

Comparing Underwater and Land Archaeology

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Underwater The branch of archaeology that deals with the recovery of ancient objects found beneath the sea, such as shipwrecks and remains from submerged habitation sites

Goals

- ❖ Survey- Identify and document a site before it is disturbed
- ❖ Excavation- Extract contextual information from artifacts, ecofacts, and features of the site
- ❖ Conservation- Preserve the context of the site and excavated materials for further study, storage and display.

Survey

Some of the unique methods used in an underwater survey are:

- GPS plotting
- Sonar
- Computer Mapping
- R.O.V. mapping



Warwick Shipwreck Excavation ©2010 Warwick Project, Jon Adams, Warwick1619.wordpress.com

Excavation

Specific tools and methods used in underwater excavations are:

- Water Dredge
- Water Jet
- Water Lance
- Air and Water probes
- Lift Bags (Air Lift)
- Careful GPS and Photographic Documentation
- Use of a R.O.V. unit (to lift or uncover artifacts if the site is too deep for human divers)

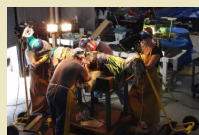


Final Field Season- S Europe/ Mediterranean /Aegean © S. Snowden 2011, Nauticalarch.org

Conservation

Some of the unique methods in the conservation of materials and artifacts found by archaeologists underwater are;

- Desalination
- Controlled Dehydration
- Electrolysis



Queen Anne's Revenge (QAR) Conservation Laboratory ncculturebloggers.wordpress.com

Abstract

To explore the methods, goals and techniques used in land and underwater archaeology by focusing on three main aspects of the archaeological process: Survey, Excavation and Conservation.

The project will look specifically at the goals of each process, how archaeologists adapt their methods and or techniques for an underwater environment, and then ask if the change in environment the only critical difference between underwater and land-based archaeology.

"Thus we have seen that underwater archaeology offers a variety of ancient material comparable to that found on land, it should be conducted by ordinary archaeologists, and it often costs no more than land archaeology. The underwater archaeologist may be distinguished from his land-based colleague, therefore, only by the specialized techniques of excavation and preservation that are necessitated by the environment of the site in which he works."

George F Bass

In Summary

- ❖ The Goals do not change
- ❖ The Reasoning behind Survey does not change
- ❖ The Reasoning for Excavation does not change
- ❖ The Reasoning for Preservation does not change
- ❖ The Environment changes

Conclusion

While underwater archaeology has its own methods and problems it is still archeology. Both land and underwater archaeology look to understand behavior and the evolution of human culture through any and all materials left behind by previous human cultures. Whether it is a burial mound, shipwreck or habitation site the goal is still the same, to understand and preserve as much as possible.

Land The scientific study of ancient cultures through the examination of their material remains such as buildings, graves, tools, and other artifacts as dug up from the ground.

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Survey

Some of the unique methods used during land surveys are:

- Ground Penetrating Radar (GPR)
- Metal Detectors
- Bore/Test Holes



Wisconsin Archaeological Society <http://warchaeologicalsociety.org/photos/>

Excavation

Specific tools and methods used in land excavations are:

- Shovels
- Trowels
- Various Brushes
- Dental Equipment (picks and brushes)
- Cameras
- Directional and Measurement Markers
- Screens (to sift dirt for smaller artifacts)
- Careful documentation based off of grids or excavation units.



Killbuck Plantation Archaeological Investigation, Archaeological Society of Virginia, <http://killbuckplantation.org/KWC-ACTIVITIES/KWLBFIELDSCOOL.html>

Conservation

To preserve artifacts found on archaeological sites the following treatments or techniques may be used:

- Polymer Stabilization
- Cleaning
- Restoration



Archaeological Conservation Institute, Italy 2011, Centro di Conservazione Archeologica, <http://www.cca-roma.org/node/116>