Chartered Institute for Archaeologists

Submitted via Citizen Space.

mac@homeoffice.gov.uk

26 May 2023

To whom it may concern,

Re: Shortage Occupation List: call for evidence 2023

Section A: About the organisations you represent

A1. What is the name of your organisation?

Chartered Institute for Archaeologists

A2. What is your email address?

rob.lennox@archaeologists.net

A3. How many organisations or members do you represent?

4200 individual members, 82 registered organisations

A4. Thinking of the organisations or members you represent, in general are staff concentrated in specific UK countries/regions or are they UK wide?

UK-wide

A5. And which region(s) or country(ies) are these organisations or staff concentrated?

Please select all that apply

All regions/countries

A6. Thinking of the organisations or members you represent, please select all the relevant sectors they cover from the list below:

Professional scientific and technical activities

A7. Thinking of the organisations you represent and their number of employees, select the main size bands that they cover.

0-9 employees

10-49 employees

20-249 employees

250-500 employees

A8. Are the majority of organisations that you represent roughly of a similar size in terms of the number of employees, (e.g. most SME's or most large organisations)?

No.

Section B: Occupations in shortage

B1. Using the ONS toolkit below, please tell us about the jobs that the organisations you represent said were hard to fill in the past 12 months.

SOC 2114 - SOCIAL AND HUMANITIES SCIENTISTS (Archaeologist)

B2. What is the job title, and where are these jobs likely to be based?

Occupation	What is the job title?	Where are these jobs likely to be based?
SOCIAL AND HUMANITIES SCIENTISTS	Archaeologist (covers a range of roles, eg Archaeological Project Manager; Archaeological site supervisor; Archaeological Post-ex supervisor; Archaeological technician; Archaeological Post-ex technician) Archaeological Specialist (covers a range of specialisms eg Archaeological Geophysicist; Geoarchaeologist;	UK-wide

	Archaeologist (Marine);	

B3. If known, approximately how many vacancies are there for the jobs stated?

We do not have precise numbers of job vacancies, nor can we accurately predict how many vacancies are expected over the next 12 months. However, the 2021 State of the Archaeological Market LMI survey (which does not collect salary information directly) noted that “most [employers] expected to increase their staff complements” and “the overwhelming majority of employers had vacancies that had been hard to fill.” (State of the Archaeological Market 2021, Landward Research 2021, p.5). The same report notes the growth in the percentage of staff on full time permanent contracts (up 26.1% between 2020 and 2021) as an indication of “a competitive labour market, where employers are actively seeking to recruit and then retain staff” (State of the Archaeological Market 2021, Landward Research 2021, p.10).

Anecdotal evidence from our registered organisations (i.e. employers) cite critical shortages of geoarchaeologists, archaeological geophysicists, marine archaeologists, and others, with wider difficulties with specific high volume roles on certain large projects (e.g. post-excavation roles related to infrastructure projects like HS2). Wider shortages in on-site supervisors and project managers have been prevalent for a number of years.

We are not aware of any evidence of greater demand in particular geographical regions, but patterns of need tend to mirror locations of large infrastructure projects or areas of housing growth (e.g. the example above given for HS2 may lead a geographical shortage for roles in post-excavation analysis in the south west and midlands), but this can occur in any region.

We note that the vacancies that we refer to in this response are ‘development-led’ roles. This predominantly refers to projects delivered by archaeological companies who provide services on a contractual basis to clients in the construction and development sector. This work accounts for the large majority of employment in the archaeology sector. Roles in academia make up around 10% of the archaeological workforce, but these roles are subject to separate pressures and are embedded in organisations like Universities which have well established approaches to recruitment and visa sponsorship.

Section B: Shortage Indicators

B4. How similar or different is Chart A on pay, compared with the experiences of the organisations you are representing?

Very different.

B5. Tell us more about your answer to the previous question

Note: SOC 2114 is very broad, covering a range of jobs which differ substantially. As stated above the construction-adjacent archaeology roles that are our focus do not show the same trends as the MAC data across the whole of SOC 2114.

Detailed information of pay in archaeological organisations is not available. However, the information that can be inferred from various sources that shows that salaries have increased across the sector year on year since 2020. Additionally, this wage growth for archaeologist job roles has been higher than the UK average wage growth.

For example, the Chartered Institute for Archaeologists' minimum salary recommendations have risen every year since 2013 when the mechanism was introduced. The increase from April 2022 to April 2023 of 10.1% for all level roles is the greatest single year increase in our records. The previous year, April 2021 to 2022, salary minima increased 3.4%, and between 2020 and 2021, increased 2.6%.

Other data on 'going rate' collected by the Jobs in British Archaeology publication series, shows that, for all grades, the salaries offered in job advertisements have increased from 2021 to 2022 by approximately 4% (G2 increase = 4.1%, G4 increase = 4.2%, G5 increase = 3.3%, G6 increase = 4.2%). Data for 2023 shows a further increase on 2022 of 7-8% for all but the highest grade (G2 increase = 8.3%, G4 increase = 7.6%, G5 = 5.5%, G6 increase = 0%). The trend for such increases goes back as far as 2017-18 and correlates with the start of the current trend in demand as employers began to experience skills shortages. Prior to this wages were stagnant for much of the previous decade.

We interpret this most recent wage growth to be as a result of (a) the extremely high demand for archaeological work that persisted through 2020 and 2021, driving competition for roles, and (b) the continued market adaptation to post-Brexit employment, where more attention is focussed on resident labour market.

This does not match the wider trend in SOC 2114.

Chartered Institute for Archaeologists, Power Steele Building, Wessex Hall, Whiteknights Road, Reading RG6 6DE
T: 0118 9662841 | admin@archaeologists.net | www.archaeologists.net

B6. How similar or different is Chart B on hours worked, compared with the experiences of the organisations you are representing?

Very different.

B7. Tell us more about your answer to the previous question

Across all archaeological jobs there has been significant increase in the hours worked over the period of 2020-2021. While our data is collected in terms of full time equivalent employees, rather than gross hours worked by all employees, the 2021 'Profiling the Profession' report recorded an aggregate increase in number of employees per employer of 26.1% amongst respondent organisations. The report notes the "increasing number of archaeologists is part of a trend that has been occurring for several years now" (State of the Archaeological Market 2021, Landward Research 2021, p.13). Although the report concedes that this level of increase cannot be directly extrapolated to the entire sector, it still cautiously estimates an overall 7.4% increase in staffing numbers.

Data from 2022, once available, is likely to show a flattening in growth due to the impact of increased costs impacting the buoyancy of the construction market. However, we still believe that the graph for archaeologists would not show a fluctuating pattern, but rather a steady increase – a result of greater numbers of FTE archaeologists year on year for at least 5 years.

B8. How similar or different is Chart C on employment, compared with the experiences of the organisations you are representing?

Not applicable: No data is available for SOC 2114 in table C.

B9. Tell us more about your answer to the previous question

As stated above, most employers are reporting difficulties filling job roles, and while we do not have specific data to support these anecdotal claims, we are confident that through 2021 and 2022, there remained a greater demand for workers than there were potential workers in the market.

B10. How similar or different is Chart D on vacancies, compared with the experiences of the organisations you are representing?

Don't know.

B11. Tell us more about your answer to the previous question

The Jobs in British Archaeology series tracks the number of job postings. In 2019-2- there were 527 adverts placed. However, many of these adverts were for multiple job roles. A single advert may seek up to 100 individuals on large projects.

It would be safe to assume that, given the increases in staffing numbers year-on-year, and anecdotal reports from employers that they are continuing to face recruitment difficulties (indicating open positions per employee), that jobs advertised had increased above the UK average rate.

B12. Please tell us about other data which you think might be relevant in assessing shortage for the jobs which you have mentioned.

N/A

<u>Section C: Why an occupation should be on the SOL</u>

Section C: part 1

C1. Why are jobs which you have referred to throughout this CfE, hard to fill as reported by the organisations or members you represent?

There are a variety of reasons why archaeological job roles are difficult to fill. An overarching reason is that in the past five years, the development-led archaeological sector has grown by around 70%, following a 15-year low reached in 2013. And because archaeology is a highly skilled job, it is time intensive and expensive to train individuals for entry-level positions, and even more challenging to train specialists. Furthermore, the capacity to train is limited by the relatively small size of employing organisations, for whom training represents and significant cost and financial risk.

This growth has seen an unprecedented demand for archaeological services, in large part occasioned by large infrastructure projects (e.g. Crossrail, the A14 improvements, and High Speed 2) and high rate of housebuilding. Archaeology is a relatively small sector and these large infrastructure projects can represent large proportions of the workforce at any one time.

Although some of the next wave of large scale projects (A303 Stonehenge improvement, OxCam Arc, and HS2 phases 2 and 3) have seen delays in the last year, creating a lull in the growth rate of commercial archaeology jobs, the potential remains for resumption of the previous trend. It remains quite likely that a confluence of major projects in the coming 2-3 years will reignite major skills shortages in the archaeological sector.

This general demand has led to shortages for all types of role, such as fieldwork roles such as 'archaeologist', 'archaeological technician' and 'archaeological supervisor' and 'project manager' roles. Since 2020, employers have made significant strides in improving both training and retention of staff in order to fill skills needs in these roles, but there remains the potential for short term skills needs to be filled via external avenues.

Since the end of freedom of movement, at which point the percentage of non-UK EEA workers peaked at 15% of the workforce (a 500% increase on historic figures from the 1990s), this percentage had fallen to 11% in 2021, and 7% in April 2022.

Over this recent period, the sector has experienced difficulties finding applicants with the desirable level of skill or experience for many roles. To compensate for this, employers have made considerable strides in improving in-work training and growing the number of training places available.

The Chartered Institute for Archaeologists and University Archaeology UK have also developed a programme of degree course accreditation to improve the vocational skills delivered to graduates, and the sector has worked to improve pay and conditions (e.g. with higher wages and a higher percentage of permanent contracts offered). The first students from these courses graduated in September 2022 so it is too early to report statistics about graduate employment rates.

Nonetheless, working conditions associated with many jobs in archaeological fieldwork remain challenging to fill due to demands for working away from home during fieldwork projects, and the demands that this places on family life for workers.

In addition, particular specialist skills, for example 'archaeological geophysicist', 'marine archaeological geophysicist' and 'geoarchaeologist' are in extreme shortage due to the specialist nature of required education and the required in-work training. The relative low pay in archaeology means that it is very difficult to attract suitably qualified specialists in other branches of geophysics or geology and upskill them in archaeology, as they can be paid more elsewhere. Conversely, archaeologists training in geophysics may be able to get higher paying work in another industry.

We also note that employers, by virtue of their core scale, are at present only able to train – at most – a few dozen trainees per year, whereas the jobs pressure created by a single large infrastructure project may result in a need for 100 archaeologists to fulfil.

Museum of London Archaeology (MOLA) launched its Early Career Archaeologist programmes as a result of needing to grow our teams to deliver project work, and partly to benefit individuals by opening up alternative routes into the profession. This was a new and expanded approach to delivering training based on a considerable investment and an innovative economic model. One programme is for new-to-sector trainees with no archaeological qualification or experience, and the other is for archaeology graduates struggling to secure employment in the sector without the requisite experience. Since then, MOLA has recruited 32 Trainee Archaeologists and 39 Graduate Archaeologists - and 16 people from the first two cohorts are still with MOLA, having spent over two years working in the sector. Many others have left for jobs within the archaeology sector.

C2. Which skills do the organisations or members you represent most commonly find hard to fill and why?

The three most common reasons for difficulties filling particular roles is related to; (a) highly specialist skills/few qualified candidates, (b) high volume of need, or (c) lack of ability to train in-house due to scale or risk of investment. The list below highlights the roles that employers have reported to us while researching this consultation response and list which reason is predominant:

a) Archaeological Geophysicist
a) Geoarchaeologist
a) Marine archaeologist
a) Marine archaeological geophysicist
b) Site supervisor
b) Project manager

For specialist roles, the nature of issues (c) is such that small and medium employers cannot realistically invest in training specialists as the cost is too high, and the risk of losing that employee in the open labour market is high.

C3. What level of experience is required for these jobs and why?

The vast majority – 99% - of archaeologists (see Profiling the Profession surveys) have at least a Batchelors degree. 70% also hold at least one postgraduate degree. Some specialist roles require a substantial amount of experience and local, specialist, or period knowledge.

There have been shortages in jobs of all experience levels in recent years. While employers have historically required a relevant Batchelor's degree, employers are expanding in-work training schemes for candidates with no experience (for example, the Museum of London Archaeology (MOLA) Early Career Archaeologist programmes which offer training for new-to-sector trainees with no archaeological qualification or experience), as well as fast track programmes for skilling-up graduates with relevant vocational skills. The Sector is also expanding takeup of level 3 and 7 apprenticeship programmes, with CIfA now acting as an end point assessor.

Our members have reported particular shortages at site supervisor level, with employers having noted that non-UK EEA candidates, during free movement, were often a valuable source of highly skilled fieldwork staff who could be given responsibilities for on-site training and supervision. These fieldwork staff shortages will be at levels between RQF 3-6.

However, since 2022, specialist roles are being more commonly cited as key shortage roles. For example, archaeological geophysicists, but also period and material specialists. Other archaeological roles require computing skills such as Geographic Information Systems (GIS) or lab-focussed skills associated with various analysis techniques employed by archaeologists.

These specialist roles will usually be at levels between RQF 6-8. Most will require a specialist MA or PhD. Some of these skills, for example geology, sees archaeology competing with other industries (e.g. mineral extraction) which pay higher wages.

C4. In the past 2 years, COVID-19 and other changes such as the ending of freedom of movement on 31st December 2020 have often changed the way employers recruit. With reference to the past 2 years, what changes (if any) have the organisations you represent experienced when recruiting/finding workers?

Employers have adapted to the end of free movement, changing recruitment methods considerably to work within a changed market. Non-UK staff in the workforce has decreased from 15% in 2019, to 11% in 2021, and 7% in 2022.

Employers have invested considerably in existing staff in efforts to retain existing employees and have, until 2022 been investing in training with high confidence. However, both the difficulties training during Covid (where safety policies restricted the ability to follow training programmes) and the market downturn in 2022 which has reduced confidence, reduced the industry's capacity to support development more recently, and employers have reported additional challenges.

Previously the largest archaeological employers regularly advertised throughout the EEA as a matter of course, with common applicants being, for example;

- Young, skilled European archaeologists seeking to work abroad for experience and travel

- Older skilled archaeologists from countries experiencing construction downturn in domestic markets

Many of these workers would work 1 or 2 years before returning to their countries of origin. Others remained in the UK for longer periods, and many have now sought indefinite leave to remain following the end of freedom of movement.

As stated, at its peak, non-UK EEA workers accounted for 15% in 2019. This number has now reduced to 11% in 2021, and 7% in 2022.

C5. Have the organisations or members you represent experienced difficulties with retaining staff in the past year?

Yes, while we expect that the situation regarding retention will be mixed across employers, those reporting skills loss doubled to 38% in the 2021 State of the Archaeological Market survey.

Some employers have reported improved retention rates, having offered significant wage increased (10% average) in 2022, with wage growth above UK inflation rates in 2021, 2020, and 2019. For example, Museum of London Archaeology (MOLA) have increased the salaries of field staff 15-20% in the past two years. This has increased competition for employees with high rates of movement of staff between employers, as staff seek out better benefits.

However, while there are some positive leaders in the sector, much of the industry is still dealing with acknowledged problems (see for example, the BAJR Poverty Impact Report 2022) of poor retention generally, especially amongst women, and graduate fieldwork staff in their 20s and 30s, with reasons given relating to lack of progression opportunities and difficult working conditions (e.g. working away from home, lack of family-friendly and disability-friendly working conditions) as well as poor pay comparative to other skilled industries. Non-UK 'temporary' workers have perhaps been less impacted by some of these conditions, and perhaps, as a result, had been relied upon to fill gaps in the workforce during the post-2017 rapid growth of the discipline. While employers have acknowledged these issues (e.g. at a CIfA Skills Summit event held in 2022) there are no quick fixes to some of the issues that are embedded in the structural model of development-led archaeological project work.

Section C: part 2

C6. Which of the following steps have the organisations that you represent taken to overcome difficulties in filling vacancies for those hard to fill vacancies?

As the professional body (CIfA) representing archaeologists working in the UK and overseas, we are not directly involved with employer activities to overcome recruitment difficulties. Reports cited below are sourced from our 82 registered organisations. We do not have statistical data across all registered organisations. CIfA has a key interest in ensuring that employers have the skills they need to meet demand and deliver public benefit from archaeological services and we have hosted two 'skills summit' meetings of interested parties in 2021 and 2022 to bring together stakeholders working to resolve these issues to share good practice and discuss opportunities.

We know that there will be a range of activities being undertaken by different employers, but we know that the largest employers are undertaking the following activities:

- Increasing salaries (see above information re: 'going rate' increases above base rate over the past 3 years)
- Redefining existing jobs

Example: Several large sector employers have sought to migrate staff onto full time permanent contracts, for example, Wessex Archaeology have sought to make all staff permanent in 2021)

- Increasing advertising/recruitment spend (???)
- Increasing the training given to existing workforce
- Increasing/expanding trainee or apprentice programmes
- Being prepared to offer training to less well qualified recruits
- Using new recruitment methods or channels

Example: Museum of London Archaeology's Early Career Archaeologist programmes which has trained 81 people since 2021, including via a 'new-to-sector' route for trainees with no archaeological qualification or experience – which in the past has been uncommon.

- Using existing networks to recruit such as through staff referrals

- Bringing in sub-contractors from outside the UK to offset demand

Example: Wessex Archaeology has proposed a partnership with France's INRAP service to work on the A303 (Stonehenge) project.

- Entering into joint ventures with non-UK partners to improve access to international projects as a way to secure sufficient contracts to enable more staff to be retained on permanent contracts (to improve conditions, and therefore retention)

C7. How effective are each of the strategies mentioned in the previous question in managing hard-to-fill vacancies, and why?

Those employers in our sector which are visa sponsors have found the process to be too complicated, expensive and time consuming, and have not been allocated significant numbers of visa.

As a result, they have chosen to improve practices for filling vacancies within the domestic market, with mixed levels of success. While these sponsor organisations (most of them being the largest employers of archaeologists in the sector) report good results from their considerable investment in training and changes to recruitment strategies, we do not have good data from across the sector. It is possible that smaller organisations will struggle to recruit as a result of the larger organisations absorbing more of the UK workforce.

In addition, skills shortages have persisted. For instance, through COVID-19, archaeologists on development-led projects worked throughout the lockdowns and were subject to extreme skills pressures. For example, working in smaller teams to limit the spread of any infections required more supervisor roles, which were is short supply.

In these cases, and in relation to more unique specialist skills, having visa sponsorship available has remained a useful option for employers.

C8. If you are a trade body or an association which represents businesses within a specific sector, to what extent has your organisation been involved in the development of training for the businesses you represent?

As the leading professional institute representing archaeologists working in the UK and overseas, CIfA has undertaken the following actions:

- Developed an accredited degree programme, with University Archaeology UK, to increase the number of graduates leaving university with the necessary skills to enter the workforce

- Developed archaeological apprenticeships, becoming the end point assessor for level 3 and level 7 archaeological technician apprenticeships.

- Developed an accreditation kite mark for employer-run training programmes.

Section C: part 3

This is the final part of Section C. We will ask you about the impact of having an occupation on the SOL. It will be helpful to us if you can provide examples or case studies to illustrate or support your response.

C9. Why do you think these occupations should be on the SOL?

The SOL, despite not being a replacement for the ease of labour access provided by freedom of movement, has been useful to the small number of sector sponsors to allay the most acute specialist skills needs. While the process is slow, with various blocks to its effectiveness, and expensive and bureaucratic (which has dissuaded many smaller employers from engaging with it) it remains a useful option.

Archaeology roles should remain on the SOL because:

- The sector has demonstrated continued levels of high demand, with this demand trend likely to resume following a 2022 lull with the resumption of major infrastructure projects like the A303 in the future.

- The sector has responded well to the need to change its practices, including by increasing starting wages dramatically – though still below the £26,200 threshold for skilled visa route, were the SOL reduction not applicable.

- The option to offer work to refugees who are waiting for their applications to process is appealing to sector employers, who responded positively to the Ukraine crisis in 2022.

C10. What options would the organisations or members that you represent consider to fill those hard to fill jobs, if those jobs were not included on the SOL?

Since the end of Freedom of Movement employers have engaged in all the listed actions to diversify recruitment, improve pay and conditions, and strengthen retention. However, it is not possible to overcome all challenges against a backdrop of high demand, especially as the playing field is not equal for all. Members will likely to continue to invest in these approaches to filling job vacancies as previously described, however, as many employers in the sector are small enterprises, the possibility of the loss of SOL status could mean the difference between being able to continue operating or folding – either because they were not able to recruit the 1 new member of staff needed to take a certain contract, or because they are outcompeted by the larger organisations for limited staff. These smaller organisations are much less likely to be able to invest in robust and effective in-work training schemes.

C11. What impact (if any) would not having a job on the SOL have to the organisations or members which you represent?

When we originally applied for archaeologist to be added to the Shortage Occupation List in 2019, we envisaged that it would be able to provide significant assistance to employers in meeting skills demand in their organisations. In short, to provide a replacement for at least some of the capacity that had been filled by non-UK EEA workers under recruited under Freedom of Movement. We expected that this could be a temporary aid during the current period of unprecedented growth in the sector.

The reality is that only relatively small numbers of staff have been recruited through the skilled visa route since 2020. There are several reasons for this including; (1) low numbers of visas allocated to archaeological sponsors, (2) high costs and bureaucracy associated with sponsorship and recruitment via the skilled worker route, and (3) successful transition to domestic workforce training and retention strategies.

Despite the continued high demand, employers have been more successful than anticipated at limiting the number of staff recruited from outside the UK. Partly, this has been enabled by high business confidence through 2020 and 2021 meaning employers have felt able to invest heavily in recruitment and retention strategies.

The Shortage Occupation List has, however, been useful in rarer cases where either (1) there were no available domestic candidates (e.g. for highly specialist roles) or (2) where there was particularly pressing need or challenge in recruiting to a particular role. This remains a useful pressure release valve for recruitment in sponsor organisations.

In terms of possible effects of not being re-added to the Shortage Occupation List, any of the following are potential effects: (1) Certain teams will be forced to run/continue to run on reduced capacity, (2) Certain specialist roles will not be able to be filled, (3) Employers will be forced to fast-track development of existing candidates, (4) Employers will be forced to invest more in domestic training, (5) Employers will be forced to outsource more services, including outside the UK (e.g. specialist lab services, analysis, geophysics, GIS.

The outcomes of these effects may be that: (1) Archaeological work (particularly development-led archaeological services provided to the construction sector) will be slower or poorer quality, potentially delaying development and causing knock on costs to clients and damage in reputation to archaeological employers, (2) individual employees forced to work is less favourable conditions (as they did throughout COVID-19, with documented mental health impacts), (2) Specialist work must be outsourced at increased cost, (3) specialist work is impossible to deliver and archaeological outcomes of products declines, (4) Employers are forced into dangerous financial risks during a period of lower market confidence, (5) reduced efficiency and increased costs, potential increase in competition for services, and loss of business to companies outside the UK.

We suspect that remaining on the Shortage Occupation List is not currently an existential issue for the sector, however, it does continue to provide peace of mind and valuable diversification in recruitment options for sponsors.

C12. Do you have any other comments?

N/A

C13. If you have supplementary information or data which directly relates to your response to this CfE questionnaire, please attach here. If there are specific pages you want us to view, please list them.

N/A

<u>Section D: Closing questions</u>

D1. Would you be happy for us to quote from your responses to this CfE?

Yes

D2. Would you be happy for us to name your organisation in the published report?

Yes

D3. Would you be happy for us or Revealing Reality, who are independent research contractors appointed by the MAC, to recontact you in the next 12 months to invite you to take part in follow-up research regarding similar issues covered in this questionnaire?

Yes

D4. And would you be willing for us to contact you if we needed to clarify or supplement responses you have given in this questionnaire?

Yes

D5. Have you attended a MAC stakeholder event for the SOL?

No

D6. If you haven't attended a MAC stakeholder event for the SOL, please tell us how you heard about this Call for Evidence questionnaire?

News report

D7. Would you like to be invited to a future stakeholder event?

Yes