

Guidelines for Underground Fieldwork

Removal of Artifacts

NAMHO

National Association of Mining History Organisations



These guidelines are not intended as an exhaustive set of rules to cover the removal of artifacts from mine sites. The recommendations and references are current at time of writing but up to date advice should always be sought from a relevant professional.

When you find artifacts in an abandoned mine, it is tempting to pick them up for a closer look but think first and **LOOK WITH YOUR EYES NOT YOUR HANDS**. Handling fragile finds with muddy hands will often result in damage or at the worst destruction of an object. Moving artefacts destroys their archaeological context and that limits the story that they can tell us about the life of a mine. Removing artifacts from a mine just to grace your mantelpiece deprives researchers of valuable archaeological information. The following guidelines will help you to decide how to treat any artifacts you may come across.

Many mining sites are now protected as Scheduled Ancient Monuments (SAMs). It is illegal to remove objects from protected sites and this protection extends to any workings beneath a site.

What Survives Underground?

Underground the environment is quite stable, and with the absence of sunlight, temperature remains around 8°C. Dry environments can preserve items like leather or wood, but these can also be preserved by wet conditions. Percolation water making its way in from the surface can be, depending on the geology and mineralogy, either acid or alkali. Biological agents are present, and dry rot is quite common. These specific environmental conditions can be very localised and a variety of environments will exist within a single mine. The stability of the environments allows a wide range of portable artefacts to be preserved. Delicate items such as the paper wrappers from explosives or more substantial items such as iron tools and large pieces of machinery. All of these items can add information to the historic record. It is worth remembering that information about the context where an artifact is found is as important as identifying what it is.

One very important difference between underground and surface archaeological sites is that many finds will not be buried. As a result they are vulnerable to removal by visitors. Some find their way into museums but most do not. This is a major problem, and the loss of archaeological information as a result of such unrecorded recovery of artefacts is immense. Because artifacts are generally not buried, the contextual provenance of any underground finds has to be treated with caution unless it can be shown that workings have not been disturbed by modern visitors. In cases where sealed contexts are encountered it is essential that contextual data be collected for use in interpretation, before or during the process of the removal of artifacts. Another important factor to be taken into account prior to artifact collection is the capability to conserve that evidence once it has been removed from its stable environment. If this is not likely to be the case, it should be certain that a sufficiently detailed survey is conducted and deposited in an appropriate archive to ensure 'preservation by record'. This approach should provide enough information to enable interpretation of the site without the need for access.

What causes damage to artifacts?

1. **Handling**

Some items may be degraded by mechanical damage from inappropriate handling, poor packing during transport and cleaning.

2. **Chemical Attack**

Exposure to acid or alkaline conditions can occur if an artifact is handled without gloves, if unsuitable materials are used for packing and storage, if unsuitable cleaning or conservation procedures are used, if it is stored or displayed with chemically reactive artefacts.

3. **Biological Agents**

Insects, bacteria, moulds etc

4. **Ultra Violet Light**

Exposure to sunlight can accelerate the degradation of organic materials.

5. **Cleaning**

Cleaning can result in the loss of important information, particularly where organic remains are present. Cleaning should not be carried out without advice from a suitably qualified professional. **Conservation should only ever be carried out by professionals** as inappropriate treatment of an artifact can lead to the loss of information or irreparable damage and accelerate decay rather than slow it down. This damage may not be visible to the naked eye and although the artifact may initially look better inappropriate treatment may accelerate decay.

6. **Environment**

Care must be taken to store finds in a suitable environment with stable and appropriate levels of temperature and relative humidity. Remember that items found underground have survived because they were in an environment, which slowed down their rate of decay, removing them from that environment and storing, or displaying them in unsuitable conditions will lead to damage to the artifact.

When is it acceptable to remove objects?

Unless the object is in danger of being damaged or lost, LEAVE IT IN SITU for others to see. LOOK DON'T TOUCH.

Objects can be removed where- the object has properties which make it worthy of preservation and:

The only access to the mine is to be filled or otherwise sealed.

The site is going to be destroyed by quarrying.

The site is going to be destroyed because mine is to be re-worked.

Decay of the mine workings will make future access dangerous.

Future access to the mine may result in damage or unrecorded removal.

Objects SHOULD NOT be removed where the mine has closely controlled access and exceptionally historic interest.

Objects SHOULD NOT be removed unless you have the legal right or permission of the owner.

Denial of future access is NOT a reason to remove items. It may be possible to re-negotiate access in the future

Artifacts can be recorded without recovery, and in many situations this may be preferable as it keeps items in context for others to see and enjoy. If they have to be removed they should be recorded before they are moved.

DO NOT handle or remove an object until the proper recording work has been done.

REMOVAL

Before moving or recovering items underground ask yourself the following questions,

1. Will the item be lost or damaged if it remains underground.
2. Can you decide if something is worthy of recording?
3. Have you got the skills to record the context of the find, i.e. where is it, and what is around it?
4. Do you have the skills to recover all the evidence?
5. Do you have permission or the legal right to remove items?
6. Do you have the skills and materials to safely remove the artifact without damaging or destroying it?
7. Are there any health and safety issues involved in the removal? Are these items safe to move / handle?
8. Once recovered do you have access to the resources required to conserve the artifact and then store or display it in an appropriate manner.

Recording

Before you handle or remove an object make a record of its context this should comprise a drawn and photographic survey. Photographs should always have a scale included and an indication of the orientation would be useful (north arrow). Black-and-white photography is preferred for archive purposes and each print should be clearly labelled with the subject, orientation and date and cross-referenced to its negative. The quality and usefulness of underground photographs depends to a great extent on the position of light sources. A flashgun fixed to a camera can produce a flat evenly lit picture where some detail may not stand out from the background. Placing a flashgun to one side will enhance any relief and therefore bring out detail but will also increase shadows, which may mask some detail. To produce the most useful record it may be better to take the same picture lit from several directions.

Documentation

All artifacts removed must be documented. A basic record should include a description of what is it, where was it found with details of the mine and the position in the mine when was it collected, and who collected it. The amount of information included affects the future usefulness of the record and so record as much as possible. What if any conservation work is carried out details of when was it done, what was done, and by who. References to any supporting documentation, reports, published papers etc. Was the artefact found alone or

was it part of a collection of items, the composition of an assemblage can provide a great deal of interpretational information.

An artifact without supporting documentation has no provenance and is almost useless as a research object.

Archiving

Once an archaeological record is produced it is important to make it available and accessible. The record should be deposited in the relevant Sites and Monument Records for the sites location. The Sites and Monument Records (or SMR's) are generally arranged on a county basis and administered by a county archaeologist but can cover other administrative areas such as National Parks. Local mining history or caving groups who often have small archive and library collections may be interested in receiving a copy, as might local history or archaeological societies. Depending on the nature of the report the local museum or local study section of the local library may also be appropriate locations to deposit your report.

Selected Bibliography – Please note more up to date publications may be available.

Barker P.1996 **Techniques of Archaeological Excavation**. BT Batsford, London.

Covers the recording of standing structures and excavation and many of the techniques discussed can be utilised underground. Particularly useful section on the recognising and recording evidence and recording the context of small finds.

NAMHO 2002 **Recording The Underground Archaeology of Mines - A Descriptive Specification**

This is series of survey guidelines for the recording of underground landscapes to assist amateur enthusiast groups to produce descriptive surveys suitable for deposit in local and national Sites and Monument Records.

Watkinson D. and Neal V. 1998, **First Aid for Finds**, Rescue / UKIC Archaeology Section

This is an excellent guide to packing archaeological materials for transport and storage. Gives a very useful guide to archaeological decay and how to handle and treat a wide variety of materials.