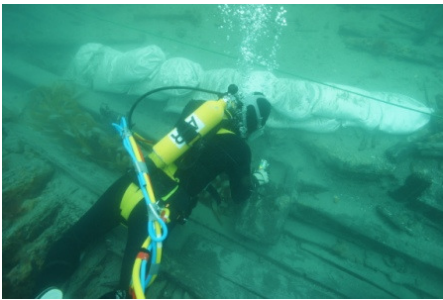




Australian Historic Shipwreck Preservation Project, a world first in maritime archaeology



Mike Nash excavating the *Clarence*. Image supplied, by the Australian Historic Shipwreck Preservation Project

In Australian waters there are thousands of historic shipwrecks. Only 10% of these have been found and of these, only a tiny proportion have actually been surveyed and monitored properly, let alone preserved. It is this lack of adequate conservation procedures and ever-diminishing Federal funding for historic shipwreck preservation that have provided the motivation for the Australian Historic Shipwreck Preservation Project (AHSPP).

The AHSPP aims to investigate the excavation, reburial and in-situ preservation of at risk historic shipwrecks.

Professor Peter Veth, lead chief investigator on the project says "the actual monitoring which we are envisaging is probably a global first."

"In terms of reburying a wreck, monitoring it long-term and having re-interred artefacts, this will be the first."

The project, which is a massive collaboration between UWA, Monash and Australian National Universities, and several industry partners and is funded by the Australian Research Council, focuses on the wreck of the colonial trading ship, the *Clarence*, in Port Phillip Bay, Victoria.

A sample excavation of timbers from the wreck revealed the *Clarence* was one of the best preserved examples of early colonial shipbuilding, an area we still know little about.

But this significant historical wreck has been significantly damaged by human activities and natural proc-

esses. It's critical status made the *Clarence* a perfect candidate for preservation.

The project is split into three main parts: excavation and recording of artefacts, reburial and in-situ preservation and long-term monitoring of the success of this process.

"The whole point was to work out if (this process) would work for other wrecks in similar situations, work out what part of the process was efficient and what wasn't; how quickly that kind of exercise could be done and then how effective is it in terms of the conservation" says Professor Veth.

The *Clarence* had previously been partially excavated in 1980 by Heri-

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tage Victoria, but one feature of the wreck that still came as a surprise to the team was the presence of a thick layer of kaolin clay ballast that covered most of the lower half of the hull.

Professor Veth says "It's the first time in Australia it has been found as a ballast on any wreck."

This discovery was a logistic challenge for the team, but it was also a delight in that the anoxic conditions it had created had preserved the artefacts beneath to the point where some were in near-perfect condition.

Many techniques are currently used in Australia to preserve the integrity of shipwrecks, ranging from seagrass beds to concrete barriers. But Professor Veth says these techniques have had limited success.

Because of this, much of the in-situ preservation work on this project has been experimental.

The In-situ preservation or reburial technique is one that has been used on only a few wrecks around the world and this project is the first in

the Southern hemisphere to implement it.

The reburial of the *Clarence*, which is the stage of the project currently underway, involves the replacement of sediments, covering with sand bags, then shade cloth to stimulate the biotic activity ideal for preservation and finally a PVC tarpaulin layer to protect the whole wreck from damage.

But it is the long-term monitoring of this project and the assessment of the techniques used, a feature often lacking from other preservation projects, that is the most unique.

Professor Veth says he and his team plan to report the results of this study both locally and internationally in hopes of improving historic shipwreck preservation techniques world-wide and developing a standardised procedure for the protection of historic shipwrecks.

It is hoped that beyond this three year project there will be funding available for continued, rigorous monitoring of the wreck.

Professor Veth says "Our biggest problem is that the Federal government dollar has been diminishing in the historic shipwrecks area."

"I would definitely like to see the federal funding back to the levels that it was in the past."

There are volunteering opportunities with the AHSPP which include data analysis, website updates, genealogical research and artefact research. Interested members are encouraged to contact Cassandra Philippou at cassandra.philippou@uwa.edu.au



Examining artefacts aboard the jack-up barge. Image supplied, by the Australian Historic Shipwreck Preserva-