

# WATERLOGGED MATERIALS

## GLOSSARY

**Waterlogged:** objects recovered from an archaeological context in a wet state. This includes objects from marine and riverine environments.

## STORAGE

- ◆ Do not store waterlogged materials in a wet state on high shelves or over dry materials.
- ◆ Seal waterlogged samples carefully in plastic bags or boxes to prevent drying out. If a waterlogged object does accidentally dry out it should not be re-wetted, but left dry and an explanatory note supplied.
- ◆ Storing waterlogged materials in a wet state long-term is not recommended. Seek specialist advice about treatment and drying out. Large waterlogged objects (e.g. timbers) will need conservation prior to storage.
- ◆ Waterlogged materials from marine environments contain high levels of salt and may need desalination before storage. Seek specialist advice.
- ◆ Once waterlogged finds have dried out and been treated, store them according to their material types.



Wooden writing tablet © Bristol Culture



Medieval wooden bowl © Bristol Culture

## LABELLING AND MARKING

Use archive labels inside the bag and mark box or bag.

- ◆ Undertake a documentation check to ensure that the information is correct before remains are marked.
- ◆ Ensure that marking is clear and legible.
- ◆ Be aware that labels can fade more quickly in a wet environment.

## ENVIRONMENTAL DATA

The general rule is to maintain waterlogged materials chilled and dark, as close as possible to conditions in the ground.

- ◆ Temperature: below 10°C.
- ◆ Humidity: 45-55% (over 65% is a high risk for mould).
- ◆ Illuminance: 300 lux maximum.
- ◆ UV Radiation: 0-10 microwatts per lumen ideal. 75 microwatts per lumen maximum.

# WATERLOGGED MATERIALS

## INDICATORS OF DECAY

- ◆ Mould.
- ◆ Very dirty water.
- ◆ Orange corrosion products deposited onto the storage bag or box.
- ◆ Purple surface deposits (vivianite, a phosphate mineral).
- ◆ Bad smell (sulphur). Biocides can also smell bad.

## WHERE YOU WILL COME ACROSS WATERLOGGED MATERIALS

- ◆ In archaeological objects of all periods.
- ◆ In archaeological excavation archives.
- ◆ In marine archaeological collections.

## HANDLING

Ideally, handle waterlogged material in a sink or outside (if large). A well-ventilated area is recommended as they can smell bad (sulphur, biocides).

- ◆ Use nitrile gloves, and wear a suitable facemask if needed.

## LOOK OUT FOR

- ◆ Waterlogged materials that are part of composite objects (e.g. bone-handled knives) may need different storage and handling conditions.
- ◆ Be aware that treated waterlogged objects can be less robust than they appear. Use two hands to support them. Handle small items over a padded surface or in the box.



Leather knife sheath © Bristol Culture

## HEALTH AND SAFETY

- ◆ Waterlogged materials may have been previously treated with toxic biocides.
- ◆ Waterlogged materials can be contaminated with mould or with chemicals from the excavation site (e.g. toxic metal salts, cess-pit material).
- ◆ Wear a facemask if mould or biocides are a risk.
- ◆ Use gloves (long ones if needed), avoid opening bags and boxes.

# WATERLOGGED MATERIALS

## SOURCES OF FURTHER INFORMATION

---

Collections Trust (2009) *Labelling and Marking Museum Objects*.

Cronyn, J. M. (1990) *The Elements of Archaeological Conservation*. London: Routledge

Historic England (2010) *Waterlogged Wood: Guidelines on the Recording, Sampling, Conservation and Curation of Waterlogged Wood* Swindon: Historic England

Jenssen, V. (1987) 'Conservation of wet organic artefacts excluding wood', in Pearson, C. (ed.) *Conservation of Marine Archaeological Objects*. London: Butterworth, 122–63

Robinson, W. (1998) *First Aid for Underwater Finds*. London: Archetype Publications

Watkinson, D. and Neal, V. (1998) *First Aid for Finds* (Third Edition; London; Rescue/UKIC Archaeology Section, revised 2001)