Introduction

Museum of London conservators have worked on iron objects from excavations of waterlogged sites over the last 30 years. In the 1980s, treatments such as electrolytic reduction and alkaline washing were used for selected material. Suzanne Keane and others were instrumental in encouraging the treatment of iron (Keane 1994). Current practice in the UK is less interventionist—most iron is not treated and dry storage is used to slow down corrosion. This poster outlines conservation policies and treatments of iron at the Museum of London since the 1980s, reflecting practice in the UK as a whole. At the Museum there has also been an active programme of surveying iron objects in our archaeological archive. Full results of the current surveys will be published in due course.

Iron from waterlogged sites

The quality of iron objects from London’s excavations with waterlogged conditions can be exceptional. Corrosion layers tend to be thin, conforming to the surface, and features such as plating, pattern welding, maker’s marks, copper alloy, silver and tin inlays survive well. In contrast, iron from aerobic contexts normally has voluminous corrosion that obscures and sometimes destroys surfaces and features.

Conservation of iron in the 1980s

The establishment of archaeological conservation laboratories in the UK in the 70s and 80s fostered experimentation and application of new methods. For iron some particularly interventive treatments were used including electrolytic reduction, boiling or steaming. At the Museum of London several large waterfront excavations produced huge quantities of iron objects, many in very good condition. Alkaline washing techniques were used for selected objects with good results. Washing techniques were used for selected objects with good results. Investigative cleaning (also known as ‘poultice’ cleaning) enabled interpretation of some objects without full cleaning. It was possible to illustrate the lower object based on poultice cleaning and a radiograph.

1990s and 2000s

In 1992, the organisation and funding of archaeological work in the UK changed with the implementation of new planning guidance. With tighter budgets, it was necessary to prioritise essential storage needs to meet archive deposition requirements and to be more selective in object treatment. A survey (Heywood, 2000) showed that most UK labs were not using active treatments for iron routinely. Concerns included occasional damage to objects, health and safety, cost and needing more evidence that the treatment was effective. Minimum intervention policies and environmental issues (eg use and disposal of chemicals) have also influenced treatment decisions.

Interim results

Interim results suggest that a large proportion of untreated finds from waterfront sites are in good condition even with some inconsistency in dry/putty gel storage. Comparison with material from sites that had lower standards of care suggests that the quality of storage has an influence on survival. Combined with experimental work, at Carduff University, the British Museum and English Heritage, it is hoped that this current work on iron will inform effective and realistic storage and treatment regimes.

Gathering evidence – use of archives

At the Museum, selected treated and untreated iron has been surveyed at regular intervals since 1985. Archaeological archives can be an excellent resource for evaluating the effectiveness of treatment and storage regimes. As the last survey was carried out over 10 years ago, funding from the City of London Archaeological Trust (CoLAT) has been obtained to continue and extend the assessment of this material. The aim is to determine whether conclusions can be drawn about the effectiveness of passive storage in maintaining iron. These surveys are being carried out using the Criterion Anchored Rating Scale (CARS) method to reduce subjectivity and ensure consistency in assessing object condition (Sully and Suenson-Taylor, 1996).

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