

Biological Anthropology Research Centre (BARC) Human Remains Policy

1. Preamble

The BARC human remains policy was developed according to the recommendations of the *Guidance for the Care of Human Remains in Museums* published by the Department for Culture, Media and Sport (DCMS) in October 2005. Human remains policies from various institutions, including the British Museum, the Museum of London, Chichester District Museum, Oxford University and University College London were consulted during the preparation of this policy. It also draws upon best practice as outlined by *Guidance for Best Practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England* (CofE/EH 2005) and *Human Bones from Archaeological Sites* (EH 2004).

2. Purpose

This policy sets out:

2.1 the principles governing the acquisition, storage, management, research upon, access to and display of human remains in the BARC collections;

2.2 the procedures which will be followed when claims are made for the repatriation of human remains;

2.3 the circumstances in which the BARC may accede to these claims.

3. Definitions

'BARC'

'BARC' refers to the Biological Anthropology Research Centre, Division of Archaeological, Geographical and Environmental Sciences, University of Bradford.

'BARC Collections Manager'

'BARC Collections Manager' refers to the member of staff responsible for the care, curation and use of the BARC Collections.

'BARC Managing Committee'

The 'BARC Managing Committee' is a group of academic staff and honorary research fellows all affiliated to the BARC. They meet regularly and make decisions regarding the BARC Collections and requests for access to the collections.

'Human remains'

'Human remains' are defined by the DCMS (2005, 8) as comprising parts of once living people from the species *Homo sapiens sapiens* (defined as individuals who fall within the range of anatomical forms known today and in the recent past). This may include:

- Osteological material (whole or part skeletons, individual bones or fragments of bone)
- Soft tissue including organs and skin; and slide preparations of human tissue
- In line with the Human Tissue Act, the definition does not include hair and nails, although it is acknowledged that some cultural communities do give these a sacred importance.
- Human remains also include any of the above that may have been modified in some way by human skill and/or may be physically bound up with other non-human materials to form an artefact composed of several materials, or artworks composed of human bodily fluids and soft tissue; however such objects are not found in the BARC collections.

'Original holding institution'

Many of the skeletal collections currently curated by the BARC are on medium or long-term loan from a museum or archaeological field unit. These museums or field units will be referred to as the 'original holding institution' throughout this policy.

4. Human Remains in the BARC Collection

The BARC is listed in the Gazetteer of University Museums in the United Kingdom. Its collection contains c.4000 archaeological human skeletons. Most of these are between 150 and several thousand years old, and pertain to excavations that have taken place over the last 100 years. The vast majority of the material is British; however some collections, notably those from Niah Caves, Sarawak, Malaysia and Sidon, The Lebanon are from further afield. A list of the major collections of human remains curated by the BARC is available via the BARC website (<https://www.bradford.ac.uk/archaeological-forensic-sciences/facilities/barc/>).

A small number of human remains are osteological anatomical specimens. While the date for these cannot be proven, most anatomical collections were created over 100 years ago, and therefore probably fall outside the remit of the Human Tissue Act.

Most of the human remains in the BARC Collections are on long-term loan from other holding institutions, including museums and archaeological field units. For these cases, the final decisions regarding any claims on these remains must remain with the original holding institution, and not the BARC; however these remains are managed following the BARC human remains policy in terms of storage, access for researchers and use in teaching, unless the original holding institution has specified otherwise.

The skeletal collections held by the BARC are continuously added to with samples coming to the laboratory for analysis on a contractual basis, many of which are returned to

archaeological contractors following analysis. Those collections with a high research potential may be retained – see section 5 Acquisition below.

The BARC collections are an important resource for teaching and research, both to the University and to visiting scholars from around the world. These human remains are of considerable significance for the understanding of biological processes, of disease and its history, of diet and population movements over time. The vast majority of work on human remains in the United Kingdom is uncontroversial and has wide popular and academic support (DCMS 2005: 8). The BARC actively encourages dissemination of research to the public, alongside academic audiences, and runs educational programmes and participates in television documentaries about the research undertaken on BARC collections.

5. Acquisition, Loans and Claims for Return

5.1 Acquisition

The BARC may consider acquiring further human remains because of their research potential or because they complement the existing collections. In this event, the BARC will satisfy itself that the remains can be lawfully held, i.e. their provenance must be clearly established and there must be no suspicion whatsoever of illicit trade. This would probably be through recent archaeological excavation, and excavation and retention of human remains would be undertaken in accordance with a Ministry of Justice licence for the removal of human remains.

In most cases, however, the BARC will change or expand their collections via new loan agreements with other institutions.

5.2 Loans

Human remains may be loaned to other institutions for display and/or research, provided that the borrowing institution meets the legal, ethical and practical considerations set out in the DCMS's (2005) *Guidance* or equivalent. Decisions regarding loans will be made by the BARC managing committee. The BARC does not have the authority to agree to loans of any material on loan to the BARC from a different institution; in these cases any loan agreement must be made with the original holding institution.

5.3 Claims for the Return of Human Remains

If claims are made for human remains in its collections, the BARC will adopt the procedural guidance laid out in DCMS 2005. When making a decision about claims for return, the BARC will consider the status of the claimant, the cultural and spiritual significance of the human remains, the age of the human remains, how the human remains were originally acquired and the potential public benefit of the human remains. The BARC will consult with other organisations (e.g. APABE, the Church of England or English Heritage) for advice over claims if deemed appropriate.

6. Curation and Use of Human Remains

The BARC will store human remains securely, professionally and respectfully. Human remains will be kept in suitably safe, secure, watertight premises, with stable, monitored

environments, which are kept clean and checked for pests (Cassman and Odegaard 2007a). Where reasonable practicable, each individual will be stored as an individual in a single box. Material will be routinely labelled, to ensure that no mixing of individuals can occur.

6.1 Storage

Our ideal standard for storage is as follows:

- All skeletal elements to be marked with a unique identifier, indicating the collection and skeleton number to which they belong
- Complete and partial skeletons to be bagged according to anatomical region in re-sealable polythene bags
- Where possible, one individual will be stored in an individual skeleton box. However, for very small or incomplete skeletons this is impractical. Where more than one individual is stored in a low-acid cardboard box, these will be separated from each other through the use of large re-sealable polythene bags or low-acid cardboard trays. In cases of very large or very fragile skeletons, individuals may be split between 2 boxes. In these cases, the boxes will be stored adjacent to each other during storage and will be labelled 1 of 2 and 2 of 2. BARC skeleton boxes have been designed to contain a large adult skeleton comfortably, however in the case of unusual pathological specimens, boxes may need to be designed to contain and support the human remains in such a way that large/fragile materials are not damaged.
- Disarticulated material cannot be stored as individuals. This will be stored in low-acid cardboard boxes according to site and context, where this is known.
- Anatomical specimens, including those with pathological alterations, may be stored in cabinets or drawers to facilitate access for teaching; however these will be located in a secure room. The drawers are lined with supporting foam and fragile specimens will be wrapped in acid-free tissue paper and placed in re-sealable polythene bags. Cabinets will be locked where practicable.

Some of the collections in our care do not currently conform to these standards. When it becomes practical to do so, these collections/individuals will be repackaged and labelled to these standards, as part of the rolling collections management programme. Skeletal material with surviving tissue, nails or hair may require different storage.

All human remains will be stored in a dedicated osteology store (SA01.04) or dedicated osteology laboratory (SA01.07; SA0.04; SA0.05). Thin sections may be stored in a dedicated histology or microscopy laboratory (SA0.03; SA01.06).

6.2 Handling

Human remains must be handled with respect and care (Cassman and Odegaard 2007b). Human remains will be handled only by staff, students, researchers and volunteers. Students (including students on outreach events such as compact days), researchers and volunteers will be permitted to handle material only after reading the BARC's *Skeleton Handling Guidelines* (Appendix 1). Wherever possible, replica material or a designated handling collection will be used to avoid damage to other collections. Where appropriate, students and researchers will receive guidance from staff on how to package human

remains correctly, and will be provided with a copy of the BARC's *How to Pack a Skeleton* leaflet (Appendix 2).

All handling of human remains will take place in the osteology store, osteology laboratories or other teaching laboratories.

Particular care should be taken when handling more than one skeleton at a time to avoid the danger of mixing of unmarked material. Material used for teaching must be marked prior to use by students. Any new damage or loss must be reported to the BARC Collections Manager. No cleaning, reconstruction or casting can take place unless permitted by the BARC Collections Manager.

6.3 Conservation

Occasionally it is necessary to conserve human remains, to ensure they remain stable. The principle of minimum intervention and reversibility will be applied where reasonably practicable. Care will be taken to select materials and treatments that will not compromise future analysis.

A database detailing all conservation interventions was created in 2005, and all interventions were recorded from this date. Prior to this date, no record of conservation and other intervention was recorded.

6.4 Use of the BARC Collection for Teaching and Research

6.4.1 Teaching

As part of a University, the BARC positively supports the use of human remains for teaching and research. Where possible, replica material will be used for teaching and outreach activities; however it should be noted that replica material is not always a suitable substitute for real material. Therefore real human remains will be used for teaching when replica material is not available or suitable for this purpose. All students will be given the BARC's *Skeleton Handling Guidelines*, and any that do not follow these guidelines will be banned from handling human remains. All teaching will be supervised, however post-graduate students will be encouraged to undertake private study, which will not be supervised.

6.4.2 Research

All requests for research on the BARC Collections must be made in writing and will be documented on a *Collections Access Request Form* (Appendix 3). Internal researchers, including staff, dissertation students and research students, will be required to complete a simplified *Collections Access Request Form*. Decisions regarding external requests for access will be made by the BARC managing committee.

The BARC will record all research use of the BARC Collections in a database. It will produce and review a research assessment of its collections of human remains as recommended in DCMS 2005.

All researchers will be provided with a copy of the BARC's *Skeleton Handling Guidelines* (Appendix 1). Where these researchers will be unpacking and packing away skeletal material, they will be given a copy of the BARC's *How to Pack a Skeleton* leaflet (Appendix 2). All researchers must send the BARC a copy of all resultant dissertations, theses and publications in a timely manner.

6.4.3 Sampling

As the *Guidance* observes, research on human remains may benefit from analysis requiring sampling, which in some cases may be destructive. Such actions will only be undertaken to the highest standards by appropriately qualified staff and students.

All requests for sampling, by both internal and external researchers, must be submitted using the BARC *Collections Access Request Form*. These will be circulated to the BARC Managing Committee, who will evaluate the application before deciding if sampling can take place. If granted, all samples taken must be listed using a BARC *Sampling Form* (Appendix 4) and all samples must be photographed (both before and after sampling, unless an entire bone fragment or tooth is used). Photographs should follow the BARC guidelines '*Sampling in the BARC: Procedures for taking Archive Photographs*' (Appendix 5). They must be labelled according to the system given in these guidelines and must be submitted to the BARC for approval *prior to any further analysis*.

All samples will be recorded in a database. Any material taken during sampling, but not analysed must be returned to the BARC. If the sample is entirely destroyed the BARC must be notified. The results, whether positive or negative, should be lodged with the BARC within twelve months of sampling date.

6.4.4 Photography

Students and researchers may take photographs of human remains for their own use. Permission to take the photographs must be obtained prior to taking them from the BARC Collections Manager. Such photos are for personal use, and must not be reproduced, sold or placed on the internet.

Researchers may take photographs as part of their research, providing prior approval has been sought. These may only be reproduced with the permission of the BARC, and this should be stated in any publications.

6.5. Display of Human Remains

At present the BARC does not display human remains outside of dedicated osteological teaching laboratories. All students using the osteological teaching laboratories would expect to see human remains in these locations.

References

DCMS (2005) *Guidance for the Care of Human Remains in Museums*. London: DCMS

Cassman V and Odegaard N (2007a) Storage and transport. In: Cassman V, Odegaard N and Powell J. *Human Remains. Guide for Museums and Academic Institutions*. Plymouth: Alta Mira. 103-128.

Cassman V and Odegaard N (2007a) Examination and analysis. In: Cassman V, Odegaard N and Powell J. *Human Remains. Guide for Museums and Academic Institutions*. Plymouth: Alta Mira. 49-76.

Church of England/English Heritage (2005) *Guidance for best Practice for Treatment of Human Remains Excavated From Christian Burial Grounds in England*. Swindon: English Heritage/Church of England.

English Heritage (2004) *Human Bones From Archaeological Sites*. Swindon: English Heritage.

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Skeleton Handling

- Treat all material, real and replica, with respect
- Skeletons were once people and are irreplaceable - please treat with respect and care at all times
- Please report any breakages immediately
- Please don't leave the articulated skeletons in 'amusing' positions – this can damage them – anatomical position is best
- Always hold skeletal material over a bench, so it has less far to fall if dropped
- Never hold skulls by the foramen magnum or orbits
- Please don't wave bones around in the air...
- ... or rest books and files on them
- Please don't have stacks of books in the lab – these have been known to fall on top of bones and crush them
- NEVER use masking tape, blue tack, sellotape, parcel tape, adhesive etc – under ANY circumstances (even if it has been used before)
- If a skeleton is unmarked, or partially marked, please tell Jo, Hannah, Shirley, Josh or Ben
- If you find tape/blue tack on a skeleton please tell us
- Our equipment is expensive – please treat it with care

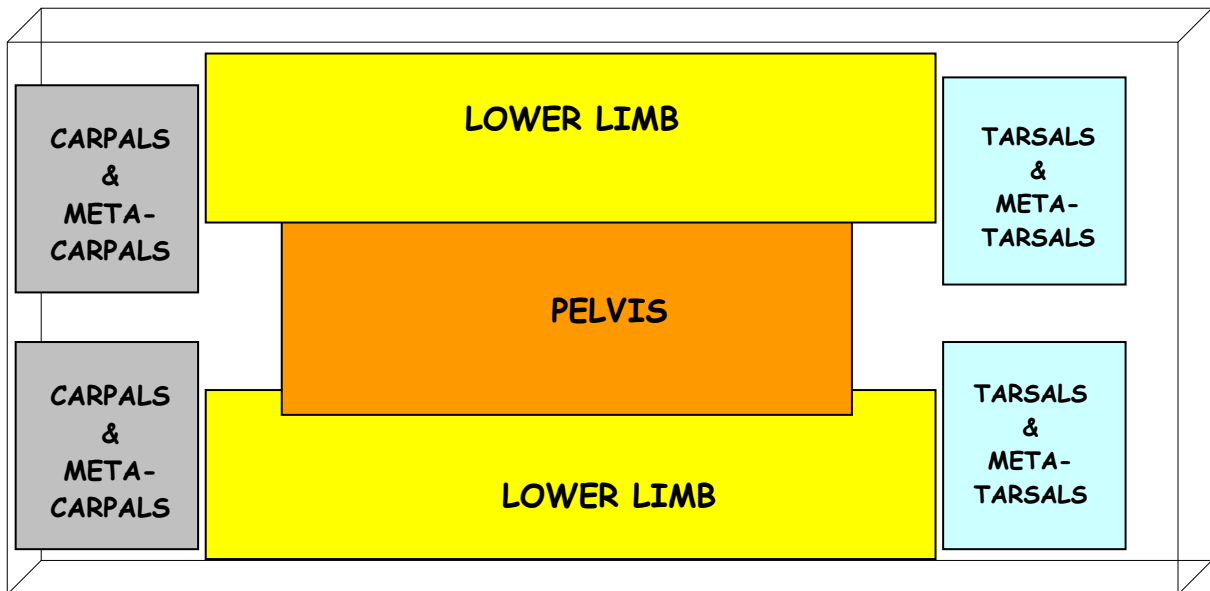
Please report any breakages to Jo, or another member of staff

Email: J.Buckberry@Bradford.ac.uk

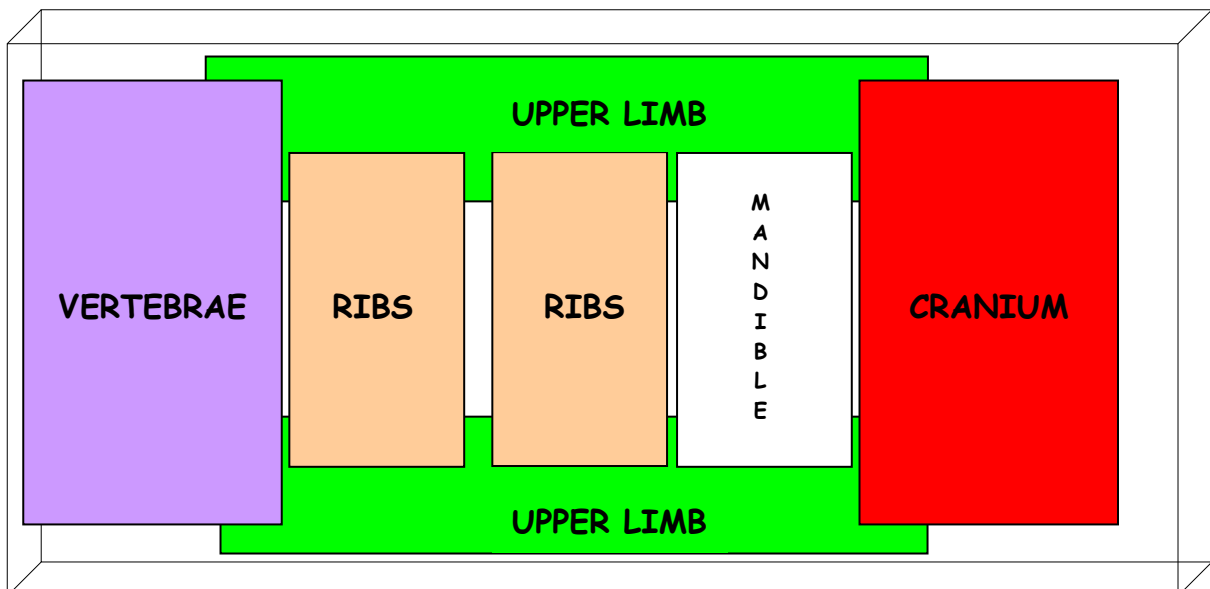
HOW TO PACK A SKELETON

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LAYER 1 (BOTTOM)



LAYER 2 (TOP)



All bones should be placed in sealed, labelled, plastic bags.

Heavy bones should always be placed at the bottom of the box, with lighter, more fragile bones placed at the top.

Pathological bones should be wrapped in protective packaging.

Loose teeth, maxillae, and mandibles should be bagged separately from the cranial vault.

**Request for access to skeletal material curated by the BARC
(external applicants)**

Title: (Prof, Dr, Mr, Ms, Mx, Mrs, Miss)

Name:

Position:

Institution:

Institution Address:

Email:

Phone:

Title of Research Project:

Co-applicants (include institution if different to above)

BARC collaborator? Y / N

Supervisor (student applicants only):

Supervisor email address:

Brief lay summary of the research to be undertaken (max 150 words):

Please return form to:

Dr Jo Buckberry

Email: J.Buckberry@bradford.ac.uk

Tel: 01274 234 289

State the purpose of your request. Please include a brief research proposal with aims and methodology, using another sheet if necessary. If research assistants will be visiting the BARC please give details here, and indicate if they will be accompanying the PI or working alone. This must be included on the form, not as an additional form, and needs to fully explain your project (max 2-3 pages):

Please return form to:
Dr Jo Buckberry
Email: J.Buckberry@bradford.ac.uk

Tel: 01274 234 289

Describe, in detail, the BARC collections and/or documentation you wish to examine:

List all of the other skeletal collections (from other Institutions) you will be examining in the course of this research project and their locations:

Requested method of study (check all that apply):

- Examination of bone specimens
- Sampling
- Examination of X-rays
- Drawing or photographing of specimens
- Photographing or digitising of X-rays
- Taking X-rays (please provide details of radiation training above)
- Creation of 3D models
- Examination of documentation
- Copying of documentation
- Examination of slides/photographs
- Other (please explain):

Requested dates of access (list in order of preference, please use format DD/MM/YY):

Please note that normal hours of access are 9.30 to 5.00, Monday to Friday
Please leave at least 3 months between the date of submission of your form and your suggested dates for access.

- 1.
- 2.
- 3.

Please return form to:

Dr Jo Buckberry
Email: J.Buckberry@bradford.ac.uk

Tel: 01274 234 289

Total number of working days:

Total number of researchers visiting the BARC:

Please indicate if the bench fees are to be paid by the individual or institution, for invoicing purposes: Individual / Institution

If individual, please provide your home address for invoicing purposes:

By signing this agreement the above party will undertake to:

1. Preserve the collection, to the best of his/her ability;
2. Provide a detailed list of the material studied in the collection;
3. Provide one copy of all material resulting from research on the collections, including all photographs, x-rays, papers, books and any other documentation, to Jo Buckberry, Biological Anthropology Research Centre, School of Archaeological Sciences, University of Bradford, Bradford BD7 1DP;
4. To acknowledge the Biological Anthropology Research Centre in all written documentation, and correctly source all photographs, x-rays, slides, and drawings of Biological Anthropology Research Centre Collections materials to the Centre as such.

Signed:

Date:

To be signed by the Supervisor of any student applying for access to Biological Anthropology Research Centre material

As the Supervisor of the above named student I support the request for access to the material detailed above and acknowledge that I am responsible for the student and the material used by the student. I have provided a letter of support for this application.

Signed:

Date:

Please Note: If any material is to be removed from the BARC, a further form (BARC exit form) must be completed and returned to Jo Buckberry.

Please save this form using the following naming convention:

Surname_firstname_year_BARC collections access application form

Please return form to:

Dr Jo Buckberry

Email: J.Buckberry@bradford.ac.uk

Tel: 01274 234 289

**SAMPLES TAKEN FROM MATERIAL CURATED BY THE
BIOLOGICAL ANTHROPOLOGY RESEARCH CENTRE
(BARC)**

Researcher Details:

Title: Prof / Dr / Ms / Mr / Mx / Mrs / Miss - please delete as appropriate

Name:

Position:

Institution:

Institution Address:

Phone:

Email:

Supervisor (student applicants only):

Supervisor email address:

Title of research project:

Reason for sampling:

Signature:

Date:

Photographs archived in the BARC? Y/N

Date:

Results archived in the BARC? Y/N

Date:

Please return form to:

Dr Jo Buckberry

Email: J.Buckberry@bradford.ac.uk

Tel: 01274 234 289

SAMPLING IN THE BARC: PROCEDURES FOR TAKING ARCHIVE PHOTOGRAPHS

All skeletal elements from the BARC that are subjected to destructive sampling must be 3D scanned prior to sampling and photographed to the following specification and after sampling takes place. 3D scans must be created and curated by the University of Bradford, at cost to the researcher.

This document stipulates the protocols for after sampling photography, to be taken by the researcher.

All post-sampling photographs must be saved as high-resolution .tif or .RAW files, saved using the protocols outlined below. The files will be archived by the BARC. The copyright of these images will be held by the University of Bradford.

Taking Photographs:

Camera: It is expected that all images will be taken with a good-quality digital camera, allowing photographs to be checked for focus and image quality prior to archiving. Details of the camera and lens should be recorded.

Number and type of shots to be taken: We no longer require photographs of each element prior to sampling. Obviously, samples that will be fully destroyed (e.g. ear ossicles) will not be photographed after sampling.

Each element that has been sampled should be photographed from all angles needed to fully capture the extent of any sampling form. Each specimen should be photographed in its entirety with the sampled area visible, with an additional close-up (macro) photograph of the area of interest. Larger samples may require additional images from different angles to fully document the extent of sampling damage.

Background: a high-quality black background should be used in all photographs. This should preferably be good quality black velvet. Care should be taken to ensure no 'bone dust' is visible on the background

- N.B. occasionally, in the case of very dark bones or teeth, it may be necessary to use a lighter coloured background.

Lighting: for most applications, even lighting is important. Using digital photography this can be achieved using daylight, flash photography, tungsten or even fluorescent lighting, so long as you remain consistent in your approach. However, it is important to achieve the best exposure and 'bracketing' of multiple exposures will provide the best results. Uni-directional

(raking) light may be required if textural information is to be recorded. Trial and error with different light sources may be necessary to establish the best results (which can differ between projects), however diffuse daylight is often the best option (on a bright day!)

Scale: each photograph must contain a suitable scale. The scale bar should be parallel to the side of the image, and in focus, with no light reflecting on the surface, ensuring that the scale can be read easily.

Macro-photographs: should take account of the need for good depth of field - the extent to which points will be acceptably sharp in front of and beyond the focussed distance - this varies with focal length of the lens, the working distance and with aperture (small apertures = greater depth of field).

Image Quality:

Always check photographs on a large screen (a PC/laptop, not the camera screen) to ensure:

- Good focus
- Good depth of field
- Appropriate lighting (e.g. even lighting for most applications, raking light for textural detail)
- Appropriate contrast/brightness (it is important to use exposure bracketing to gain the best results)
- Scale visible
- No flashback present

Archiving:

File type: All photographs should be stored as .tif or .RAW. There should be no cropping, or reduction of the image size or image resolution.

Data storage: Each set of photographs should be saved to cloud storage, with a second copy saved onto a USB stick or CD / DVD to ensure a backup is present. These must be archived in the BARC. This should be labelled with researcher name and project title. There should be a photo log saved as a pdf) that clearly indicates:

- Researcher name
- Title of research project
- Collection(s) sampled
- Skeletons sampled
- Elements sampled

For example:

Jo Buckberry

Radiocarbon dating Chichester and Towton

Chichester

C2 – left tibia
C10 – right femur
C13 – left femur
C88 – right humerus
Towton
T10 – left femur
T16 – right femur

Filename conventions: It is essential that clear, standardised filenames are used, to ensure data integrity:

- Photographs of each skeleton should be kept together within a folder labelled with site name and skeleton, e.g. Chichester 2 (using the full site name, not an abbreviation)
- Each image to be named as follows: Approved site abbreviation (e.g. C), skeleton number (e.g. 2), element (e.g. tibia) and side (L or R), orientation (e.g. anterior), image number [for this shot] (1,2,3 etc)
- Underscores should be used in place of spaces between different sets of information
 - For example: C2_Ltibia_anterior_1 = Chichester 2 left tibia anterior view, first photograph
 - C2_Ltibia_anterior_2 = as above, second photograph
 - C2_Ltibia_posterior_1 = Chichester 2 left tibia posterior view, first photograph
 - C2_Ltibia_posterior_1 = Chichester 2 left tibia posterior view, first photograph

A signed copy of this agreement should also be provided with the photographs and the photograph log.

Agreement:

By reading and accepting these terms you agree to allow fair use of all images by the BARC. The copyright of the images will be held by the University of Bradford.

Signed:

Date: