Shipbuilding in the Australian colonies before 1850

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Awarded a large ARC (Australian Research Council) Linkage grant in May 2011 - $500,000

Chief investigators – Peter Veth (UWA), Mark Staniforth (Monash) and Tony Barham (ANU)

Partner investigators – Vicki Richards and Ian MacLeod (WA Museum)

Research is being conducted between early 2012 and the end of 2014 with fieldwork in April/May and Nov 2012 with regular monitoring after that

Ten participant organisations including Heritage Victoria and the Australasian Institute for Maritime Archaeology (AIMA)
Project objectives

- Add to the knowledge base about Australian colonial wooden ship-building (Staniforth)

- Develop a protocol for the rapid recovery, recording and reburial of artefacts (Veth, Richards, MacLeod & Barham)

- Develop a methodology for the *in situ* preservation of historic shipwrecks considered at risk (Veth, Richards & MacLeod)
Australian shipbuilding background

- British settlement of Australia in 1788
- The need for shipping particularly small vessels for coastal trade
- Ship building industries became quickly established based on British traditions = Cultural continuity - methods and designs derived from the parent culture
- Lack of historical (archival) records - small (often unregistered) vessels
- First vessels sent to Australia = deep draft full bodied cutters
- Quickly developed a distinct style of vessel built to suit the environment - shallow draft and flat bottom schooners
- Changing length/breadth ratio shows changing hull shape = adaptation to the environment
Australian shipbuilding

- Australian National Shipwreck Database lists 2,786 Australian built vessels wrecked in Australian waters
- 271 have been located (10%)
- 14 have been archaeologically surveyed or excavated (0.5%)
- Identified as a significant theme in Australian maritime archaeology (Historic Shipwrecks National Research Plan 1995)
Zephyr (1851-1852)

- Schooner built by John Gray at Hobart, Tasmania
- Gray was a Sunderland trained shipbuilder and mariner, who emigrated to Van Diemen's Land in 1823.
- Zephyr ran ashore on the east coast of Tasmania
- Fieldwork undertaken as part of the 2005 Maritime Archaeology Field School
Zephyr (1851-1852)

- Probe survey and recording in 2005 as part of Rick Bullers’ Masters research
- Site plan established by probe survey, measurement and visual recording
- 13 frames on the port side and outer planking
- Showed that Australian-built vessels were over-built in terms of scantling dimensions
- Built mainly of Tasmanian Blue gum (*E. globulus*) with some Stringybark frames (*E. macrohyncha* or *E. globoidea*) which are not endemic to Tasmania
Clarence (1850)

- Found by MAAV members in 1981 located near St Leonard’s, Port Philip
- Shallow depth – 4 m of water
- Survey and test excavation by Peter Harvey in mid 1980s
- Protected by the Victorian Heritage Act 1995
- Monitored over more than a 25 year period
- Recent excavation in April/May 2012
Clarence (1850)

- Probably built by William Lowe on Williams River, NSW 1841
- At 14 he was apprenticed as a shipwright at the Royal Dockyard, Deptford. At 19 he was sent to Stettin, Prussia, to work on building of several ships and there he stayed for nearly three years
- Dimensions 51 x 16.3 x 8.7 feet two-masted wooden schooner of 67 tons
William Lowe & James Marshall’s Deptford shipyard

• Established in 1830
• Built a wet dock in 1831
• Ceased operations about 1860
William Lowe’s Deptford shipyard

- Watercolour painting by Oswald Brierly of Lowe & Marshall’s shipyard on the Williams River probably dating to 1842 (courtesy of the State Library of NSW)

- Identified as a result of this research this is the oldest known depiction of a commercial shipyard in Australia
Archaeological evidence at the Deptford shipyard still exists and may be investigated in the future.

- Top left - GoogleEarth view of Deptford
- Top right - The Deptford shipyard wetdock
- Bottom left - The front steps to William Lowe’s house at Deptford
Timber Analysis - Clarence

- Rose Gum (E. grandis) – treenail & bow plank
- Blue gum (E. saligna) – deck plank & bow block
- Red mahogany (E. resinifera) – sternpost, ribs & 2\textsuperscript{nd} bow plank
Research has demonstrated that Australian built vessels were not poorly built as some historians have suggested.

Biographical research shows that some of the early Australian vessels were built by professional and trained shipwrights.

Timber analysis has shown that vessels were often not built of the historically suggested “high quality” shipbuilding timbers such as Huon Pine in Tasmania and Red Cedar in NSW but from other timbers such as Rose Gum in NSW and Tasmanian Blue Gum.