

SECRETARIES' REPORT

MARCH 2014 – MARCH 2015

Research

Chris Binding and Linda Wilson are continuing with their search for apotropaic marks, otherwise known as ritual protection marks or witch marks, in Somerset caves and churches, and are putting together a gazeteer of sites, with photographs, with the help of Graham Mullan, which will be hosted along with other such gazeteers on the UBSS website. They will be visiting Wookey Hole again shortly, and would like to express their thanks to the management at both Wookey Hole and Cheddar Caves and Gorge for their assistance with this research.

This year Christopher Smith and Anya Keatley come to the end of their PhDs on dating speleothems by U-Pb methods and testing the heterogeneity of uranium ores respectively

Roy Vranck has continued his collaboration with Andy Farrant in an 'ongoing research project investigating the developmental role of the Cretaceous and Tertiary geological periods on the Mendip Landscape'. This has already resulted in a paper on the Cretaceous overstep of the Mendip Hills.

Meanwhile, Charlie Self has published work on the use of gull caves in dating valley excavation. U-series dating on the speleotherms in these caves have been used to estimate the age of the Cotswold escarpment.

Caving

We have had great attendance to all of the club weekends and have been as enjoyable as ever. We have even been to some areas not often visited by UBSS, such as Devon. Closer to home, we have had a very interesting tour of Redcliffe Caves with Alan Gray and have finally begun to make use of the club's Draenan key thanks to Dr Pete Talling.

Due to the ongoing situation with the Student's Union building and the unfortunate last minute cancellation of the Derbyshire weekend due to bad weather, chances to use SRT have been few this year, however the recent trip to Yorkshire was well attended and enjoyed by all.

Caving abroad

Members of the Society have also been present on expeditions abroad, including the Cambridge University Caving Club's expedition to the Loser plateau in the Austrian alps, Bristol Exploration Club expedition to Crete, and the club's very own project in County Mayo in the Republic of Ireland, for which we are incredibly grateful for the grant from the Alumni Foundation for the surveying gear, and other grants from Tratman Fund and the Oliver Lloyd Memorial Fund.

The 2014 Ireland expedition followed up on the success of the previous year, working towards the new edition of the society's publication Caves of County Clare and South Galway in time for the centenary of the society in 2019. Detailed surveys of six caves in the Cong area were produced, summing to almost a kilometer of passage, as well as location data and descriptions for many more minor caves. Elliott Smith has taken on the responsibility of organising the 2015 expedition, with hopefully further progress to follow.

Other

January saw the publication of the first caving guide ebook in the UK; of the now out of print Caves of County Clare and South Galway first published in hard copy in 2003. Furthermore, inventive socials and museum nights organised by Linda Wilson and Pippa Churcher and joint with the Archeology society have resulted in significant interest for the museum, and an archeology student undertaking their practical work right here in the stables.

We would like to thank to Dr Martin Crossley-Evans for the donation to the Library of significant runs of a number of journals including the Geological Magazine and the Journal of the Geologists Association.

And finally, this year the society won the prize for best Stall at the Fresher's Fair, providing £100 prize money thanks to the cuddly charms of the squeeze machine.

Jacob Podesta

MUSEUM REPORT, 2015

The past year has been another busy one in both the museum and library.

Work on the old Time Team dig at Fishmonger's Hole has continued. I collected the human remains from Oxford Archaeology, and a spreadsheet catalogue of the material was made by Graham Mullan, Tony Boycott and myself, with the invaluable aid of Tony's old medical half-skeleton. Some additional animal material was obtained from Professor Mark Horton, and Tony, Pippa Churcher and I went over to see our Curatorial Advisor, Andy Current, for the day, during which Andy identified all previously uncatalogued material, enabling us to complete that part of the report. Pippa and I will work with Andy on the faunal report in due course. A first draft of a report on the human remains has been completed by Margaret Cox and Louise Loe and work on that is in progress. David Hardwick will be working on the history of exploration for the final report. There is still a lot of work to be done, including the formal accessioning of the material to the museum, although the owner has indicated her wishes in this regard. A site visit to the cave itself was highly entertaining and interesting, and despite the mud, the cave was much nicer than I had expected.

Work on a collections audit of the material from Picken's Hole has continued, and Professor Danielle Shreve from Royal Holloway has agreed to look at the faunal material with a view to producing a report for publication. In addition, Danielle paid a visit to our museum.

Material from Aveline's Hole on loan to Rick Shulting, who wrote and coordinated the modern reexamination of the material from Aveline's Hole published in our Proceedings in 2005, has been returned, after obtaining some fresh stable isotope dates which were much more in keeping with what would be expected for that time, this addressing the anomalously low results obtained on earlier testing.

In June, I attended the University Museum Group Conference being hosted in Bristol. This was a fascinating and very well worthwhile event. The theme of the conference was Digital Dimensions, including sessions on Current Cutting Edge Developments, Digital and Impact and the Post Digital World. It asked questions such as 'What are the most innovative digital projects happening in museums at the moment? How are university museums using digital activity as part of their public engagement work and how can this impact be measured? What does this all mean for us now that digital is part of everything we do, and how does this change the way we work? I made useful contacts in other university museums and learned a lot.

There was also a lot of discussion around the use of social media in a museum context. The consensus of opinion appears to be that Facebook holds little appeal for museum professionals due to the way that Facebook's own metrics determines what content a user actually sees in their news feeds. However, museums have a huge presence on Twitter and that particular face of social media was deemed to be extremely useful for public engagement and profile-raising. I was also introduced to the weird and wonderful world of tweeting museum mascots. If you're on Twitter, so make the acquaintance of @GlassJarofMoles, from the Grant Museum in London, and the very polite @Arthur_the_Bear from Haslemere Museum and Bristol's own @GreatGeorgeWMB, the Wills Memorial Building's tweeting bell. It was obvious that every self-respecting museum should have a tweeting mascot, and after a small amount of thought Whatley Mammoth was born, a 14,000 year old mammoth tooth from Whatley Quarry. A soft toy of mine was pressed into service as the public face of Whatley, and he can be followed on Twitter as @UBSSmuseum. He now has just over 200 followers, drawn from our members, members of the general public and other museums. This may all seem bizarre, but I believe it does help get our name known in the wider world. In January, we also played host to a travelling vintage teddy bear from Twitter, @BassettHeritage, and Whatley took Ted on visits to The Wills Memorial Building Tower, Bristol City Museum and Cheltenham Museum. You can see their adventures on Ted's website: <http://www.wherested.today/>

There have been various research visits to the museum. An MA student in archaeology at Bristol, Yang Liu, was researching the excavations at Stokeleigh Camp in Leigh Woods; Lynn Mackay, a part-time Diploma student here, had access to the material from King Arthur's Cave in the Wye Valley; Katie-Davenport-Mackey and Dr Paul Preston spent a day in the museum working with flints from various sites including Sun Hole and Aveline's Hole; Dave Arnold, an MSc Quaternary Science student at Royal Holloway, working on a project on Banwell Bone Cave for his masters dissertation under the supervision of Danielle Schreve had access to the material from Banwell Bone Cave; Clare Coppen, an MPhil student at Bradford University studying Bronze Age Accessory vessels (also known as pygmy cups or incense cups, visited the museum and examined the specimens from the Tynings Barrow group, three of which are on display, and a fourth was also located in the collection. Clare is building up a corpus of all known examples of these vessels. Another of Danielle Schreve's students, Neil Adams a Geography student at Royal Holloway, had access to the material from Westbury-sub-Mendip Quarry, as part of his dissertation. Peter Leeming, doing a PhD at Exeter, examined the fossils from Aveline's Hole and we spent a fascinating morning in discussion about the possible ritual deposition of fossils I archaeological sites and lamenting how frequently such things are simply dismissed as accidental depositions.

Last year, I had the considerable pleasure of spending time in the museum with Sean Borodale, formerly Poet in Residence at the Wordsworth Trust, who now holds a fellowship at Trinity College, Cambridge. Sean is engaged in a project on the Mendip subterranean landscape, and is intending to write a book of poetry on the subject. We spent a considerable time discussing the material in the UBSS museum and its place in the history of Mendip caving and this year, I arranged for Sean and a friend of his, the writer Robert Macfarlane, also from Cambridge, to visit both Aveline's Hole and Read's Cavern.

Elaine Jamieson of English Heritage requested permission to use some images of grave goods from Gorsey Bigbury on Mendip for a book 'The Historic Landscape of the Mendip Hills' to be published by English Heritage. Graham Mullan worked with her on that.

There have been several organized visits to the museum this year, starting in August with members of the Bristol and Avon Archaeological Society paid a visit to our museum in August. The visit appears to have been enjoyed by all who came and we are grateful to them for

their generous donation to the society. In September, Graham and I worked with professor Mark Horton of the Archaeology Department to host a visit by one of the university's Access to Bristol groups. Access to Bristol provides local students with an opportunity to gain access to the university's academic expertise and facilities. Students who are eligible for this scheme and complete the course will receive a guaranteed offer for a place at Bristol. We spent the afternoon with 12 very engaged 17 year olds, and I hope we will see some of them in the future as student members. One of them is even attempting to translate Herbert Taylor's appalling handwriting as part of our attempts to let the T5 barrow report finally see the light of day.

On the social side of things, in November, Pippa Churcher organised a very successful social evening in the museum with the aim of introducing members of our society, and members of other student societies at the university to our collections with a series of short talks in the library and then a 'behind the scenes' visit to the museum. This was very well attended by our own members as well as students from the Archaeological and Anthropological Society and Dino Soc. I'd also like to thank Richard Jalilli with his help in publicising this event in the Geology Department. As a result of this evening, several students joined the society and I've gained various offers of help in the museum, most notably, I'm now working with Allan Summerfield from the part-time Archaeology degree, who is doing five days practical work in the museum as part of his degree. Allan has been doing excellent work in conservation and catalogue audit, starting with the Tynings Barrow group, and we have a long-term aim to see if progress can finally be made with the very long-overdue report on the excavations carried out over 40 years ago. Students from Dino Soc have also asked for work experience in the museum, and I'll be taking this forward in the coming months.

The Aveline's Hole material has once again proved its worth to researchers, and some material went on loan to Professor Ian Barnes from the Natural History Museum for the purpose of attempted DNA sampling. The main aim of his study is to track how the human genome in Britain has adapted to changing diet and infectious disease loads over the past c.10,000 years by analysing genetic data from archaeological human remains. The results will be used to assess the extent to which humans have adapted to fit the demands of modern urban living, particularly in terms of whether modern disease vulnerabilities are the result of a failure to adapt to the changes in human ecology since the Neolithic transition. The data will also be used to assess whether genetic differences between populations from different time periods are likely to be the result of indigenous adaptation or influxes of new populations, and to assess the impact of posited historic migrations into Britain (e.g. Neolithic, Roman, Anglo-Saxon etc.)

Each of the Mesolithic specimens from Aveline's Hole was been drilled for ~50 milligrams of bone powder. They extracted and sequenced DNA from each sample using Next Generation Shotgun Sequencing (NGS), and the data will be uploaded to a publically-available online database. DNA extracts will be stored in the NHM Molecular Collections Facility. When the data is obtained, we will be sent the preliminary results.

Ian's assistant, Tom Booth states: "The adoption of agriculture in Britain at the beginning of the Neolithic represents a major point of interest, as sedentary food production engenders significant changes in both diet and exposure to disease. The evidence for a rapid introduction of Neolithic technologies into Britain has meant that this period may also be characterised by significant demographic change via migration from Continental Europe. Human remains dating to the preceding Mesolithic period are particularly important to our study, as they represent a genetic baseline against which all future change can be measured.

Unfortunately the British Mesolithic archaeological record is characterised by a paucity of human remains. Most securely-dated Mesolithic human bone assemblages represent no more than two or three separate individuals. By contrast, the human bone from Aveline's

Hole held at the University of Bristol Speleological Society (UBSS) represents at least 21 individuals; around a third of all confirmed Mesolithic individuals from Britain. The Aveline's Hole collection is unique and singularly crucial to our efforts to obtain a good representation of the human genome in Mesolithic Britain."

I have also received a report from Charlie Self, who curates our geology collection. Charlie states: "The geological side of the Museum does not normally feature in the Museum Report, but this year we have a contribution to make. Speleothems (broken samples from the floor litter) collected over the years in Cotswold caves by Charlie Self and Tony Boycott have been radiometrically dated using the U-series method by the ERC Isotope Laboratory at the British Geological Survey. This has resulted in a major paper (Andy Farrant *et. al.*) in the Journal of the Geological Society, where these results are used to constrain the retreat rate of the Cotswold escarpment and the landscape evolution of the River Severn valley system. This, in turn, will affect the modeling of landscape evolution in the whole of central southern England."

Finally, the society has started to look towards its centenary in 2019, and it is hoped that the museum will figure largely in these celebrations. It is hoped to put together and host an ambitious online digital project, with a working title of 'The History of the Society in 100 Object', shamelessly riffing off the British Museum's book, The History of the World in 100 Objects. A project group has been convened for this and a preliminary meeting has been held. If anyone has any suggestions for iconic objects in the collection that tell the story of the society and its interests, please do contact me. We would welcome as much help with this as possible and there are plenty of write-ups needed.

It is as true this year as it was last that once again, the vast range and volume of enquiries and visits the museum receives is a testament to its continuing importance and it is a pleasure to be able to cooperate with researchers in such a wide variety of fields.

Linda Wilson
Museum Curator

