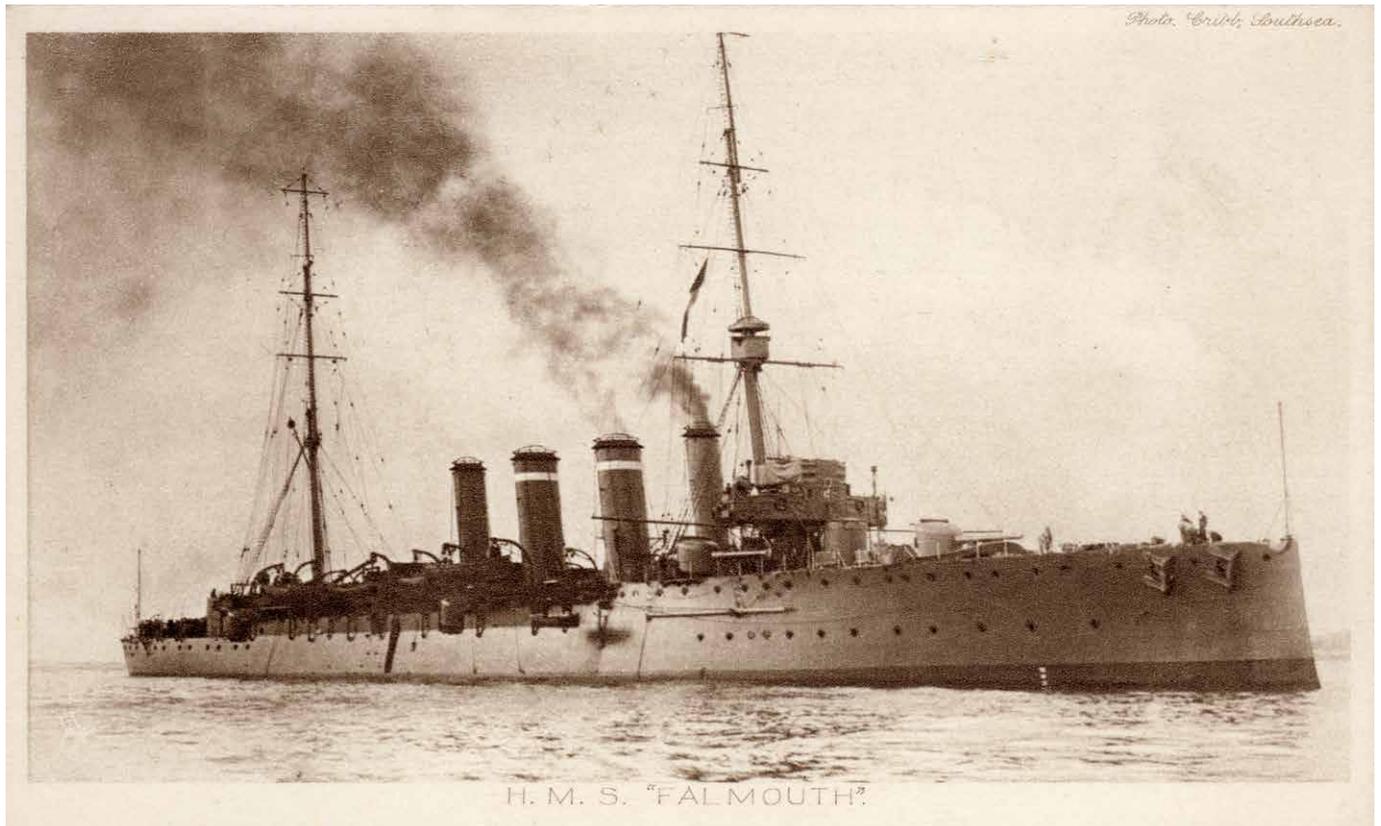
The visualisation still holds great potential for further development. Even the juxtaposition of the wreck survey and the builder's model suggests that the remains of HMS *Falmouth* are more complete and coherent than its history of clearance and salvage might suggest. The visualisation has also helped in identifying the original position of historical photographs taken aboard *Falmouth*, which it might be possible to include in future development of the visualisation. A further aspiration is to incorporate other sources of information, such as original construction drawings of the ship. Altogether, the project points the way towards far greater use of three-dimensional visualisation to 'bring to life' underwater heritage by representing and reconnecting

other seabed surveys, ship models, drawings, photographs, documents and diaries.

Gunnery Lieutenant Arnold Pears wrote poignantly of HMS *Falmouth*'s sinking as follows:

“ I have no heart to write ...
the loss of that ship, the symbol
to me of my home, my work, my play,
my life, my companion in danger,
hits me too hard ... ”

This three-dimensional juxtaposition of wreck and ship reminds us to see shipwrecks not as hidden features of the seabed, but as the important historic places in which the First World War at sea was fought.



Contemporary postcard of HMS *Falmouth*. © AJ Firth /Fjodr

Authors



Dr Antony Firth, MCIfA
Director of Fjodr Limited.

Antony started his career in marine archaeology as a volunteer diver in 1986. He subsequently combined fieldwork and research on historic wreck sites and submerged landscapes before working for Wessex Archaeology, where he was Head of Coastal and Marine until 2011. Antony established Fjodr Ltd. in 2012, specialising in strategic research and public engagement projects.



David Andrews, AssocRICS
Geospatial Imaging Analyst with
Historic England.

David has worked for Historic England and its predecessors since 1989, initially as a Photogrammetrist. He now works in the Geospatial Imaging Team and as well as undertaking various surveys manages a framework agreement for their procurement.



Jon Bedford, MCIfA
Senior Geospatial Imaging Analyst
with Historic England.

Jon has worked for Historic England and its predecessors since 2003, initially as an historic buildings surveyor. He now works in the Geospatial Imaging Team.

England's protected wreck sites

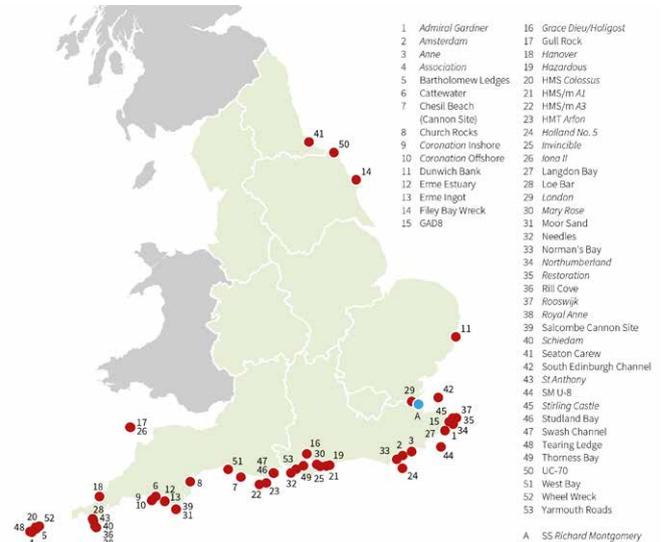
Underwater exploration without getting wet!

There are currently 53 wreck sites in England with statutory designations under the Protection of Wrecks Act (1973). They are of the highest significance and help to define our nation and tell our story. They range from Bronze-Age cargo scatters through to 20th-century submarines and include a diverse range of site types in between.

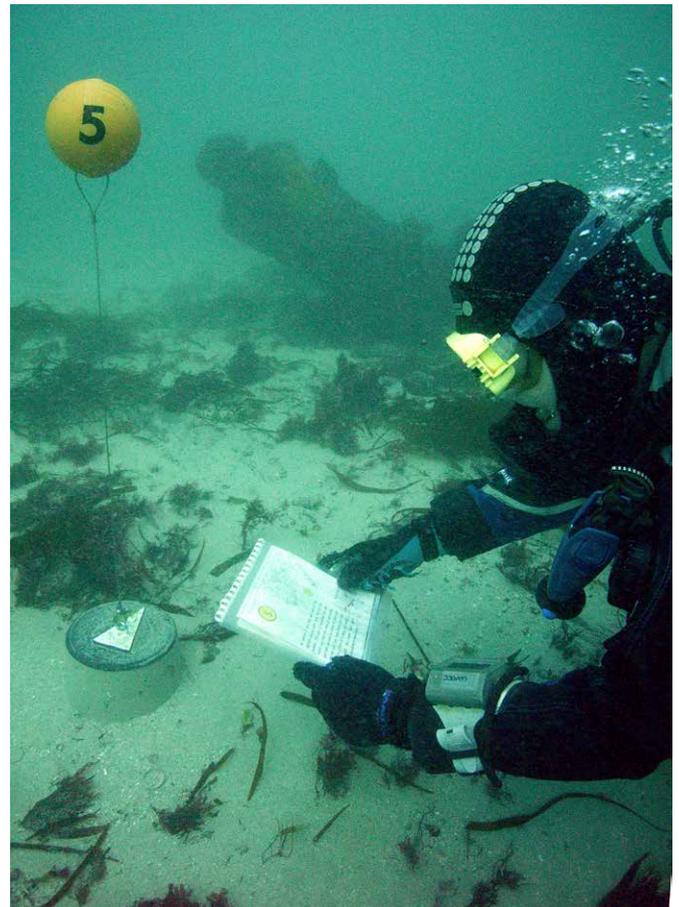
Responsible access has been a key element of the management approach to the sites championed by Historic England. To support this we have enabled the creation of a number of diver trails on wreck sites designated under the Protection of Wrecks Act (James 2013a and 2013b). Our experience has shown that by encouraging responsible access sites are better managed and understood. Diver trails provide interpretation material and enhanced access by licensed divers and the increase in the number of visits brings benefits to Historic England. Divers are encouraged to share their photos with us, and this enables site monitoring (for Heritage at Risk purposes), while the additional presence of licensed divers on site can act as a deterrent to anyone thinking of illegally accessing the wrecks. These dive access schemes have been a success for the economy, for the divers and for Historic England (Beattie-Edwards, 2012). Over 5000 dives have now taken place on Protected Wreck Site dive trails. The *Iona II* dive trail was recognised at the Association of Heritage Interpretation Awards in 2015 with a commendation in the Interpretation for a Target Audience category, and UNESCO recognises the trails as being examples of best practice for audience engagement.

Increasing access to our maritime heritage

The sport diving community has been instrumental in finding and helping Historic England to manage many of these sites, but not everyone can dive. The very nature of maritime archaeology, lying at the bottom of the seabed in an area only accessible by those with the right training and equipment, has meant that protected wreck sites have only engaged with a very small number of people.



England's 53 Protected Wreck Sites (November 2017).
© Historic England



A diver exploring the Colossus protected wreck site trail. © CISMAS

The National Heritage Act of 2002 transferred general functions for maritime archaeology to Historic England (then English Heritage). Since then, there has been a commitment to widening access to protected wreck sites in new and innovative ways. Increasingly we have looked to new technology to achieve this. To enable engagement with non-divers, Historic England is embracing new techniques of display and interpretation; the scheme to provide virtual trails is a good example of this. The trails are showing how technology can be utilised to engage the public with heritage assets irrespective of their ability to physically access the sites. The principle aims of the trails are to provide enhanced interpretation and to inform Historic England's on-going programme of site investigation and management by encouraging feedback from people using the trails.

Virtual Trails commissioned by Historic England (November 2017)

Association (CISMAS)

Bartholomew Ledges (CISMAS)

Coronation (MAST)

Holland No 5 (Nautical Archaeology Society)

HMS/m A1 (Nautical Archaeology Society)

HMS Colossus (CISMAS)

HMT Arfon (Maritime Archaeology Trust)

Invincible (Pascoe Archaeology Services)

London (Cotswold Archaeology)

Normans Bay (Nautical Archaeology Society)

Submarine *U8* (MSDS Marine)

Tearing Ledge (CISMAS)

Thorness Bay (MSDS Marine)

Wheel Wreck (CISMAS)

* Those highlighted red have been completed

From the outset of the programme we deliberately decided to not be overly prescriptive with the techniques contractors would use. We wanted to stimulate creativity and the application of new technology. We have now taken forward a number of different virtual trails, and all have used slightly different approaches, from standalone websites through to using photogrammetry, virtual reality and computer generated imagery (CGI). In order to ensure that the virtual trails had a consistent feel, it was specified that Historic England branding and style guides should be adhered to in their creation.

The web technology: a case study

The *Invincible* protected wreck site is the second web tour to be developed through the collaborative efforts of Grant Cox (ArtasMedia) and Stuart Graham (CyanSub) for Historic England, the first being the *Coronation*, and is a rounded prototype of our ongoing development of a unified HTML5 framework. Rather than relying on premade tools or code, a key technical ambition in the creation of this technology is to provide an efficient and original framework that unifies all desired content in a streamlined system. Currently this includes the presentation of CGI animation, photogrammetric survey, laserscan data, audio, video, traditional imagery and the possibility for future additions such as [reflectance transformation imaging](#) (RTI), panoramas and virtual-reality experiences, all through the web browser. An admin system is also being developed to provide a user-friendly interface for the creation of future tours.

With pure HTML5 delivery, accessibility and the ability to create experiences that can be accessed independently of hardware or administrative rights are key factors in removing as many variables as possible from delivery to the user, such as insufficient graphic cards on mobile devices and restrictive institutional policies.

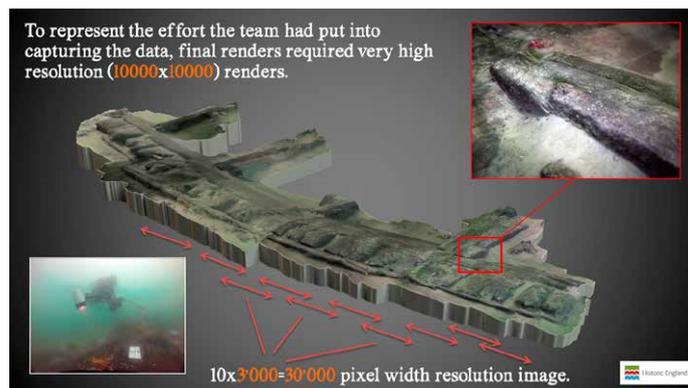
Along with dynamic web presentation, an ongoing ambition of our collaboration is to bring commercial-level visuals that integrate sophisticated digital processes and CGI techniques. For this, the *Invincible* virtual trail content creation was comprised of three stages: the underwater data capture by the *Invincible* dive team (Pascoe Archaeology Services); the formulation of that into a working CGI resource (ArtasMedia); and its translation into our web tour system (CyanSub).

Creating the virtual trail

In such varying underwater conditions, the initial data set produced widely ranging outputs and required photography at a very close proximity to the datasets. This caused two problems for its development into a CGI model. Firstly, the majority of sections were fractured into multiple pieces with different colours, visual information and frequently different camera quality (GoPro vs Nikon). Secondly, a side effect of the necessary recording distance was that the RAW photographic information was incredibly detailed.



Example of original data rendered into the model. © Artas Media



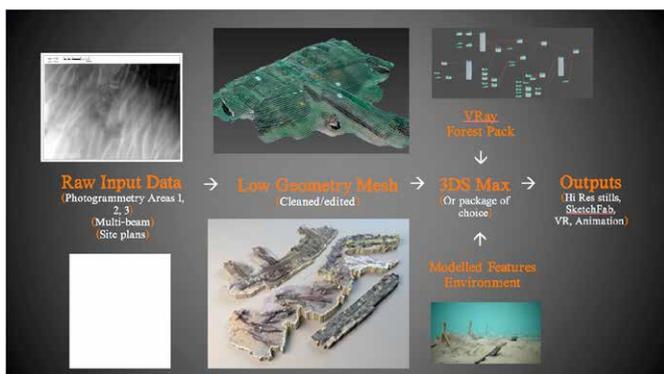
The side effect of the team's close proximity diving and the large amount of data. © Artas Media



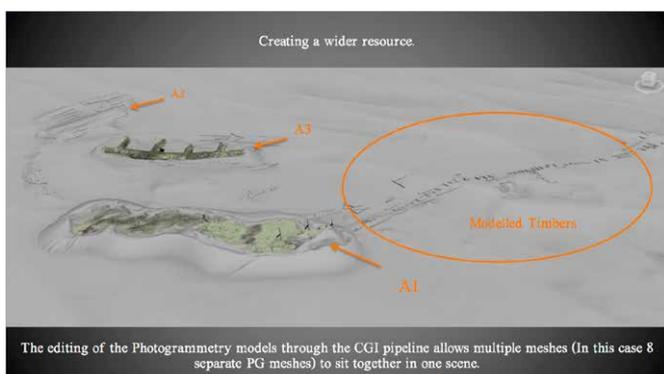
The edited photogrammetry rendered into one large 10k resolution image for the virtual trail. © Artas Media



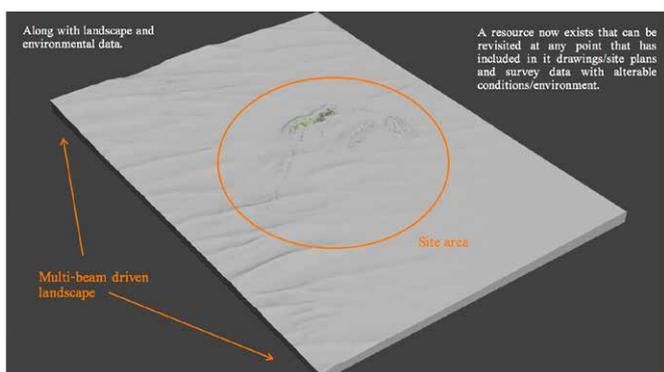
The level of detail that was able to be extracted from even very zoomed-in areas. Highlighted in red box. © Artas Media



Pipeline for combining multiple inputs inside three-dimensional software. © Artas Media



The combination of all re-worked photogrammetry. © Artas Media



The finished CGI model. © Artas Media

Translating as much of this as possible into the final models required very high-resolution texture sizes and rendering outputs (10k pixels wide in some cases), which made working with the data unwieldy and required a heavy investment in processing and editing time.

However, the benefit of this can be seen in the outputs and in a [short compilation of the working processes](#) that shows how to achieve this. To explain in short, the photogrammetric models (this can also apply to any scan-based data) were taken into three-dimensional re-topology software, reworked into 'lighter' meshes, and then the higher density detail was 'baked' and reapplied as textural-driven information in the lower complexity geometry. They were then aligned together, connected and heavily edited inside Photoshop to balance colours and fix errors in the recording. This process is often used in the CGI pipeline to bring high-quality information into models required in game engines, or just to generally economise scenes. This allowed the combination of multiple meshes into a singular working three-dimensional object and turned very high-density objects into manageable assets.

Once the above processes were completed, the models, along with other contextual information such as multi-beam surveys, site reports, technical drawings and photographic references, were referenced to build a large section of the underwater site inside the software package 3DS Max, creating an academic resource and reusable model for the team

From this point in the development of the trail, cameras, an adjustable underwater environment, flora/fauna and parts of the wreck not in the survey (such as iron knees and planking) were created alongside the photogrammetry using traditional CGI modelling techniques and rendered into animation sequences and 45megapixel renders. Finally, all of this was compiled together with the relevant contextual information into the HTML5 framework along with audio and visual narration.

Moving forward, the web tour system will not only be refined, but due to its centralised code framework, any future developments can retroactively be applied to existing tour features. This not only provides a



Screen shot of the virtual trail. © Artas Media



An example of beauty render. © Artas Media



An example of environmental outputs from the model. © Artas Media

financially feasible model to create an original system over successive projects, but also a cumulative return of investment.

To date, five virtual trails have been delivered and the rest should be live by the end of 2017. These trails are doing exactly what they were designed to do, enthusing new audiences with maritime archaeology and the protected wreck sites. Since the first three trails were delivered, over 5000 people have accessed the sites and taken a virtual tour. The figures are expected to dramatically increase as new trails go live and are promoted. The virtual trails are helping to foster a dynamic heritage cycle ensuring the sites are placed high in the consciousness of the non-diving public and opening up the world of underwater archaeology for all.

Authors



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Alison has been a maritime archaeologist at Historic England for eight years with responsibility for the protected wreck sites. Previously she worked at Hampshire and Wight Trust for Maritime Archaeology and the Nautical Archaeology Society. She has a BSc and an MA in Archaeology, both from the University of Liverpool.



Case Study: Grant Cox, MSc
Artas Media.

Grant is a digital artist and archaeologist. After attaining an MSc in Virtual Pasts at Southampton University, he formed Artas Media to develop visualisation techniques and has worked on a number of high-profile sites.

Further reading

You can follow these projects on Twitter by using the #HEDiveTrail hashtag.

Beattie-Edward, M 2012 *The Local Economic Value of a Protected Wreck* https://www.nauticalarchaeologysociety.org/sites/default/files/u9/Local%20Economic%20Benefit%20of%20a%20Protected%20Wreck_EH6608PD_Final%20Report_for%20distribution.pdf

James, A 2013a *Researching, Protecting and Managing England's Marine Historic Environment*. ACUA Underwater Archaeology, Proceedings from the 46th Annual Conference on Historical and Underwater Archaeology

James, A 2013b *Diving into History with the English Heritage Dive Trails* <https://heritagecalling.com/2013/05/27/diving-into-history-with-the-english-heritage-dive-trails/>

Pride of Place

England's Lesbian, Gay, Bi, Trans and Queer (LGBTQ) Heritage.

Gender diversity and same-sex love have long been part of England's history. But LGBTQ identities as we understand them today only date from the last decades of the 20th century. Prior to this, same-sex love and gender diversity were treated as criminal acts or moral sins, medical or emotional problems, or were absorbed within accepted family and community relationships. So LGBTQ people and their histories have often been hidden, marginalised or suppressed.

A note on terminology

Pride of Place uses the term 'queer' both in its historical context and also as an inclusive term to indicate the complex experiences of sexuality and gender diversity across history. In the past, 'queer' has been used both as a term of derision and also of self-identification. Many people today, scholars and community members alike, have reclaimed the term but use it differently: to capture the complexity of gender and sexuality not otherwise addressed by LGBT. It is with this in mind that we use the acronym LGBTQ.

The Pride of Place project

In 2014 Historic England commissioned a team of historians and scholars at Leeds Beckett University's Centre for Culture and the Arts to identify and



The exterior of Shibden Hall, Halifax, the home of landowner, industrialist, traveller and diarist, Anne Lister. © Alison Oram

research the locations and landscapes associated with England's LGBTQ heritage. The project, Pride of Place, adopted an inclusive approach in defining its scope. Many historical locations and sources shed light on LGBTQ pasts. Some identities, groups and periods have been better recorded than others and are therefore better understood. We know much more about men who desired other men than about any other group. LGBTQ historical records also often focus on famous 'elites' and white gay men. Lesbian, bisexual, trans, working-class, disabled, black, and ethnically diverse voices within queer history are less visible. More research is still needed to better understand these diverse LGBTQ histories.

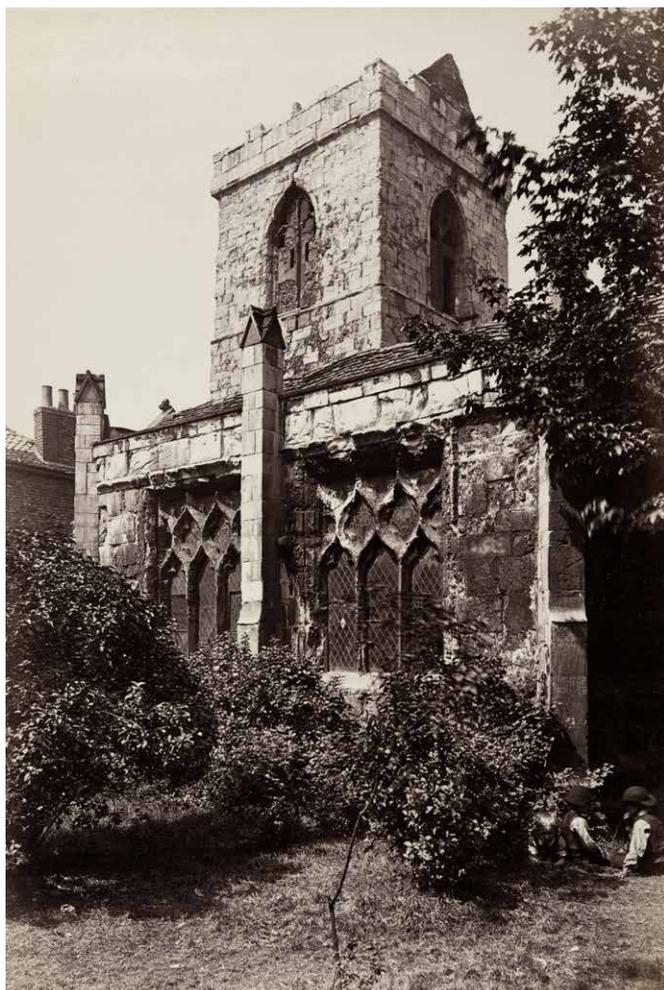
The project was supported by a knowledgeable steering group and had a number of aims:

- Identify, document, and increase awareness of the significance of LGBTQ histories and heritage in relation to England's buildings and landscapes
- engage community members, the heritage sector and scholars in documenting locations of LGBTQ heritage by identifying sites and recording their histories
- identify a number of LGBTQ heritage sites for consideration for inclusion on the [National Heritage List for England](#) (NHLE), and to suggest amendments to existing entries on the NHLE where there are important LGBTQ associations which deserve to be better known
- nominate buildings or landscapes for consideration for local heritage listing on the basis of their significance to LGBTQ histories; and
- encourage the management of current heritage sites open to the public, as well as those designated in the future, to include LGBTQ histories in their interpretative content as a key part of engaging with the public

The project was divided into 2 phases. The first phase included the gathering of crowd-sourced content and production of a map, hosted by [Historypin](#).

Members of the public were invited to identify places relevant to LGBTQ heritage and history. Contributions were made by the research team, by individual contributors and at a series of pinning parties hosted by the research team at venues and events all over England. Many personal stories emerged, and these help to construct a broad and inclusive queer heritage. Pride of Place also drew on the increasing body of wider research by local and community groups and by academics into our queer past.

The opening up of the project to individual contributions raised a number of questions for the project team and the steering group. Beyond the usual considerations of accessibility and usability of data, there were public knowledge issues more in keeping with sites like 'Trip Advisor'. How representative is the data that are being posted? Does this matter?



A view of Holy Trinity Church, Goodramgate, York, showing the south windows and the tower above. Anne Lister and Ann Walker celebrated their union here in 1834. © Historic England AL2383/046/01

In addition, there was the question of partnerships. From the start these were viewed as highly important. What inferences might be drawn from Historic England hosting the site? Would this deter some potential users by giving the process a veneer of authority?

These issues caused debate. Some parties were keen on 'traditional' structures, with an emphasis on reliability. Others saw the method of gathering data as being a more populist, democratic tool. Questions were also asked about the use of a 'wiki' format and the possibilities of a self-regulating system. It was, though, concluded that, even if consensus on some issues could not be achieved, then at least a layered view would be presented. The hope was that by using crowd sourcing information the project would challenge customary heritage processes and in so doing be more inclusive and representative.

Identifying LGBTQ sites

The second phase of Pride of Place aimed to uncover new locations associated with England's LGBTQ past and to revisit existing heritage sites to consider their LGBTQ significance. These included, most obviously, places of LGBTQ social interaction, political action and community organisation, but were not limited to these. They also included homes and domestic spaces once lived in by 'queer' people as well as buildings and interiors created by LGBTQ designers and architects, locations which may themselves hold 'queer' resonances.

One of the key desired outputs of the project was to identify new sites for listing. Whilst a range of assets was highlighted, particularly pubs and clubs, crowd sources actually revealed very few examples which met the criteria for listing. There was also little apparent overlap between architectural and LGBT knowledge and thus nothing of significance emerged in respect of, for example, specific gay or lesbian architects. The history revealed tended to be rather ephemeral and therefore intangible. There was more potential when considering amendments to existing listings, approaching existing knowledge from different perspectives and uncovering otherwise hidden heritage. One new listing was registered, and 18 amendments were made to existing list descriptions as a result of the project.

Why LGBTQ places matter

Place gives a sense of belonging. The built environment is where we have lived, loved, socialised and taken shelter. Not only does it meet our needs, it reflects our lives and desires. There is no tidy history of the LGBTQ past. Some places are significant because they were used to escape hostility towards same-sex love or gender diversity. In certain periods, however, queer behaviour was ignored or even accepted. Contrary to common belief, queer people were not always considered deviant.

LGBTQ people have long used public and private buildings, parks and streets to create their own cultures. Even though identities are expressed differently today, having a knowledge of this heritage gives LGBTQ people a sense of long-established communities. Our historic buildings and spaces of all kinds have acted as meeting places for LGBTQ people, in all towns and villages, and across time.

Most cities and towns had particular bars and pubs that tolerated and welcomed queer people, some even when homosexuality was illicit or illegal. Theatres and artists' studios have also been places of greater licence for pleasure and queer behaviour. They were and often still are cosmopolitan, bohemian spaces where alternative ways of living can be imagined or experienced.

Powerful institutions of the past, such as schools or monasteries, have been locations of same-sex relationships, as well as places that issued warnings and decrees about these desires. Town halls, the centres of local government across the country, have seen impassioned debates about LGBTQ rights since the 1980s. The Greater London Council was vilified for promoting lesbian and gay equality, and therefore the seat of its power, County Hall, has a strong role to play in the LGBTQ story. More recently, town halls have hosted the civil partnerships and marriages of lesbians and gay men, alongside the unions of heterosexual people. Some open spaces have become notorious as places where men sought sex with other men. From the late 19th century public toilets have often been sites for public sex, 'cottaging', by men. Churchyards might be 'cruising grounds' for sex, as St Paul's Church in Covent Garden was in the 18th century. Inside churches, we sometimes find memorials to love between men, or between women. Trans people have 'fooled' church



Edward Carpenter, an early activist for the rights of homosexuals, with friends at Millthorpe, Derbyshire. © Sheffield Archives: Carpenter/Photograph Box 8/95

authorities into marrying them – reports of such weddings are found from the 18th to the 20th centuries.

Many more types of buildings and places – suburban streets, dockyards, factories, courtrooms, the historic homes of the affluent and elite, even palaces – are significant to LGBTQ heritage. But these stories often remain invisible to visitors today.

Author



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Parts of the text for this article were originally written by Professor Alison Oram from Leeds Beckett

University who led the Pride of Place research team.

SEAHA: Science, Engineering, Arts, Heritage and Archaeology

A milestone for heritage science.

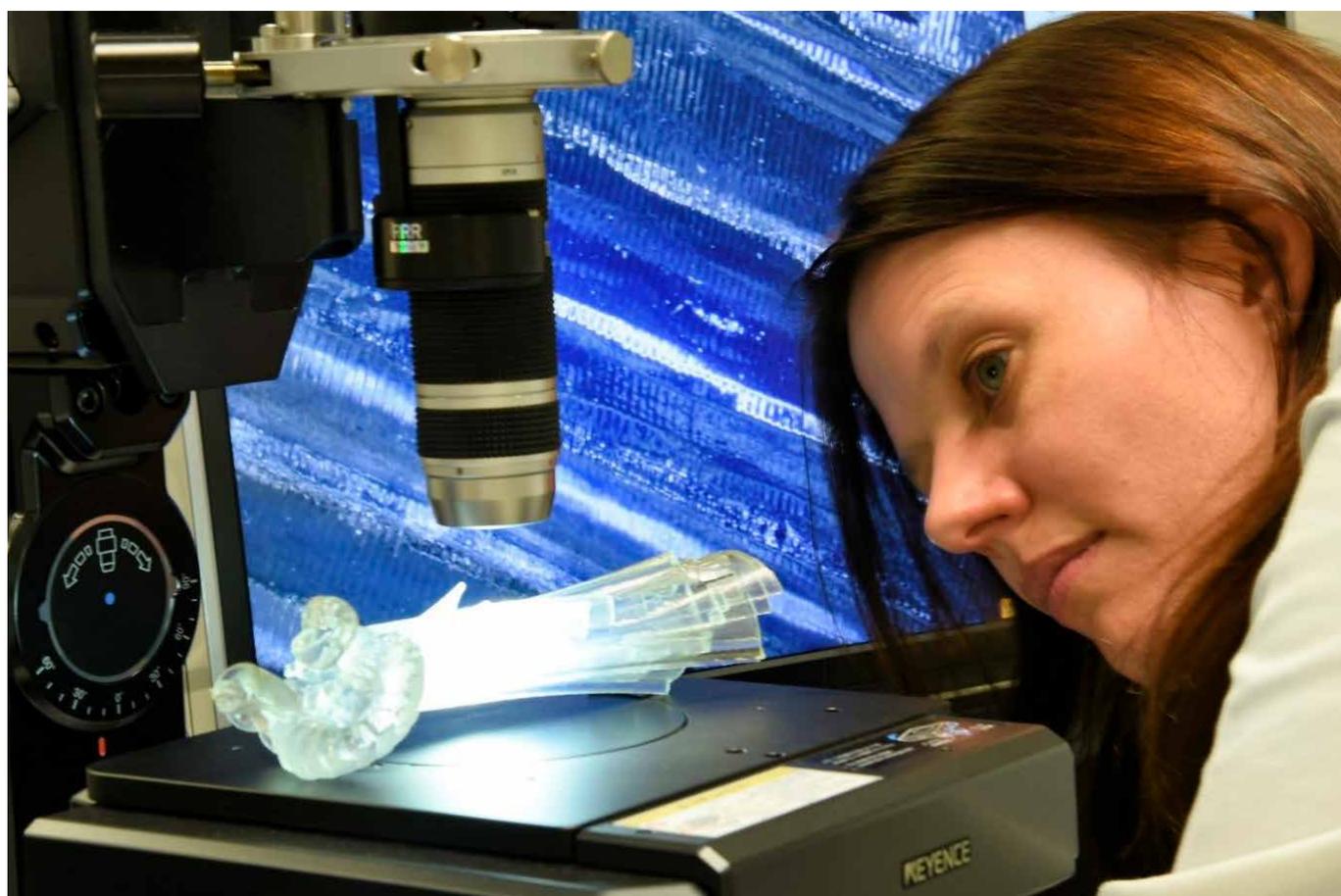
In 2014, the Engineering and Physical Sciences Research Council approved funding for the Centre for Doctoral Training in Science and Engineering in Arts, Heritage and Archaeology (SEAHA). This represents the largest single investment in heritage science training in the UK so far, with the remit to train 60 PhD graduates by 2022.

By 2017, 32 students had started their academic studies within SEAHA, enrolled at University College London (UCL), the University of Brighton or the University of Oxford. These institutions provide the academic leadership of the Centre, and are joined by more than 60 heritage organisations and companies, half of which are

UK-based, making SEAHA currently the largest heritage science training initiative globally. This article looks at what makes SEAHA so exceptional and why now is a suitable time to develop capacity in the field.

The need for SEAHA

The Centre for Doctoral Training is being funded with the aim to focus a diffuse and growing research community and to address an identified skills gap. The scale of cultural heritage in the UK, the size of the business that it supports, and its potential for growth in the UK and internationally, make this country an attractive destination for SEAHA graduates. Heritage tourism supports 466,000 jobs and contributes £7.4bn a year to



Carolien Coon examines the stability of rapid prototyping materials using a 3D digital microscope. © Matija Strlic (UCL)

the UK economy. Sustaining this contribution requires heritage science capacity to maintain the country's museum, library, archive and gallery collections and its historic buildings. The conservation, repair and maintenance sector in England alone is estimated at £4.7bn, and SEAHA graduates' skills and understanding of the industry sector make them ideally placed to take jobs in companies, or even start their own.

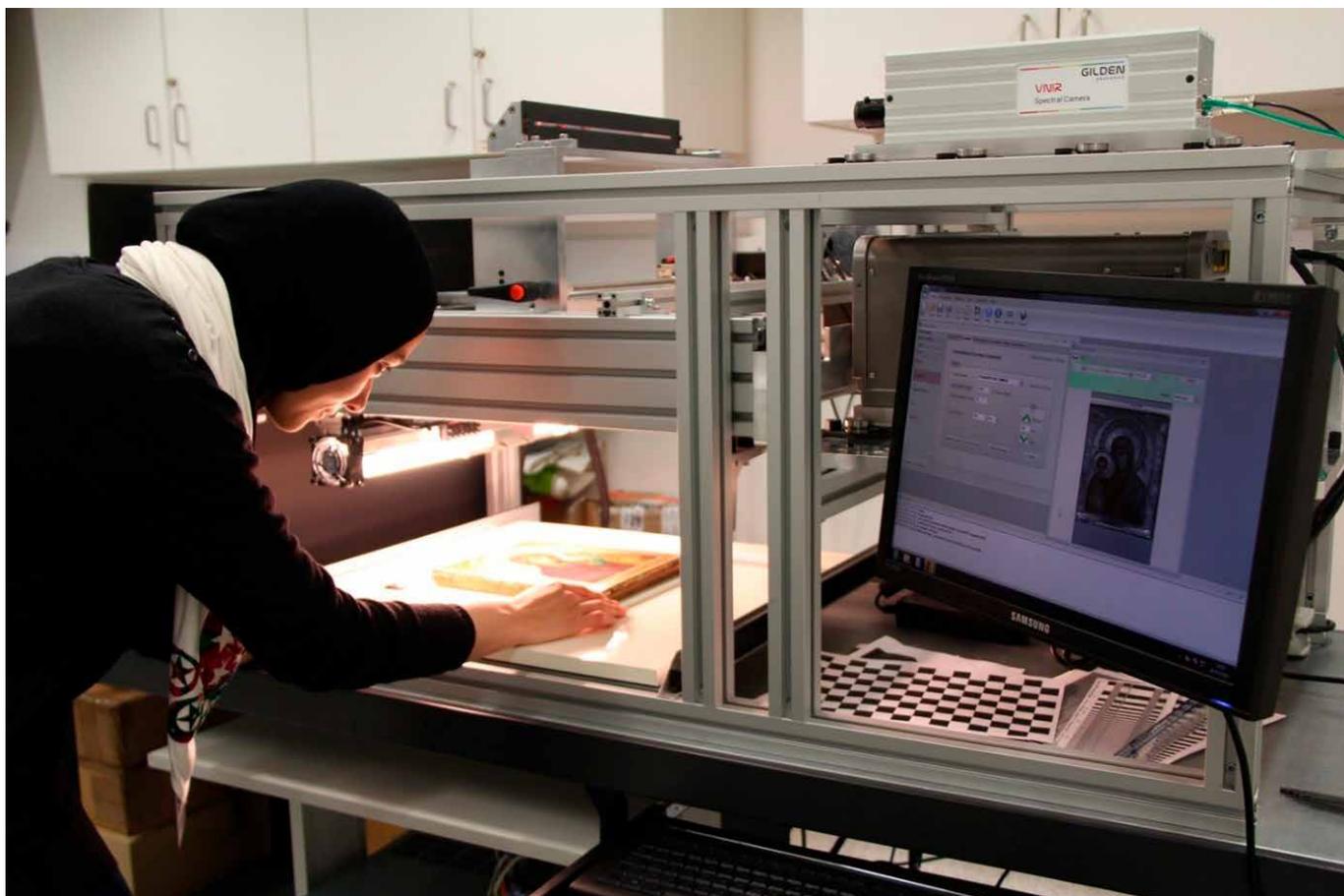
In 2011, the English Heritage labour market intelligence on archaeological specialists (which includes archaeological and environmental science) predicted an 18% loss of capacity in the following 5 years: 9.4% of the workforce was already over 65. Of the current SEAHA cohort more than one in three are women, an exceptionally strong representation compared to only 13% in the science, technology, engineering and mathematics workforce in the UK.

Professor May Cassar, Director of SEAHA and Director of the UCL Institute for Sustainable Heritage, affirms:

“ SEAHA graduates will be well placed to support the leading role that the UK heritage sector has in the international tourism market, as well as to spearhead the academic development of UK heritage science and enhance its global leadership. ”

A unique training experience

The size and scope of SEAHA are matched by its unique approach to training. In the current changing job market, transferable skills are as important as research skills. Students develop their skills in collaboration with supervisory teams drawn from the academic, heritage and industry sectors, with the aim of learning how research is carried out and used in environments that are significantly different to academia. Currently, SEAHA engages a body of more than 100 supervisors, representing an exceptionally strong network within which students thrive and develop collaborations that will help them build future careers.



Hend Mahgoub starts the hyperspectral imaging process exploring the distribution of pigments in a historic icon. © Adela Shah (UCL)



The Mobile Heritage Lab at the Brighton Pavilion. © Matija Strlic (UCL)

Research topics range widely from the development of archaeological analytical methods to collection management, and from hyperspectral imaging and visualisation to robotically enabled thermal insulation of domestic buildings. Therefore, cross-disciplinarity is a crucial element of training and builds on the equally diverse backgrounds of our students. Approximately half have a conservation or archaeology background, and the other half has science or engineering degrees. Consequently, SEAHA training removes barriers between disciplines that historically have existed in the field. Candidates join us as scientists or conservators, but they leave us as heritage scientists.

A landmark for the field

While managed by academic institutions, SEAHA has a Steering Committee, chaired by Historic England, involving experts from industry and heritage institutions. Its Advisory Board is further populated by senior policy makers and domain experts, chaired by Sir Philip Campbell, Editor in Chief of Nature magazine. These bodies support the development of research and policy impact of SEAHA and its future direction.

“SEAHA represents a blueprint for heritage-industry-academia collaboration in our field. The range of projects, the innovative approach to training and the opportunities that are being developed for the SEAHA graduates are unique” says Barney Sloane, Head of Strategic Planning and Management Research Group at Historic England and Chair of the Steering Committee of SEAHA.

On the level of individual projects, the evidence of this effort is in unusual and inspired partnerships: an SEAHA student is supervised by Historic Royal Palaces, IBM and University College London, while another is currently working with the Smithsonian’s Museum Conservation Institute, Analytik Ltd and the University of Brighton. A particularly international project is supervised by the Getty Conservation Institute, the Dunhuang Academy and the University of Oxford.

SEAHA is making a further mark in the field by enabling a range of initiatives beyond training, such as the development of infrastructures. SEAHA supported the UK’s involvement in the European Research Infrastructure for Heritage Science. When established, this will represent the largest distributed research

infrastructure in the field supported by a number of eminent partners, including Historic England.

Where to meet SEAHA

There is a distinct possibility that SEAHA has already visited a historic site or a museum collection near you: in 2015, SEAHA invested in the UK-first Mobile Heritage Lab, a vehicle equipped with instrumentation for archaeological, environmental and digital heritage research. With more than 50 individual scientific instruments, it enables students to take heritage science to UK museums and sites, rather than the other way around, as is often the case.

Another unique characteristic of the mobile lab is that it doubles as a public engagement space: in whatever context heritage science research is carried out, there is always an opportunity for public engagement. At the Cheltenham Science Festival in 2016, the students engaged with more than 500 children and families in experiments involving microscopy, photography and radar imaging. At a recent event organised in collaboration with the Royal Society of Chemistry, 60 schoolchildren were engaged in experiments involving imaging and ink-making, thus learning science through art, heritage and archaeology. In June of this year, SEAHA will engage diverse audiences at the British Science Festival in Brighton.

The Mobile Heritage Lab supports learning and research through its mission to mitigate the inequality of access to heritage science and infrastructure. Anyone can apply to use the mobile lab, and it is free to use, under one condition: a proposed project needs to be of interest to at least one SEAHA student. In the last 10 months it has been used to explore tapestry conservation, to carry out stone degradation research and to explain imaging techniques to the public, to mention just a few examples.

Read about the [SEAHA research projects, students' successes and Mobile Heritage Lab tours](#).

Author



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Deputy Director of SEAHA and Professor of Heritage Science at UCL Institute for Sustainable Heritage.

Matija has a PhD in chemistry and joined UCL Institute for Sustainable Heritage in 2017. He established the successful MRes Heritage Science in 2010.



SEAHA students engaging with schoolchildren at Burlington House in London, under the watchful eye of Dr Josep Grau-Bove, SEAHA cohort activities coordinator. © Josep Grau-Bove (UCL).

New Research Agenda sets out our stall

The agenda provides a goldmine of ideas for university-based and other researchers seeking to deliver research projects with real-world impact for the heritage sector.

Historic England has reissued its [Research Agenda](#). The new publication replaces the [English Heritage Research Agenda 2005-2010](#), and [SHAPE 2008](#). It sits alongside our [Research Strategy](#), developed in 2016 as part of our successful bid to become an [Independent Research Organisation](#).

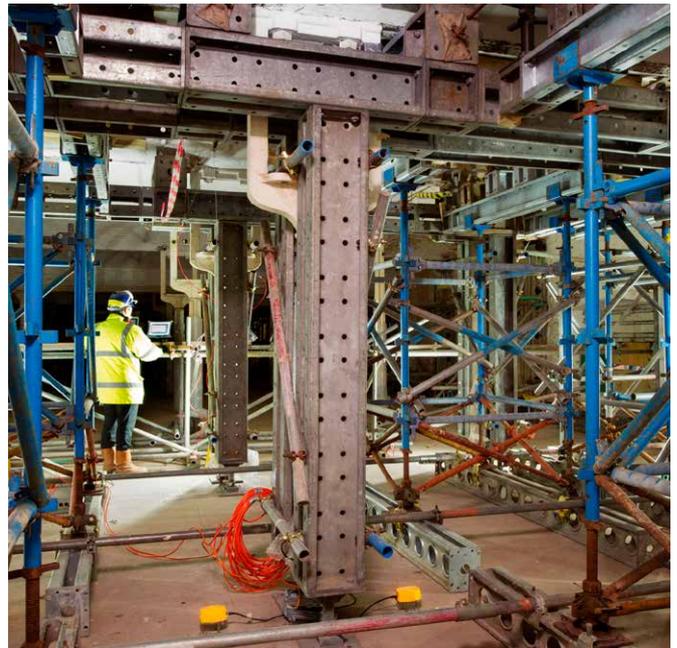
Historic England research Themes and Topics

The Research Strategy defined nine broad Themes that describe our research interests:

- #value
- #understand
- #diversify
- #adapt
- #conserve
- #inform
- #skill
- #inspire
- #innovate

The [Research Agenda](#) expands the Themes to include thirty-nine specific Research Topics. Each Research Topic briefly sets out the importance of the topic, identifies the variety of ways in which research in this topic could benefit the historic environment and broader society. It sets out our stall, and offers a list of research questions to guide those looking to do research in this field. For example:

- How are hidden histories within society reflected in the historic environment?
- What new technologies can be deployed to unlock access to our historic environment and how can they best be brought to bear?
- How can we maximise the use of survey and prospection data collected for renewable energy, aggregates and fishery projects to help us better understand our marine heritage?



Research reveals the significance of historic sites, and guides decision-making. The 18th-century Grade I Shrewsbury Flaxmill Maltings is the world's first cast iron framed building. © Historic England



Heritage contributes to the rich sense of local identity. Research deepens that link. Rag Market, Birmingham. © Historic England

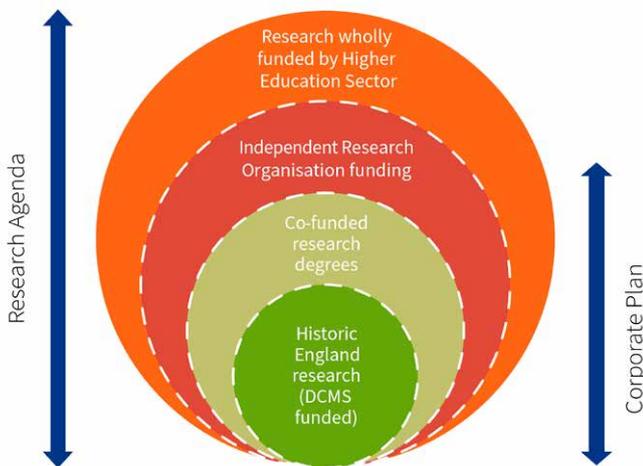


Much remains to be discovered. Research makes new discoveries and assesses their significance. Preserved Bronze Age timbers on the foreshore at Mersea, Essex. © Historic England

Make a difference

The research undertaken, commissioned and supported by Historic England is ‘applied research’, with outcomes relevant to current real-world situations. To help guide the development of projects and partnerships, our [Research Agenda](#) also lists types of research outcomes that we regard as delivering particular beneficial impact. These outcomes will support the national, strategic mission of Historic England, set out in our [Corporate Plan](#), and assist the wider heritage sector. Put simply, they are research that will make a difference.

The Research Agenda will be kept under review by Historic England. Please see our website [HistoricEngland/research/agenda](https://www.historicengland.org.uk/research/agenda) for updates.



The scope of our Research Agenda extends beyond what we can do ourselves, and encourages partnership with others.

Please see our website for further details of [collaborative research opportunities](#) with universities, and [funding for research](#) projects.

Contact research@historicengland.org.uk.

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Houses of eternal life

England's Jewish burial grounds.



Sephardi burials at Hoop Lane Jewish Cemetery, Golders Green, London. © Historic England, Nicky Smith

Known by the Hebrew names bet hayim, 'house of life', and bet olam, 'house of eternity', Jewish burial grounds are where the bodily remains of the dead dwell. According to traditional Orthodoxy, they await the arrival of the Messiah when they will awaken to be reunited with their departed souls and be resurrected for eternity.

Research by Historic England's Historic Places Investigation Team is underway to improve our understanding of England's post-Resettlement Jewish burial grounds. In collaboration with colleagues in the Listing Group, we are working to enhance their protection through new entries on the National Heritage List for England (NHLE) and, as we learn more about the issues they face, we are developing policies and building partnerships to ensure that the historic significance of these unique places is not lost.

The Resettlement

In 1656 Oliver Cromwell allowed Jews to be re-admitted to England after an absence of almost 400 years following their expulsion by Edward I. The 'Sephardim' of Spanish or Portuguese descent were the first to arrive, later joined by 'Ashkenazim' from Eastern Europe and Germany. Most lived in London's East End, where the earliest cemeteries are found within a small area around the Mile End Road. The Velho Sephardi cemetery, established in 1657, is the oldest to survive. Smaller communities developed later in provincial ports and market towns, each of which had their own burial ground. The oldest fully documented example outside London, in Fawcett Road, Portsmouth, was acquired in 1749.

Urban churchyards and burial grounds became a source of disease and were closed under the provisions of the Burial Acts of 1852 and 1853. These Acts led to the

establishment of municipal cemeteries which form the basis of modern burial provision. Many have a discrete Jewish section, usually at the cemetery's edge and accessed through its own entrance. Southampton Common Cemetery has one of the earliest Jewish sections, dating from 1854. These municipal cemeteries would be the final resting places of many of the 100,000 Jews who fled to Britain from pogroms in Eastern Europe between 1881 and 1914. They were joined by a further 50,000 who managed to evade Nazi death camps prior to 1939.

Hidden gems

Passers-by on busy urban streets are usually unaware that a Jewish burial ground lies hidden away behind high walls and locked gates. Those who venture inside will find a quiet and secluded oasis harbouring a deep sense of the past. There are no crosses or weeping angels and it is not normally the custom to lay flowers. Instead, small stones are placed by visitors to the graves, following the Biblical custom of covering burials with cairns.

Although Jewish cemeteries share some characteristics with Christian burial places, there are differences. In contrast to churches surrounded by their graveyards, Jewish burial grounds are hardly ever located next to a synagogue. They are usually enclosed by high walls and access is restricted. If possible, running water is supplied for the ritual washing of corpses and facilities are provided near the exit for visitors to ritually cleanse their hands on leaving the cemetery. Bodies may be buried with the head facing Jerusalem (east or south-east in Britain) and care is taken to delimit the outline of a grave by kerb sets, railings or temporary plastic markers. This prevents people disrespecting the deceased by stepping over them and alerts the Cohanim to their presence.

The Cohanim are male Jews directly descended from Aeron by the paternal line. Present-day Cohanim might have indicative surnames such as Cohen, Kahn, or Katz, but synagogues rely on individuals to identify themselves. They have special priestly status in Orthodox Judaism and, to avoid defilement, they are strictly forbidden to come into contact with corpses other than those of close family members. For this



Washing facilities at the United Synagogue's Cemetery, Willesden, London. © Historic England, Mike Williams



The ohel at Crumpsall Cemetery, Manchester, built in 1888. © Historic England, Mike Williams



Elaborate late 19th-century monument of the Samuel family, founders of H Samuel, at the United Synagogue Cemetery, Willesden, London. © Historic England, Nicky Smith



Burial enclosure for Hannah Rothschild, Countess of Rosebury (d.1890), United Synagogue Cemetery, Willesden, London.
© Historic England, Nicky Smith



Hands raised in blessing and a crown, symbols denoting the grave of a male Cohen who was the head of his household.
© Historic England, Nicky Smith



Eighteenth-century Levi headstones and Cohen headstones at Southsea, Portsmouth. © Historic England, Michael Hesketh-Roberts

reason the graves of Cohens are often found at the edges of cemeteries to allow their Cohanim relatives to visit while keeping a safe distance from the other graves.

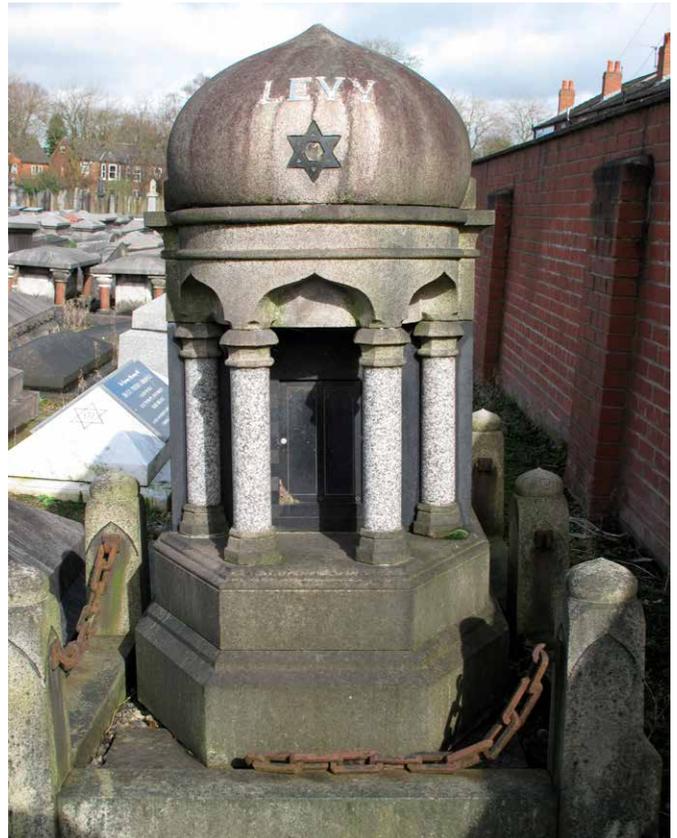
The spectrum of religious observance in Judaism is wide. Reform and Liberal congregations have their own burial grounds where they allow human ashes to be buried, sometimes in purpose-built columbaria, whereas cremation is strictly forbidden in Orthodox cemeteries. Burial practices also reflect different ethnic origins. In larger cemeteries, Sephardim, who have flat tombs, are buried separately from the Ashkenazim with their upright headstones.

There may be an *ohel* (Hebrew for 'tent'), a small prayer hall in which the funeral service is conducted immediately prior to interment. This is sometimes combined with a *bet taharah* ('house of purification') where the body of the deceased is washed. Larger Jewish cemeteries, such as Willesden and Golders Green in London have impressive purpose-built complexes, and in some provincial cemeteries distinctive hexagonal *ohalim* were built during the 19th and early 20th centuries.

Monuments to the dead

Everyone was considered to be equal in death, so early Jewish *matzevot* (gravestones) were simple and uniform in size and style. However, it was not long before distinction crept in. In Victorian Jewish cemeteries chests, urns, obelisks and grander monuments began to appear in keeping with the fashions of the time. London's Brady Street cemetery established a special 'privileged members' section for people who financed it, while large monuments in prime spots were occupied by wealthy and powerful families such as the Rothschilds in London's Willesden and West Ham Jewish cemeteries.

Inscriptions are in Hebrew and English, with the balance shifting towards English over time. Hebrew and Gregorian calendar dates of death and birth (or age at death) are given, with names of the deceased and those of close family members. There may be a quotation from the Psalms and comments on an individual's character, activities, place of origin, place of residence (sometimes the full address), place and cause of death.



Domed memorial to Haym Levy (d.1923) at Urmston cemetery, Manchester. © Historic England, Nicky Smith



Many Jews fled persecution and their headstones make poignant reference to those left behind. © Historic England, Nicky Smith

Jewish symbols are of particular interest. The Star of David is common and is a relatively recent introduction, appearing from the 19th century onwards as a public confirmation of Jewishness. Older symbols include spread hands performing a priestly blessing denoting the grave of a male Cohen. Another symbol found is a hand pouring water from a jug. This denotes the grave of a male Levi, a descendent of families who served the Cohanim of the Jerusalem Temple. Levis still ritually wash the hands of the Cohanim before the latter recite priestly blessings during some synagogue services. Other symbols include the menorah (seven-branched candelabra), broken trees, birds, books and opening doors.

Decline and decay

Today, the Jewish population in England is declining and those who remain have usually moved from the inner-city areas of early settlement to more affluent suburbs. Their 'orphaned' burial grounds often lie untended, sometimes derelict. Even where the Jewish community thrives, the challenge to maintain ageing cemeteries with large numbers of dangerously unstable, broken and weathered tombstones is enormous. Vegetation growth, theft and vandalism exacerbate the problem, while urban foxes make burrows under funerary monuments.

Religious prohibition on the disturbance of Jewish burials has not protected them from damage and destruction. Most controversially, three quarters of London's Nuevo Cemetery, including the earliest part dating from 1733, was destroyed for the expansion of Queen Mary University's campus in the 1970s. The surviving part is now listed Grade II on Historic England's Register of Historic Parks and Gardens.

Burial grounds are the principal body of evidence for the cultural heritage of the early Jewish community and are sometimes the only reminder of a community which no longer exists. Their gravestones tell us about individuals from all walks of life, giving us an insight into people's beliefs and into contemporary fashions, providing a unique historical and social perspective of Jewish life in England from the 17th century onwards.

Author



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Nicky is a landscape archaeologist who began her career with the Ordnance Survey. She joined

English Heritage from the Royal Commission on the Historical Monuments of England in 1999. She undertakes a range of applied research and analytical survey tasks. Her publications include *An Archaeology of Town Commons in England* (2009).

Further reading

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The Whitehorse Hill cist, Dartmoor

An ordinary or extraordinary Bronze Age burial?

The excavation of the Whitehorse Hill cist took place in the late summer of 2011. It had been assumed that the most significant aspect of the project would be the environmental recording and that the cist itself would be empty. In the final event, the cist was found to contain one of the most significant Early Bronze Age burials to have been found in southern Britain.

At over 600m above sea level, the Whitehorse Hill cist is located on one of the highest and most remote hills on Dartmoor. There are extensive views over the

surrounding landscape and the overall feeling when standing on the mound is of being far removed from the everyday world. But was this perception one which would have been shared by the communities who built the cist in the Early Bronze Age?

The cist is located on the west side of a natural peat mound, which it is tempting to imagine may have appeared to Bronze Age people to be a small barrow. This, however, is uncertain as the area around the mound had been extensively cut for peat in the post-medieval period.



The Whitehorse Hill peat mound from the west. Andy M Jones © Cornwall Archaeological Unit, Cornwall Council

Excavating the cist

Because of continuing erosion to the site, in 2011 Cornwall Archaeological Unit was funded by Historic England and the Dartmoor National Park Authority to undertake an excavation to record the contents of the cist and recover environmental information from the adjacent mound section. The exposed section of the peat mound was cut back and investigations began with the sampling of the mound. It had been thought that most of the information gathered by the project would be of an environmental nature (Jones 2016). This was because most Dartmoor cists have proved to be devoid of artefacts and the acidic soil conditions here mean that unburnt bone does not survive. Furthermore, a previous inspection indicated that the end stone of the cist was missing and what was left of the interior appeared to contain vegetation (Turner 2000).

The environmental recording did, as anticipated, reveal an interesting sequence. Pollen and testate amoebae analysis demonstrated that the summit of the hill was becoming drier and more grass-covered at around the time that the cist was constructed, and study of the non-pollen palynomorphs (fungal spores) associated with animal dung suggested an increase in the presence of grazing animals. The footprints of sheep and cattle were found in the later Bronze-Age field systems (Balaam *et al* 1982) or reaves, which are found in lower-lying parts of the moor. It is possible that transhumant pastoralist communities were moving their animals to higher pastures during the summer months during the Early Bronze Age.

It was not, however, the only major significant outcome from the project. On completion of the sampling, the



The Whitehorse Hill peat mound after the section had been cleaned. © Alan Endacott



Close-up of the cist after the west-facing section had been cleaned back. Andy M Jones © Cornwall Archaeological Unit, Cornwall Council

section was cut back and the very large capstone which sealed the top of the cist was exposed. Once this was lifted it became apparent that the end stone of the cist was not missing, but rather a small side stone had been displaced. This meant that, unexpectedly, the cist was mostly intact. There was, however, no indication that it held anything other than peat, and on that basis sampling in spits commenced to recover peat for further analysis and radiocarbon dating. Almost immediately a remarkable discovery was made. A shale bead was found and a patch of 'orange fur' and burnt bone was exposed. Luckily the deposit was located on a base stone and it was possible to block lift it for controlled excavation at the Wiltshire Conservation Centre. After the block was lifted the side stones were removed and a final exciting discovery was made. This took the form of two hazel stakes: one had become prone but the other was vertical and marked the corner of the cist. It is therefore possible that the site had been marked as a place for burial before the cist was constructed.

Reconstructing the burial

The preservation of the contents of the cist in the peat and the controlled level of excavation meant that a great deal more information was recovered than would have been the case had we tried to excavate in the field. It is now possible to reconstruct the series of events surrounding the formation of the burial deposit. After

the site had been marked by the hazel stakes, a cut was made into the peat. A granite slab was placed on the bottom and the sides were lined with vertical set stones. The granite slab on the bottom of the cist was covered by a layer of purple moor grass, still growing on the moor today, which had probably been collected in late summer. This seasonality is also indicated by meadowsweet pollen, which may have been part of a floral tribute. Upon the plant matting was an extraordinarily rare survival, an animal skin and textile band or sash, fringed by triangles of calfskin, upon which was a bearskin pelt. The pelt is without parallel and may have been worn as a high-status garment before being used to wrap what was clearly the remains of a cremation deposit. The cremation comprised the partial remains of a young person, who on artefactual associations was probably female.



Textile and animal-skin object after conservation treatment. Helen Williams (Wiltshire Conservation Centre), © Plymouth Museum

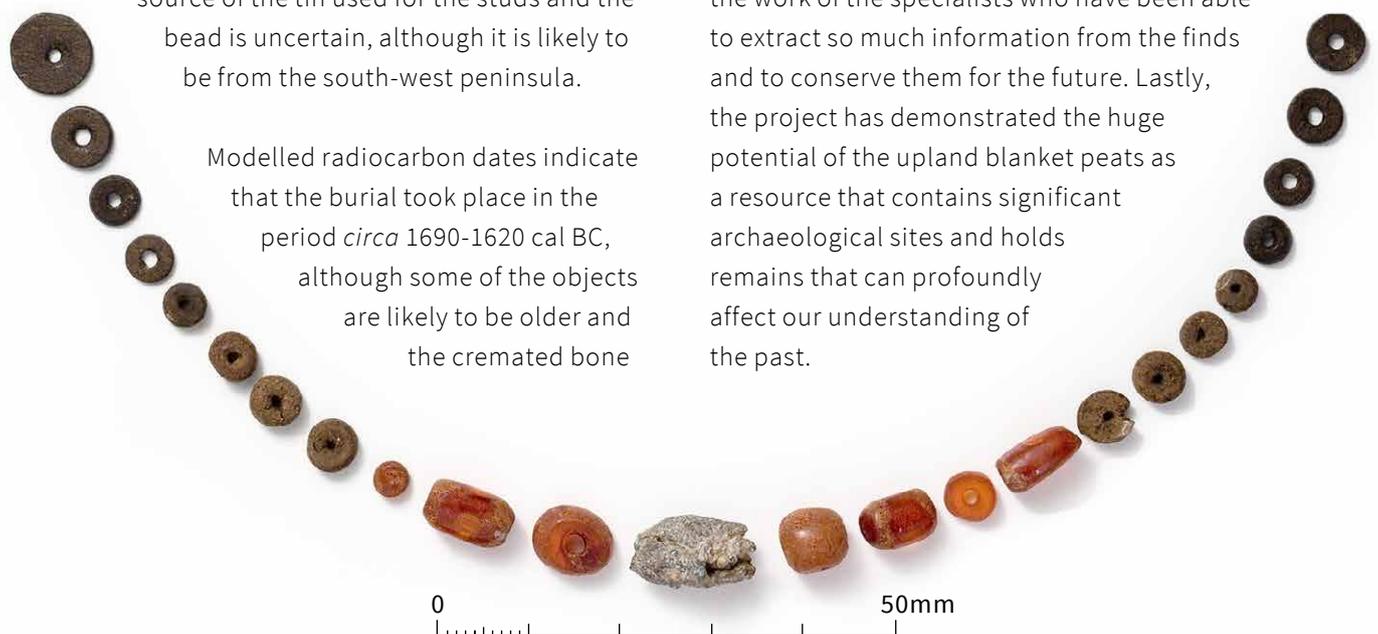


Basketry container, detail. Helen Williams (Wiltshire Conservation Centre), © Dartmoor National Park Authority

Beside the pelt was a lime-bast basketry container, inside which were over 200 beads from a necklace. One of the beads was tin, 6 more were of amber, 92 were of kimmeridge shale and over 100 were of clay. This number of beads makes it the largest composite necklace from south-west England and reveals long-distance contacts with communities in Wessex, from where the amber and shale beads were obtained.

Four studs made from spindle wood were also recovered from inside the basketry object, and they provide the earliest evidence for wood turning in Britain. Spilling out of the container was a braided wrist or armband made from cattle hairs and pierced with tin studs. The source of the tin used for the studs and the bead is uncertain, although it is likely to be from the south-west peninsula.

Modelled radiocarbon dates indicate that the burial took place in the period *circa* 1690-1620 cal BC, although some of the objects are likely to be older and the cremated bone



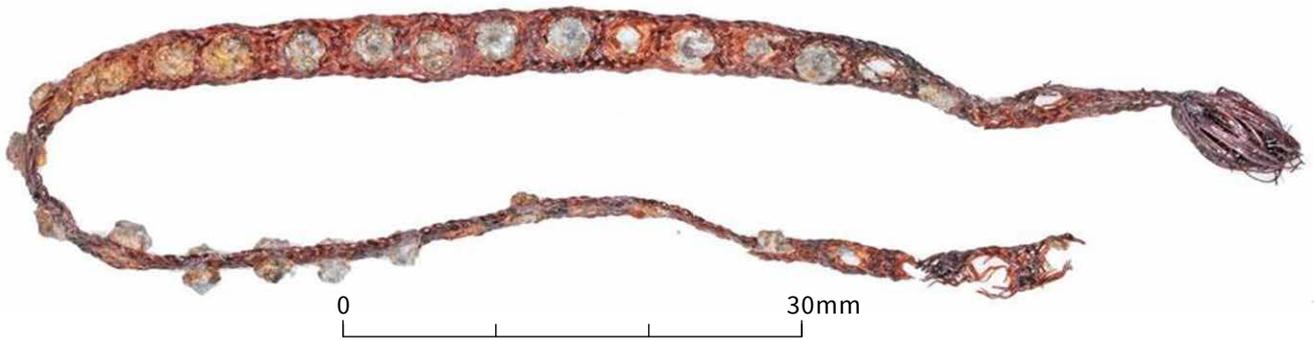
Hypothetical reconstruction of arrangement of some of the beads in the composite necklace. © Gary Young

may well have been curated prior to its deposition in the cairn. The difference in ages is indicated by the individual radiocarbon dates and the condition of the artefacts. The basketry container, for example, appeared to be new, whereas the amber beads were old and worn. The burial of the bone in the cist may have therefore occurred long after the person had died.

The motive for choosing Whitehorse Hill as a place for burial is lost. It may have been to place an individual closer to the heavens on an elevated plateau, or to demarcate an area of valued land, or perhaps it was a favourite place, where pastoralists sat while their animals grazed on the surrounding pasture. In the latter scenario, the remoteness experienced by the visitor today is perhaps unlikely to have been that of the Bronze-Age pastoralist.

The importance of the site

The organic nature of the artefacts, which included textiles, wood and a pelt, represent a rare survival, evidence of what has been referred to as the 'missing majority' (Hurcombe 2014). As such, they provide a window into what was likely to have been placed into the many excavated cists on Dartmoor and beyond, which are now apparently empty boxes. So perhaps, what we should consider to be extraordinary is not necessarily the artefacts themselves but instead their survival. The 'extraordinary' part of the project is the work of the specialists who have been able to extract so much information from the finds and to conserve them for the future. Lastly, the project has demonstrated the huge potential of the upland blanket peats as a resource that contains significant archaeological sites and holds remains that can profoundly affect our understanding of the past.



The armband following conservation. Helen Williams (Wiltshire Conservation Centre), © Plymouth Museum

Author



**Dr Andy Jones, PhD,
CMIFA, FSA**
Principal Archaeologist,
Cornwall Archaeological Unit.

Andy's PhD focused on the earlier Bronze-Age barrow complexes that are found across Cornwall and south-west Britain. His main research interests are focused upon the Neolithic and Bronze-Age periods, particularly in relation to the uplands and coastal areas of western Britain. He directed the excavations at the Whitehorse Hill cist and oversaw the post-excavation project, the results from which were published by Oxbow books in 2016.

Further reading

Balaam, N D Smith, K and Wainwright, G 1982 'The Shaugh Moor project: fourth report – environment, context and conclusion'. *Proceedings of the Prehistoric Society* **48**, 203–79

Turner, J 2000 'A cist on Whitehorse Hill'. *Proceedings of the Devon Archaeology Society* **58**, 249–50

Jones, A M 2016 *Preserved in the peat: An Extraordinary Bronze Age burial on Whitehorse Hill, Dartmoor, and its wider context*. Oxford: Oxbow Books

Hurcombe, L 2014 *Perishable Material Culture in Prehistory: Investigating the missing majority*. London: Routledge



Photograph of the larger pair of wooden studs. Gary Young, © Dartmoor National Park Authority

Reconstructing the parkland of Marble Hill House

A garden designed by Alexander Pope?

Marble Hill, on the Thames west of Richmond, was one of several Palladian villas in this then fashionable rural area. The house was built between 1724 and 1729 by Henrietta Howard, Countess of Suffolk (1689-1767) and sits within 27 hectares of parkland.

Both house and park are now part of the National Collection of historic properties administered by the English Heritage Trust (EHT), and the site is intensively used by local residents. The visitor facilities need improvement, so the EHT is applying to the Heritage



The house and grounds with the Thames in the foreground. © Skyscan Balloon Photography, Historic England Photo Library

Lottery Fund and hopefully over the next few years the site will see major developments including the restoration of the mid-18th century pleasure grounds around the house.

The history of the house and park

Henrietta Howard was mistress to the Prince of Wales, later George II. She was also a lady-in-waiting to the Princess of Wales and friendly with her circle of courtiers who included many of the most fashionable gentlemen of Georgian England. The architect Colen Campbell, credited as a founder of the Georgian style, designed the house and Lord Herbert, later Earl of Pembroke and known as the ‘architect earl’, directed its construction. In a similar vein the pleasure grounds, also commenced in 1724, saw the involvement of both the famous landscape architect Charles Bridgeman and the poet Alexander Pope, a long standing friend of Henrietta, who may have had a hand in the design.

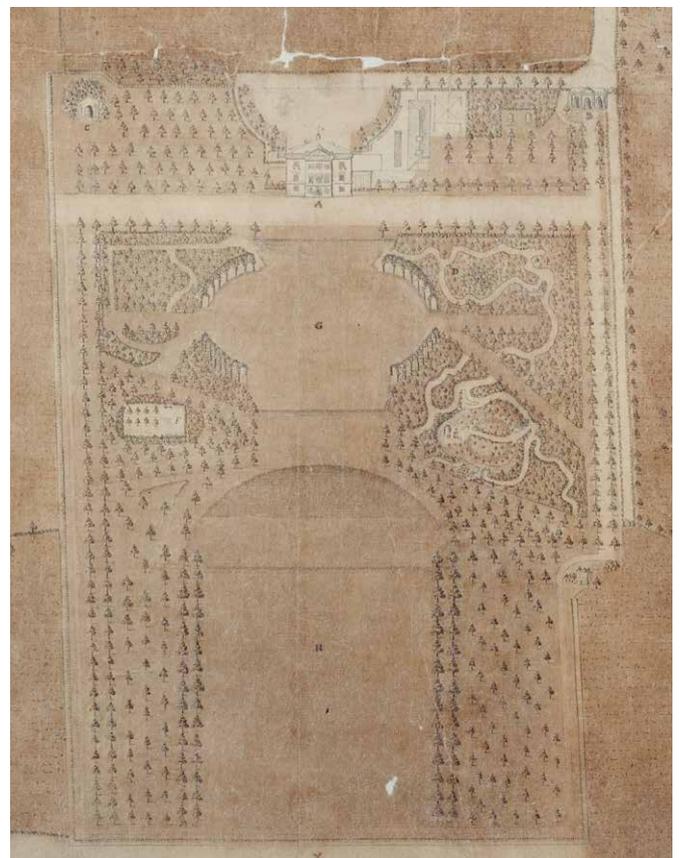
Henrietta’s will included a legal clause that ensured the estate, house and contents remained together. In 1824, however, it was divided and the contents dispersed, though the estate was later reunified by General Jonathan Peel, MP and brother of Prime Minister Sir Robert Peel. Following his death in 1879 and that of his wife in 1887, the house lay empty for ten years and was eventually sold in 1898 to the Cunard family who planned to develop the site as a housing estate. This was opposed by local residents and in 1902 an Act of Parliament was passed to protect the view from Richmond Hill, in which Marble Hill was central. Following its purchase by a group led by the London County Council, the park was opened to the public in 1903 with the house serving as a tea room, and throughout the 20th century further alterations to the park were made.

Reconstructing the park

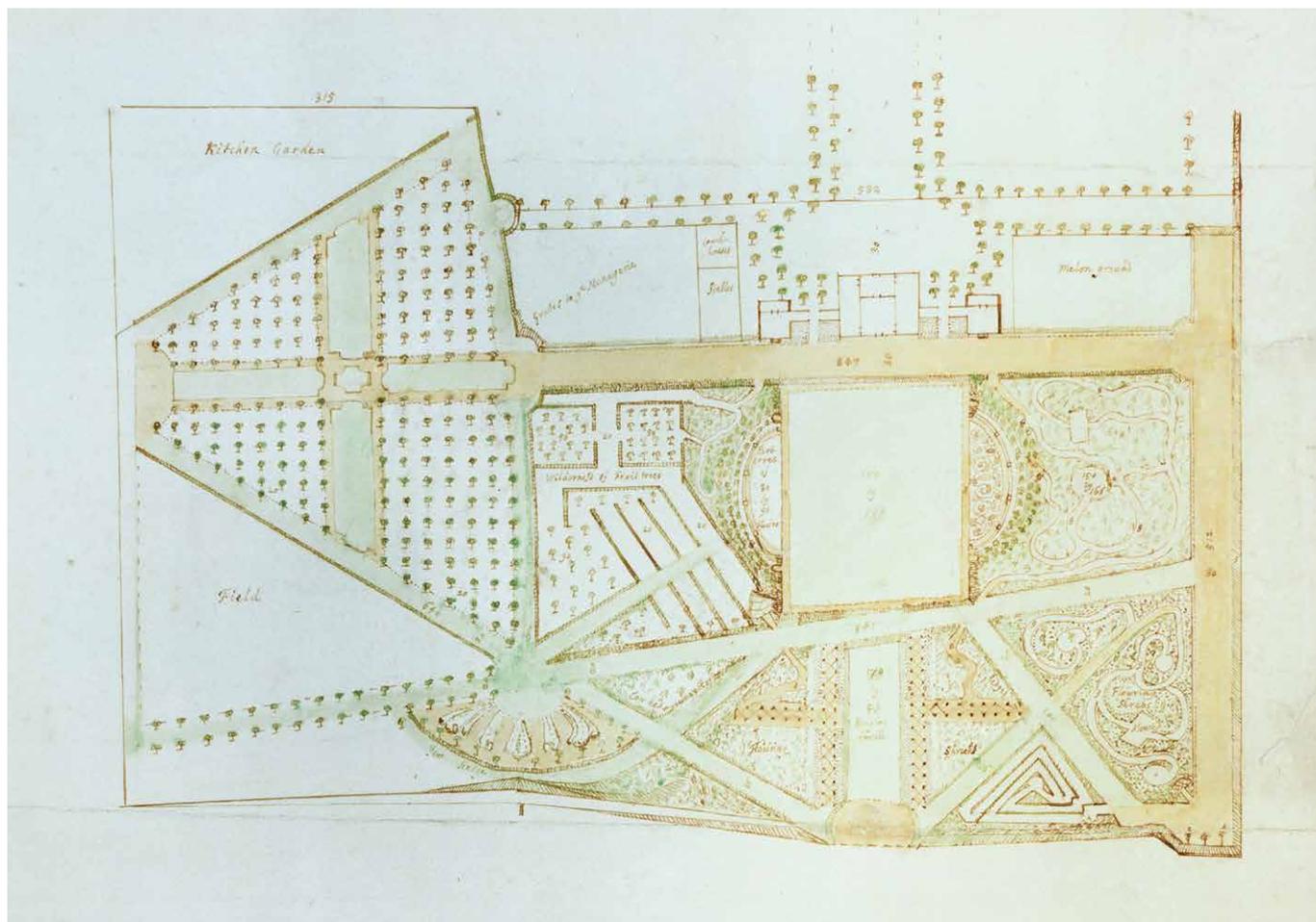
The current Historic England project, designed to support the bid and the planned works, comprises a wide range of investigation techniques including aerial photography and lidar mapping, analytical earthwork survey, coring and vegetation analysis and various geophysical techniques. Some excavation has also been undertaken and more is planned.

One of the main uncertainties in the history of Marble Hill is the extent of Pope’s influence on the gardens. The present development plan proposes the reconstruction of the pleasure grounds as they appeared on a map of about 1752. However there is also a design attributed to Pope and thought to date to about 1724. The question is, was the earlier plan just a draft or was it implemented and later remodelled? There are many similarities between the two plans, such as the avenues south of the house and to the east, the central lawn with semi-circular features to either side, and the arrangement of the quarters including their asymmetric southern extent. It is possible, however, that such large-scale features could have been copied from one design to another or even discussed on visits and incorporated into several designs.

However, some small-scale features, several revealed by the earthwork survey, suggest that Pope’s design may have been implemented. The width given for the cross walk on the 1724 plan (30 feet) is almost exactly that suggested by the earthwork evidence. At the eastern



Detail of a map thought to be from about 1752. Reproduced with the kind permission of Norfolk Record Office MC184/10/1



Detail of a plan for the pleasure grounds thought to be of about 1724. Reproduced with the kind permission of Norfolk Record Office MC184/10/3

end of the cross walk, quarter-circular features to north and south may be visible in the earthworks, and some of the unexplained features to the west of the slope down from the terrace may relate to the walks that appear on the 1724 plan. Perhaps the most significant discrepancy between the two plans is the westward extension of the garden; the 1724 plan shows the cross walk extending further west than in 1752 and ending in a semi-circular area, the focus of several walks and perhaps intended to house some sort of 'eye-catcher'. The 1752 plan shows an octagonal feature in this area and though it appears on that plan to be south of the line of the cross walk, Historic England's surveys all show the feature to have been directly in line. This could therefore be a remnant of the earlier layout, for it is difficult to see why otherwise it would have been sited here, at the bottom of a slope and not particularly prominent. It therefore seems possible that when the land to the south was acquired in September 1724, allowing development of the whole sweep of ground to the Thames, the

plans which had already been started may have been reconsidered. Perhaps it was this that prompted Pope and Bridgeman to visit at this time rather than it marking the start of their planning.

Later uses of the parkland

The aerial survey has revealed the extent of the park's wartime use. Typically, most of West Meadow and the southern third of East Meadow were given over to allotments with the northern two thirds apparently ploughed for pasture. This use persisted for a surprisingly long time, with large areas of allotments surviving into the 1950s and the last area only being removed in the early 1960s. Despite the urgent need for home-grown food during the war, the whole park was not converted to allotments. Parts were kept for sport; the areas north and south of the house featured football pitches, tennis courts and perhaps cricket squares. No doubt this helped maintain morale and fitness, and kept local children occupied.

This period also saw the construction of a curious feature in the north-east corner of the park, shown on an aerial photograph of 1946. It appears to consist of a metallised, perhaps concrete, surface measuring 33x25m, but the detail of the internal features is difficult to interpret. Four small, probably square, structures were evenly spaced along the northern side with others towards the south corners, and at the south centre was another structure, which analysis of the aerial photograph indicates was larger and taller. There are lighter patches within the centre which are reminiscent of drainage or wear. The feature can be seen on some wartime aerial photographs and had been removed by 1949. Its short lifespan and relatively quick removal after the war suggest it was associated with the conflict, but we are not entirely sure what it was for and would welcome any suggestions, particularly if anyone with a long memory can recall it.



The park in the immediate post war period (detail from USAF LOC304/14 023 22-APR-1944 Historic England USAF Photography)



The mystery feature in 1946 (left, above) and 1947 (right, above) (details from RAF 106G/UK/1271 5274 23-MAR-1946 and RAF CPE/UK/2112 5228 29-MAY-1947 Historic England RAF Photography)

This article only touches on the work undertaken and on how combining a range of techniques has proved invaluable in unpicking the history of the park. We hope that our work will enhance the current development plans and that the local community will continue to enjoy Marble Hill for years to come.

Author



Magnus Alexander, MCifA
Senior Investigator with
Historic England.

Magnus is based in Cambridge and is a landscape archaeologist and archaeological surveyor specialising in analytical earthwork survey. For the last few years he has been working on the gardens at Marble Hill, Wrest Park and Audley End but has worked on a wide range of other sites.

Further reading

Alexander, M, Carpenter, E *et al* 2017 *Marble Hill House, Twickenham, London: Landscape Investigations*. Portsmouth: Historic England Research Report Series **5-2017**), available at: <http://research.historicengland.org.uk/>

Linford, P, Linford, N *et al* 2016 *Marble Hill Park, Twickenham, London: Report on geophysical surveys, December 2015 and February 2016*. Portsmouth: Historic England Research Report Series **19-2016**, available at: <http://research.historicengland.org.uk/>

Understanding Winchester's past

A new archaeological synthesis.

We have a great deal of archaeological information about Winchester. How accessible it is as whole, though, is another matter. Much has been published, but is to be found in a multitude of different places. A major new publication brings the evidence together to provide a fresh analysis of the significance of the city and its environs.

Like most of England's great historic cities, Winchester has seen much antiquarian and archaeological investigation. The first recorded discovery was in 1693, when a Roman tessellated pavement was observed while a new palace was being built for King Charles II. Further chance finds and discoveries followed in the 18th, 19th and early 20th centuries. Work to more modern standards began in the 1920s, when Christopher Hawkes (later one of Britain's leading prehistorians) excavated the Iron Age hillfort on St Catharine's Hill, overlooking the city. Between 1961 and 1971, Winchester saw the first major programme

of urban archaeology in Britain, directed by Martin Biddle for the Winchester Excavations Committee. This campaign set new standards for rescue archaeology in Britain and abroad. Subsequently Winchester City Museums Service, various commercial archaeological contractors and an active local society have undertaken numerous fieldwork projects in the city.

Much of this work has been published, in a variety of places: for example, the Excavations Committee's *Winchester Studies* volumes, two series sponsored by the Museums Service, and various other monographs and journal articles. Many investigations of the last 25 years or so have, however, only been reported in 'grey literature', produced as part of the local authority planning process, and a number of important excavations are still awaiting publication. Thus it has - until now - been difficult to get a comprehensive overview of Winchester's very rich archaeology.

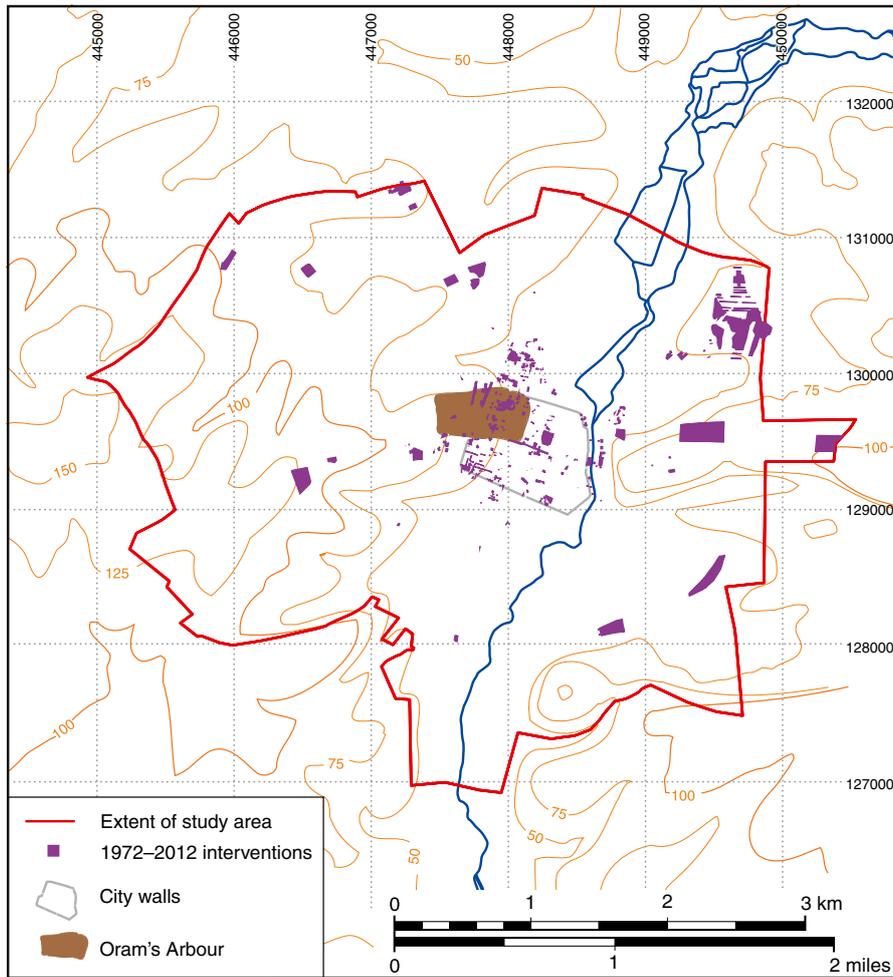
The new publication

It was to meet this need that the newly-published monograph, *Winchester, St Swithun's 'City of Happiness and Good Fortune': an archaeological assessment*, was produced. This volume has been funded by Historic England, with Winchester City Council leading the project, and is published by Oxbow Books on behalf of Historic England (for details, see Further reading). It builds on the Winchester Urban Archaeological Database (UAD), the creation of which was funded by English Heritage in the 1990s as part of a national programme of such databases. The UAD provides a comprehensive summary, with GIS (Geographical Information Systems) mapping, of all archaeological work in Winchester, and of the results of that work. The UAD now forms part of Winchester City Council's Historic Environment Record.

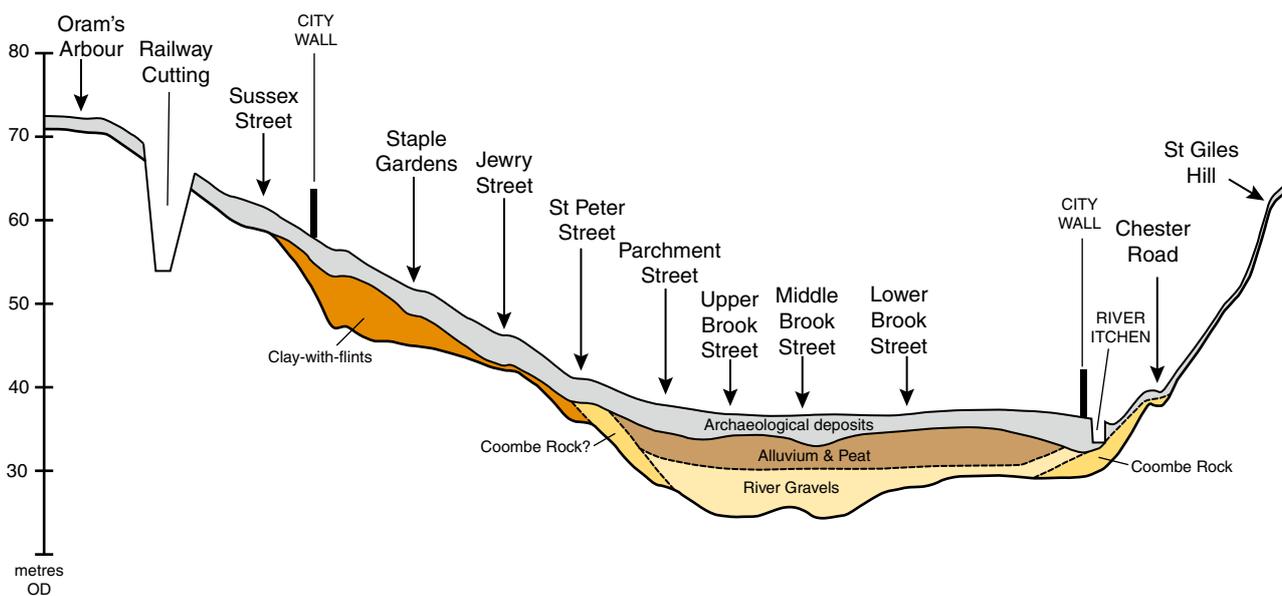
The new book synthesises the archaeological information for Winchester, and sets it in a wider geographical and historical context. The first part explains the background to the project, the setting of Winchester, and the history of archaeological endeavour there. A 'deposit model' is also presented. The main body of the volume consists



Winchester has a long history of archaeological investigations. Sidney Ward-Evans examined the remains of Winchester Castle in 1930. © Winchester City Council/Hampshire Cultural Trust



The new book brings together the results from numerous excavations. © Historic England



Cross-section of deposits in the valley of the River Itchen, in which Winchester sits. © Historic England

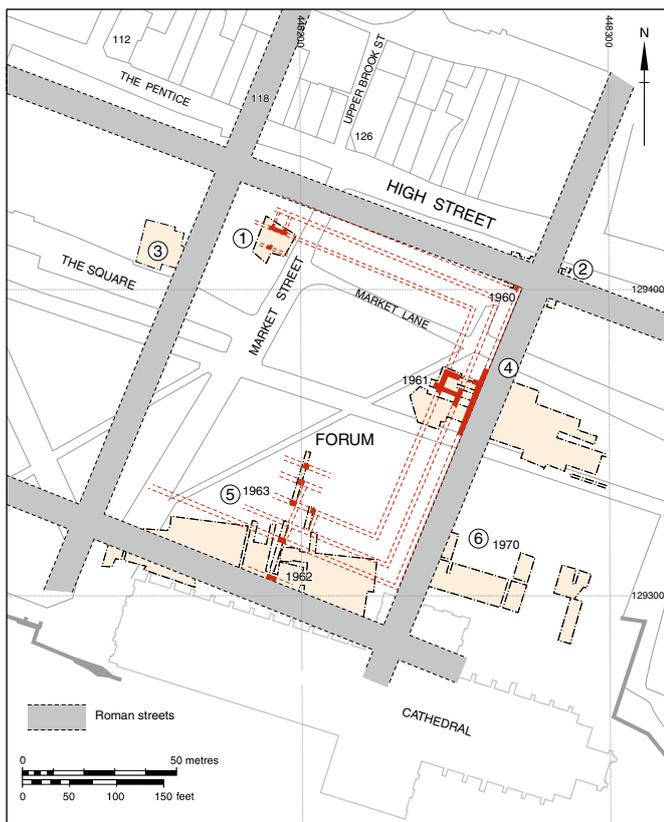


This Middle Iron Age pottery vessel came from Oram's Arbour, a major Iron Age defended enclosure which lies partly beneath the Roman and later walled city. © Winchester City Council/Hampshire Cultural Trust

of a chronological account, extending from prehistory to the 21st century. For each period, the wider regional and national background is explained, the pattern of past work and the nature of the resultant archaeological evidence are considered, and the evidence is described and discussed. Its importance and potential are then assessed. A final section provides an overview of Winchester's archaeology, including discussion of how best to manage it in the future. Appendices provide detailed gazetteers of past archaeological investigations in the city and of recorded monuments. The text is fully illustrated with maps, plans, drawings and photographs, many in colour.

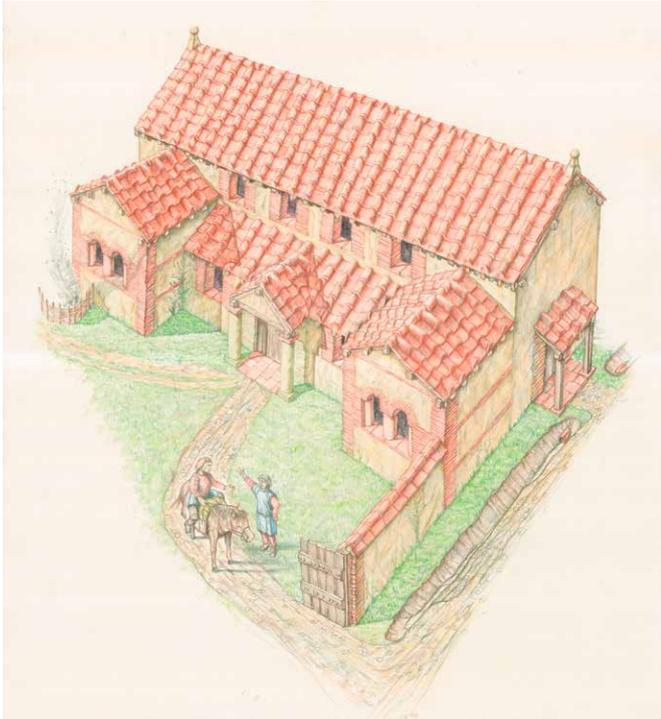
Winchester's long story

A picture emerges of Winchester as a place favoured for occupation for millennia. There was human activity in the area in the Palaeolithic, Mesolithic, Neolithic and Early Bronze Age periods: the combination of the valley of the River Itchen and surrounding chalk hills clearly made this an attractive area for both hunter-gatherers and early farmers. There were significant settlements in the city's hinterland in the Middle and Late Bronze Age. Activity intensified in the Iron Age with the construction of the hillfort on St Catharine's Hill and a large enclosed settlement on Winnall Down. Subsequently, perhaps around 150 BC, a large defended enclosure, now known as Oram's Arbour, was constructed on the western side of the Itchen valley. In the late 1st century AD, following the Roman conquest of Britain, the tribal (or 'civitas') capital of the Belgae, *Venta Belgarum*, was established here, partly overlying Oram's Arbour. The Itchen was canalised and the valley drained, a grid of streets laid out, and public buildings and defences were constructed. Remains of numerous houses, some of them with long histories of alteration and rebuilding, have also been found. The cemeteries of Roman Winchester have been investigated in great detail, notably the 4th century AD burial ground at Lankhills. Much light has been shed, too, on the economy, society and people of the Roman town.



This outline plan of the Roman Forum has been pieced together from a number of small excavations and observations. © Historic England

Venta seems to have remained a major urban centre until the end of Roman rule in Britain, in around 410 AD. What happened thereafter is (as in most parts of England) not entirely clear: buildings seem to have fallen into disuse or been demolished, and deposits of



Reconstruction drawing of an early 4th-century AD house excavated at The Brooks in the 1980s. © Winchester City Council/Hampshire Cultural Trust

'dark earth' are often found overlying their sites. There are Anglo-Saxon cemeteries, and some evidence for settlement in the environs of Winchester in the 5th and 6th centuries AD, but only slight evidence for activity within the former Roman town. By the 670s AD, however, Winchester had become the seat of a bishop, and home to one of Anglo-Saxon England's most important churches, Old Minster, whose history has been fully revealed in excavation. Secular occupation of the walled

area may have been limited to high-status estates; there is important evidence of glass-making and gold-working from this period.

In the late 9th century, Winchester became part of the network of *burhs*, or defended centres, established by King Alfred for protection against the Vikings. The Roman walls were refurbished and a new grid of streets was laid out within the walls. Winchester served as the royal capital of the kingdom of Wessex and, as the kings of Wessex became in effect the kings of England, the city had a prominent role nationally and even internationally. The population grew rapidly and Winchester became an important centre of trade and manufacturing, as well as of royal and religious power. Old Minster, site of the burial of St Swithun (bishop of Winchester and patron saint of the city) after his death in 863, was now flanked by New Minster and the Nunnaminster (later St Mary's Abbey). This great complex of religious institutions became a centre for the reformation of English monasticism in the late 10th century.



A Roman hypocaust (under-floor heating system) was excavated at the The Brooks. The low-lying site was heavily waterlogged. © Winchester City Council/Hampshire Cultural Trust



A pottery jug of Winchester Ware, a type of pottery which was being used in the city after about 950 AD. © Winchester City Council/Hampshire Cultural Trust



The Norman transept of Winchester Cathedral, built between 1079 and 1093 AD. © Winchester City Council



Ruins of the Bishops of Winchester's Wolvesey Palace in Winchester, now in the care of English Heritage. © Winchester City Council

Winchester's importance was sustained into the period after the Norman Conquest. An imposing castle was built, while the Anglo-Saxon Old Minster church was demolished and replaced by a new cathedral, in Norman architectural style and to a plan closely reflected in the building as it stands today. Another important building of the time was the Bishop of Winchester's palace of Wolvesey, ruins of which are now in the care of English Heritage. There were many other religious establishments in medieval Winchester, including the great abbey of Hyde founded by Henry I. Archaeology has shown that the medieval town flourished and was well-populated, with commerce and manufacturing well-attested. From about 1300 onwards, we have surviving domestic buildings to study, as well as abundant below-ground evidence.

After about 1200, Winchester's political importance began to decline, but it remained significant within its region, especially in the religious and judicial spheres; archaeological study has thrown much light on the detail of the later medieval, post-medieval and modern city, even down to the recording of air-raid shelters from the Second World War.

This short article tries to convey something of the historic importance and archaeological richness of Winchester. The 'archaeological assessment' volume on which it is based presents a much fuller picture, but is it itself only a summary of what is available. We hope that it will increase appreciation of Winchester's rich archaeological heritage, and stimulate further research on it in the years ahead.

Author



Roger M Thomas, FSA, MCifA

Roger has recently left Historic England. He was Head of Urban Archaeology from 1997 to 2011, and led Historic England's national urban archaeological strategies programme, of which the Winchester project formed part.



Patrick Ottaway, FSA, MCifA Manager and owner of PJO Archaeology.

Patrick was previously Head of Fieldwork at York Archaeological Trust, but began his professional career as Assistant City Archaeologist for the City of Winchester. He teaches on a part-time basis for York University. His principal research interests are Roman Britain, urban archaeology and ironwork.



Tracy Matthews, PG Dip Archaeological Officer with Winchester city Council.

Tracy has worked for Winchester City Council since 2001, and since 2008 as the Archaeological Officer. She advises the local planning authority and manages the Historic Environment Record which includes the Winchester Urban Archaeological database.

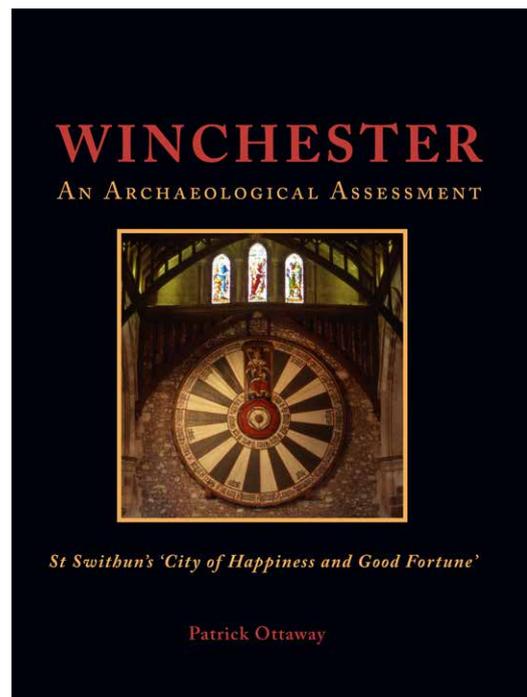


A mid-15th century building in Chesil Street, Winchester. For the medieval period, the evidence of buildings supplements that from excavations. © Patrick Ottaway

Further reading

Ottaway, P 2017 *Winchester, St Swithun's 'City of Happiness and Good Fortune': an Archaeological Assessment*. Oxford: Oxbow Books. ISBN: 9781785704499. <http://www.oxbowbooks.com/oxbow/winchester-swithun-s-city-of-happiness-and-good-fortune.html>

The Winchester volume is the latest in a series of such studies published by Historic England. Previous volumes cover Bath, Cirencester, Colchester, Greater London, Lincoln, Newcastle, St Albans and Shrewsbury. A further volume, on Bristol, is due to be published in 2018.



Cover image of volume. © Historic England

Historic England publications

In this edition of *Historic England Research* we look at two new titles from the Twentieth Century Architects series. This series, designed to provide full and engaging examinations of some of Britain's most significant post-war architectural practices, is commissioned by Historic England and the Twentieth Century Society. It's been several years since the last book in the series was published so we are really pleased to have some exciting new titles to look forward to.

Visit the [Historic England Bookshop](#) to discover a huge variety of books on archaeology, architectural history, sporting heritage and heritage conservation.

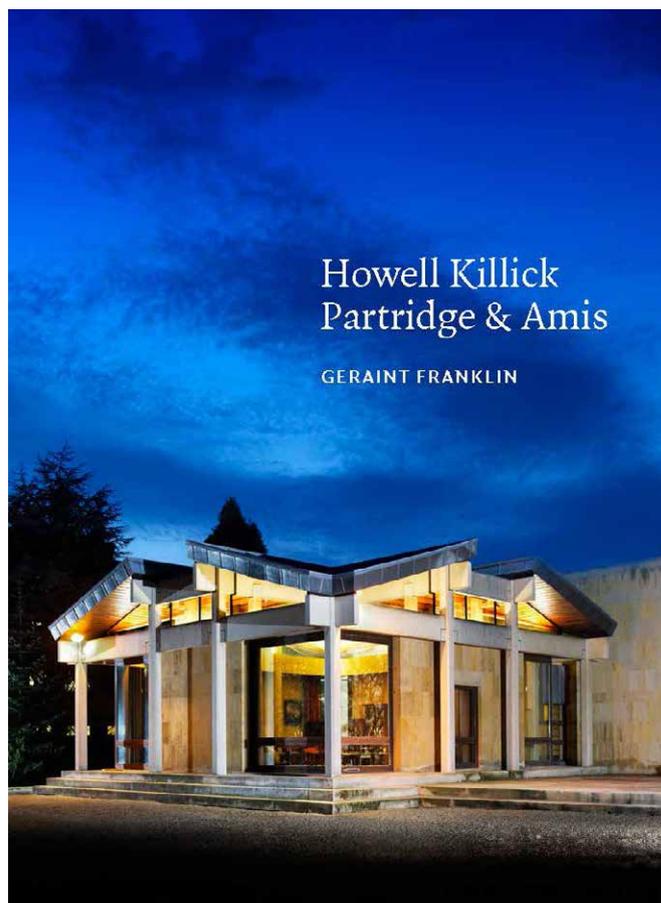
Readers of *Historic England Research* can get **20 per cent discount** on all books sold through the online shop with **free postage and packaging** on orders where the catalogue price is £20 and over.

Enter discount code **HERES17** on the basket page before you checkout.

Howell Killick Partridge & Amis Geraint Franklin

The Roehampton Lane (Alton West) estate is widely acclaimed as one of the seminal works of the Modern Movement in Britain. Less well known is the identity of its designers, four ambitious young architects in the employ of the London County Council: Bill Howell, John Killick, John Partridge and Stan Amis. Launched into practice with a maverick design for Churchill College, Cambridge, their output ranged from additions to Oxford and Cambridge colleges to theatres, houses and government buildings.

Deriving a distinctive design language from revealed structure and highly modelled surfaces, HKPA developed a rich, allusive and extrovert architecture. Although a mastery of pre-cast concrete and a preference for raw



finishes earned them an early reputation as Brutalists, their sensitivity to context, refined sense of light and materials and eye for the qualities of historic buildings transcends any single style.

Geraint Franklin has combined interviews with archival research to tell the stories behind the built and unrealised projects. New photography by James O Davies and images from the practice archive, help uncover this key practice in British post-war architecture.

£30.00 : June 2017 : 978-1-84802-275-1 : Paperback : 192pp : 240x170mm : 144 illustrations : Twentieth Century Architects

<https://retail.historicenglandservices.org.uk/howell-killick-partridge-and-amis.html>

Frederick Gibberd Christine Hui Lan Manley

This book gives a comprehensive account of the works of architect, town planner and landscape architect, Sir Frederick Gibberd. At the beginning of his diverse and far-reaching career, Gibberd was a pioneer of modern architecture in Britain – he designed Pullman Court in 1933, one of the first International Style buildings in the country. His association with the Modern Architectural Research (MARS) Group and his influential publications put him at the forefront of the establishment of modern architecture in Britain.

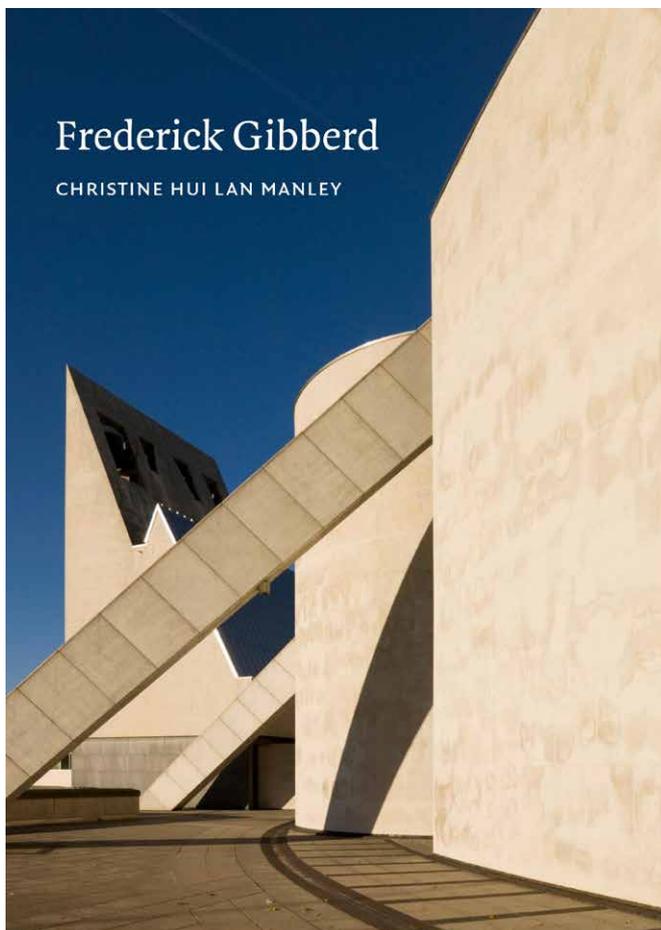
During the 1940s, Gibberd’s diaries reveal a belief that the Modern Movement had ‘done its job’, allowing architects to consider the visual, rather than functional qualities of materials, colour and texture. After the Second World War, his master plan for Harlow New Town and his influential book *Town Design* conveyed

his growing interest in ‘visual planning’. His later projects, Liverpool Metropolitan Cathedral (1967) and Regent’s Park Mosque (1977) for example, also reflected his aesthetic approach, prompting many to question his role as a key figure in the history of modern British architecture.

This reassessment of Gibberd’s work demonstrates, that with his visual approach to the design of buildings, spaces, townscapes and landscapes, Gibberd was at the forefront of the development of a softer, distinctly English form of modern architecture and town planning, thus, reaffirming his role as a significant architect of the 20th century.

£30.00 : August 2017 : 978-1-8402-273-7 : Paperback : 192pp : 240x170mm : 123 illustrations : Twentieth Century Architects

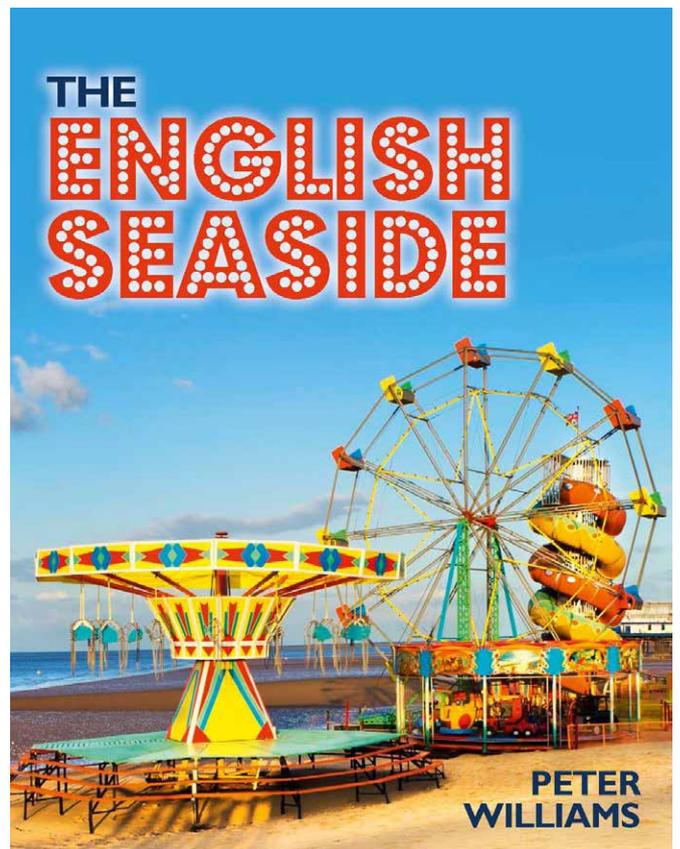
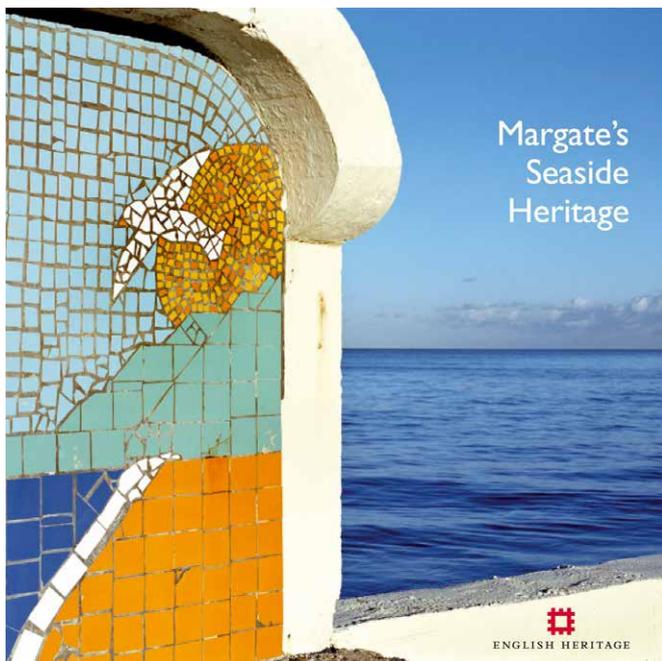
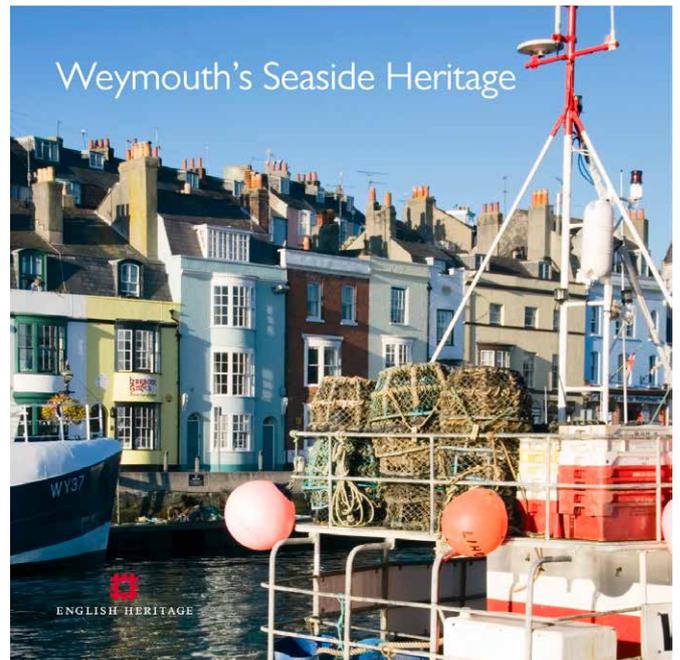
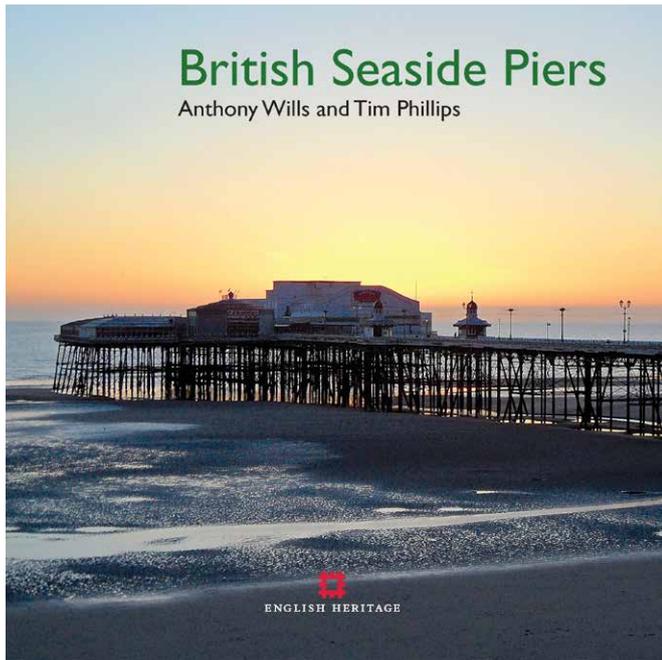
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Seaside Heritage

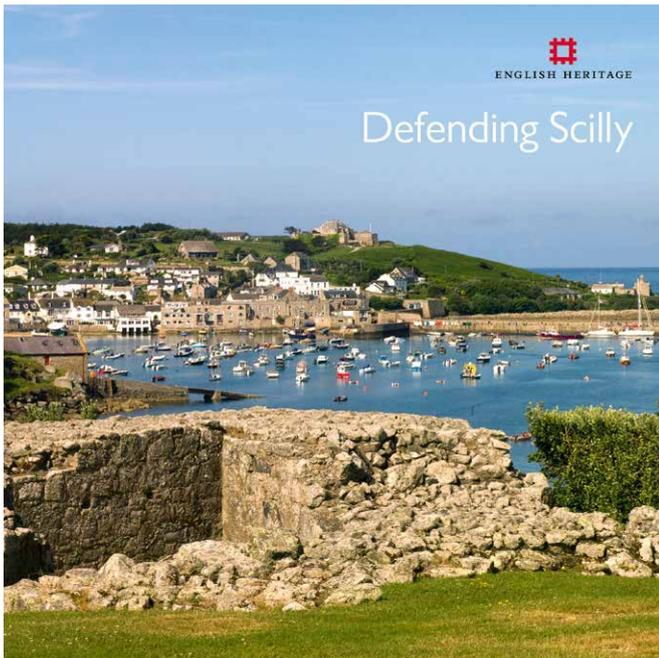
If you are yearning for summer and the salty sea air then Historic England publishing can offer you a tempting collection of seaside heritage books.

Seaside towns come with their own unique challenges and opportunities. The Informed Conservation series looks at the special character and development pressures faced by a selection of seaside towns. [Blackpool’s Seaside Heritage](#) examines the town’s rich heritage and shows how the transformation of Blackpool’s seafront along with regeneration programmes have led to improvements in the town for both visitors and residents; [Margate’s Seaside Heritage](#) looks at the town’s development as a destination for holiday makers; [Weymouth’s Seaside Heritage](#) tells the colourful history of the town through its buildings and open spaces; whilst [Defending Scilly](#) celebrates the unique survival of military fortifications on the islands and illustrates the value and vulnerability of the whole country’s coastal heritage.



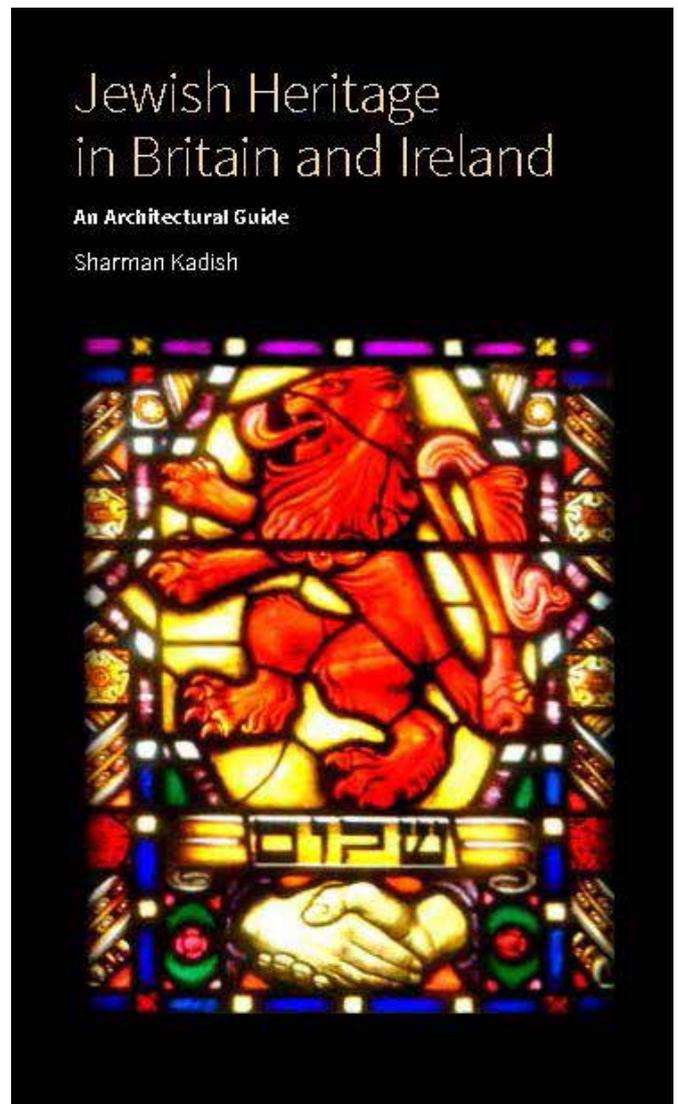
The seaside pier is perhaps the most iconic symbol of the British holiday resort. No two piers are the same, ranging as they do from the clear and uncluttered deck to elaborately structured pavilions, from amusement arcades to landing stages and theatres. [British seaside Piers](#) tells the fascinating story of the Victorian origins of the pier, discusses the engineering and architectural challenges of their construction, the economic benefits they bring, the constant conservation and preservation issues they face, and includes a gazetteer of all the piers which the public can visit around the coast of Britain.

Whatever your vision of the English seaside – whether it includes deck chairs, beach huts, piers, grand hotels, fairgrounds, fish and chips or gardens - Peter Williams' evocative photographs in [The English Seaside](#) will make you want to rediscover what a fantastic place the seaside is – full of character, charm and 'Englishness'.



Jewish Heritage

Jewish Cemeteries form part of Britain's rich Jewish heritage. To find out more you can turn to [Jewish Heritage in Britain and Ireland](#) by Sharman Kadish. First published in 2006, this revised edition celebrates in full colour the undiscovered heritage of Anglo-Jewry. Simple to use, this architectural guide covers more than 300 sites and is organised on a region-by-region basis. It remains the only comprehensive guide to historic synagogues and sites in the British Isles. Each section highlights major Jewish landmarks, ranging from Britain's oldest synagogue in the City of London, through the Georgian gems of the West Country to the splendid High Victorian 'cathedral synagogues' of Birmingham, Brighton, Liverpool and Glasgow.





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Edited by

Jon Cannon and Paul Backhouse

Design and layout

Vincent Griffin

Historic England Research can be viewed online at:

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ISSN: 2058-1858

Product Code: 52092

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