

Caring for marine archaeological objects

Objects recovered from the sea floor must be kept wet until the salts that have penetrated into the objects have been removed. Fluctuations in humidity can cause salts to migrate towards the surface of the object causing damage and loss to the surface of the object.

Objects can be desalinated in deionised water to remove the salt (chlorides). Over time, the salt content of the object becomes balanced with the salt content of the surrounding water. Once this point is reached the water is changed. This process is repeated regularly; each successive change of water will reach equilibrium at a lower salinity. Once salinity remains constant at the salinity of the fresh water, the desalination is complete. Seek expert advice on how to deal with marine archaeological objects before attempting any intervention.

The Environment

A controlled environment is one of the most important elements in the preservation of objects. Excessive humidity is a leading contributor to the corrosion of metal. Relative humidity should be kept below 55 percent where at all possible. In a domestic environment this is difficult, but in a museum, dehumidifiers and air conditioning can be employed to limit the amount of moisture in the air. If such options are not feasible for you, avoid storing your objects in places such as basements where the relative humidity is likely to be too high.

Storage and Display

Once the desalination of an object is complete it can then be dried thoroughly and coated (if required) to prevent further corrosion, if it is metal. Suitable coatings to prevent deterioration differ depending on the substrate of the object.

For further information

Marine archaeological material may be subject to various State and Commonwealth laws regarding removal from wreck sites. Always ensure that you are aware of your rights and responsibilities.

Marine archaeological material generally requires expert attention. It is best to seek advice from a conservator before attempting to undertake any remedial work on this type of material. If you require advice you may contact an objects conservator at the email address below. They can advise about the safest means by which to stabilise, conserve and restore your object.

conservation@anmm.gov.au