The Australian Historic Shipwreck Protection Project

Reburial of the *Clarence* (1850) and *James Matthews* (1841) Shipwreck Sites

Vicki Richards, Ian MacLeod & Peter Veth

AIMA Conference
Canberra 4–5 October 2013
AHSSPP – Aims

Make significant contributions to understanding site formation processes, colonial shipbuilding and specific lifeways and assemblages associated with a colonial trader.

Develop a procedure for the rapid capture 3D imaging of significant artefacts.

Create a virtual representation of the site that will enable re-interrogation in the future.

Develop site specific in situ preservation protocols for the long-term stabilisation of the site.

Conduct and improve conservation monitoring techniques following reburial of the site and associated artefacts.

Contribute to the development of a sustainable, cost-effective and strategic national approach for shipwreck management.

Make significant contributions to current international in-situ preservation protocols.
Two very different and innovative *in-situ* preservation techniques will be included in this longitudinal study for comparative analysis.

- *Clarence* (1950) - colonial trader
- *James Matthews* (1841) - ex-slaver
The *James Matthews* site has been the subject of a detailed in-situ conservation management research programme since 2000.

There is more than 10 years of accumulated scientific data regarding the efficacy of different remediation measures on the wreck remains.

The wreck remains are similar in composition (i.e. wood), size and depth.

The environments are relatively similar (open, well circulated, oxidising marine environment).

Both are under threat by anthropogenic and natural processes.

Due to excellent project management in the first year, funds are available for the *James Matthews* reburial.
Outline

- Completed in-situ preservation strategy for *Clarence*
- Planned in-situ preservation strategy for *James Matthews*
Clarence Pre-reburial – May 2012

- Post excavation
- Conservation survey
- Preparation for reburial
- Artefacts on-site pre-reburial
Preparation of Sacrificial Samples

wood samples

iron alloy samples

prior to reburial
On-site Placement

off-site reburial depot
wood samples

wood

on-site

iron alloys
Shade Cloth Preparation – Nov 2012

250m² shade cloth

1800 sand bags
Method for deploying the mesh
Excavations 1973–1977
Increased Exposure in 2000

Exposed timbers at stern

Exposed timbers aft slate mound

James Matthews Sketch 10-10-2000
G. Kimpton
Scale 1:100
Conservation Survey 2000

Corrosion survey of iron features

pH profiles, Umax & wood ID all timbers in TTs

Physico-chemical and microbiological analyses sediment cores
Sand Bags – Interim Measure

- Slate mound
- Cotton sand bags 2001
- Polymeric sand bags 2005
- Backfilled & shade cloth 2007

- Slate mound
- Sand coverage 2003
Shade Cloth Mat

3 months

1 year

2 years

5 years
James Matthews Test Square

1 month

3 months after refilling

1 year

5 years
“Crash Barrier” Cofferdam Solution
40 - 45 HDPE crash barriers in ring arrangement

sand 1m depth

windlass

sacrificial samples

zinc anode

slate mound
Thank You