

2015 AIMA/ASHA CONFERENCE 2015

PROGRAM SUMMARY

Venue: National Wool Museum, Geelong, Victoria
26 Moorabool Street, Geelong

Wednesday 23 September 2015

2.00 – 4.00 Walking Tour of Geelong – Dr David Rowe

4.00 – 5.00 Guided tour of National Wool Museum

5.00 – 8.00 Welcome drinks and conference registration

Conference opening by Minister Richard Wynne

Book launch

Please God Send Me a Wreck: Responses to Shipwreck in a 19th-Century Australia Community, by Brad Duncan and Martin Gibbs, Springer, 2015

Thursday 24 September 2015

9.00 – 9.15 Welcome to Country, Wathaurung Aboriginal Co-operative

9.15 – 10.15 Guest Speaker – Dr Annalies Corbin, President & CEO, PAST Foundation
Topic: *The Archaeology of Innovation*

10.15 – 11.00 Morning Tea

11.00 – 12.30 Plenary Session: *Digital Frontiers in Archaeology I*

-Carrie Fulton, Andrew Viduka, and Andrew Hutchison: *Use of photogrammetry for non-disturbance underwater survey: an analysis of in situ stone anchors*

-Kevin Edwards, Nicolas Bigourdan, Ian McCann, Darren Cooper: *Omeo, Mayfield and City of Perth: a trio of diverse 3D mapping challenges*

-Andrew Hutchison: *Building 3D site maps of HMAS Sydney and HSK Kormoran*

-Paddy Waterson: *The 'Magic Roundabout' of digitally recording coastal maritime heritage*

12.30 – 1.30 Lunch

Presentations by Sponsors

1.30 – 3.00 Session 1: *The Archaeology of Sealing and Whaling in the South Seas*

-Myra Stanbury: *Archaeological evidence of an early 19th-century whaling venture across the Indian Ocean*

-Jaco Boshoff: *South African Archaeology in the Sub-Antarctic*

-Tara Van Niekirk: *Case Study: The Solglimt Survivor Camp on Marion Island*

-Ross Anderson: *Modelling maritime economy and society on the Southern Ocean frontier*

1.30 – 3.00 Session 2: Digital Frontiers in Archaeology II

-Pam Forbes and G. Jackson: *Recording Inscriptions at the Quarantine Station: an Application of Polynomial Textural Mapping*

-Annita Waghorn, David Roe and Rod Brumby: *At the Coal Face: 3D laser scanning to identify and quantify change across dynamic landscape features*

-Anita Yousif: *3D Conservation of Archaeology at the Sydney Opera House Site*

-Peter Davies, Susan Lawrence and Jodi Turnbull: *Going with the flow on the Fryerstown goldfield: LiDAR, GIS and conflict over mining water*

3.00 – 3.30 Afternoon Tea

3.30 – 5.00 Session 1: In Situ Preservation and Conservation of Cultural Heritage

-Trevor Winton and D. Bergersen: *Trial sub-bottom survey on the James Matthews (1841) shipwreck site using a parametric SES-2000 compact sub-bottom profiler*

-Vicki Richards: *In-situ preservation of the ex-slaver James Matthews – the cofferdam strategy*

-Jon Carpenter, Vicki Richards, Kalle Kasi and Ian MacLeod: *Management of UCH sites: Conservation and planning for the future*

-Cassandra Philippou, Vicki Richards and Peter Veth: *It's a wrap – Preserving the historic shipwreck Clarence*

3.30 – 5.00 Session 2: Research Problems in Historical Archaeology

-Melissa Dunk: *Chinatowns: Reinterpreting Overseas Chinese archaeology in North Queensland*

-Jessie Garland and Katharine Watson: *From the ground up: understanding the construction of class in 19th century Christchurch*

-Mary Casey: *Parramatta: Developing a Research Framework 2002-2015*

-Luke Tremlett: *Considering Hospital Construction: The Buildings Archaeology of Ashburton Hospital, New Zealand*

Friday 25 September 2015

9.00 – 10 Guest Speaker – Prof. James Symonds, University of Amsterdam

Topic: *Where are we now? A personal reflection on the past, present, and future of historical archaeology*

10.00 – 10.30 Morning Tea

10.30 – 12.30 Plenary Session: *With, for and by'*: Community Engagement and the Two Big 'I's in Archaeology

- Kurt Bennett: *Rethinking working 'for' industry: A case study from the Lyttelton Port redevelopment, New Zealand*
- Maddy Fowler: *Decolonising maritime archaeology: A case study from the Point Pearce/Burgiyana Aboriginal community, South Australia*
- Colleen Lazenby, Warren Jones and Rick Knecht: *Community Archaeology in Quinhagak, Alaska – Yup'ik Eskimo Culture and Continuity*
- Peta Straiton: *Giving back: Community engagement and the State Government*

12.30 – 1.30 Lunch

12.30 – 1.30 AIMA Tutors Meeting

12.30 – 1.30 Poster Session

1.30 – 3.00 Session 1: *Conflict Archaeology in the Pacific I*

- Stirling Smith: *WW1 Shipwrecks and Maritime Heritage Sites in NSW*
- Martin Gibbs: *WWII Heritage in Solomon Islands – A Crisis*
- Andrew Viduka, Alan Williams, James P. Delgado, Nicholas Bax, William S. Lange, David L. Conlin, Dave Gallo, Ronald Thresher and Grant Luckman: *The Battle of the Coral Sea: Searching for the wrecks of USS Lexington Sims and Neosho*
- David Steinberg: *Exploring muddy waters: recent work on WWII infrastructure in Darwin's intertidal area*
- Michael McCarthy: *50 years of Military Archaeology in Western Australia*

1.30 – 3.00 Session 2: *Urban Archaeology in Melbourne*

- Ian Travers: *The other side of the coin – subsurface remains at the Former Royal Mint, Melbourne*
- Meredith Filihia: *Archaeological Excavations at the former Stork Hotel*
- Alison O'Connor and Paul Pepdjonovic: *280-286 Little Lonsdale Street (2-8 Sutherland Street) and 290-292 Little Lonsdale Street (Bucks Head Hotel) in Melbourne*
- Sarah Myers: *Excavations at 556-560 Flinders Street, Melbourne; Preliminary Results*
- Geoff Hewitt, Natalie Paynter, Meg Goulding, Sharon Lane, Jodi Turnbull and Bronwyn Woff: *Salvage archaeology at 452 Elizabeth Street: reflections upon documentary sources and the 'instant city' of gold-rush Melbourne*

3.00 – 3.30 Afternoon Tea

3.30 – 5.00 Session 1: *Conflict Archaeology in the Pacific II*

- Matthew Kelly: *What was General Blamey up to on Hombrom Bluff?*
- Fiona Shanahan: *A living history of the last Royal Australian Air Force World War II operation from Australia's mainland*

- Andrew Hutchison: *Early results of the high resolution imaging of HMAS Sydney and HSK Kormoran*
- Mark Ryan: *Project Longshot: Locating the Shell that was the first shot fired by the Allies in WW1*
- Paddy Waterson: *'Invincibility lies in the defence...': The Queensland Colonial Navy and its heritage legacy – is it significant?*

3.30 – 4.30 Session 2: ASHA General Workshop

4.30 – 6.00 Annual General Meeting of the Australasian Society for Historical Archaeology

Saturday 26 September 2015

9.00 – 10.30 Session 1: Lessons from the past and opportunities for the future in Australasian maritime archaeology

- Joanne Edney: *A decision support tool for managing diver impacts on underwater cultural heritage*
- Matt Carter: *Will dive for helium? The Professional Maritime Archaeologist Diver and the Deep Shipwreck Resource*
- Iain Gately: *Maritime Archaeology: Hijacked*
- Daniel Petraccaro: *The archaeological study of the ketch Hawthorn [1875-1959]: Understanding centreboard construction in 19th-century Australian-built trading vessels*

9.00 – 10.30 Session 2: Artefact Studies & Material Culture in Historical Archaeology I

- Bronwyn Woff: *Beer bottle blues: a study of bottle reuse in early Melbourne*
- Wendy van Duivenvoorde: *The Dirk Hartog Inscription Plate: Its Archaeological and Historical Context*
- Celeste M. Jordan, Ian Moffat and Renaud Joannes-Boyau: *Here, There and Everywhere: Development of an Analytical Technique for Provenancing Mother of Pearl Buttons*
- Wendy Dolling, Adrienne Ellis and Simon Greenwood: *Archaeological investigations at the Eureka Historic Precinct (2011-2012): the artefact assemblage*

10.30 – 11.00 Morning Tea

11.00 – 12.30 Session 1: Voices About the Past: Oral History and Local Knowledge in Historical and Maritime Archaeology I

- Peta Straiton: *Community participation and co-operation in preliminary archaeological investigations*
- Melissa Hetherington: *Through the Eyes of Henry Gray: Investigating the influence of the Temperance Movement and Wesleyan Methodism on the Greenough Flats, Western Australia, 1839 – 1900*

- Brad Duncan: *'We used to dive off there when we were kids': Utilising oral histories and community sources to discover the maritime cultural landscapes of the Murray and other NSW Rivers*

-Mal Venturoni: *Community engagement with maritime archaeology in Vanuatu*

11.00 – 12.30 Session 2: Artefact Studies & Material Culture in Historical Archaeology II

-James Flexner and Andrew Ball: *An assemblage of transfer-printed pottery from a south Tanna (Vanuatu) mission site*

-Christeen Schoepf: *Old lives, changing entities and new narratives: An object biography of the Mayoral Chair of Port Pirie, South Australia*

-Penny Crook: *Measuring the quality of personal goods: challenges and opportunities for the archaeology of consumption*

-Susanna Collis, Louise McCullogh, Megan Goulding and Natalie Paynter: *A Stitch in Time: the discovery, analysis and conservation of a Melbourne c1870 frock coat*

12.30 – 1.30 Lunch

1.30 – 3.00 Session 1: Voices About the Past: Oral History and Local Knowledge in Historical and Maritime Archaeology II

-David Steinberg: *Back in the Day: Drawing on decades of local diver knowledge for the Darwin Harbour Wreck Inspection Project*

-Ross Anderson: *The loss, discovery, loss, rediscovery, archaeology and social history of Koombana Bay's shipwrecks, Western Australia*

-Angela Middleton: *The Voice of William Cotton and the Archaeology of Pēwhairangi*

-Martin Gibbs and Brad Duncan: *Norfolk Island – Heritage surveys and Remote Sensing across three periods of settlement*

1.30 – 3.00 Session 2: Rural Homesteads

-Gary Vines: *The Scottish pastoral landscape in Tullamarine*

-Sylvana Szydzik, Pamela Ricardi and Oona Nicolson: *Two households... in Truganina*

-Wendy Morrison: *Silverwells: Constructing a home, farm and community in colonial Victoria*

-Fiona Weaver: *Oak Park, Portland: Historical Archaeological Investigation*

-Maddison Miller and Brandi Bugh: *Flour Power: Public archaeology at the Thomas Mill*

3.00 – 3.30 Afternoon Tea

3.30 – 5.00 Session 1: General Session I

-Fiona Weaver: *The Former Moorabool Street Pier, Steampacket Place, Geelong*

-Matt Carter: *Maritime cultural landscapes of the 'middle ground': the development of the Pākehā shipbuilding industry in pre-colonial New Zealand (1792-1840)*

-Iain Gatley: *M.T. Næs: The analysis of an early Ertebølle coastal site, and an examination of the role of watercraft in hunter-gatherer mobility*

-Daniel Petraccaro: *Identifying, surveying and registering the remains of Hawthorn, an Australian built trading ketch wrecked at Carpenter Rocks in South Australia's South East*

3.30 – 5.00 Session 2: General Session II

- Geraldine Mate and Sean Ulm: *Another Snapshot for the Album: Results from the 2015 Australian Archaeology in Profile survey*
- Ashley Matic: *'A mill for grinding rogues honest': the archaeology of the Port Arthur Historic Site Penitentiary Precinct*
- David Roe and Peter O'Donoghue: *The Risk of Ruins: the role of archaeology in managing the Port Arthur Penitentiary Precinct Conservation Project*
- Neville Ritchie and David Wilton: *HMS Tortoise, Sailors Grave and the Camp in the Forest*

5.00 – 6.00 Annual General Meeting of the Australasian Institute for Maritime Archaeology

Conference Close

7.00 – 10.00 Conference Dinner: Black Bull Tapas Bar and Restaurant

www.blackbulltapas.com.au
48 Moorabool Street, Geelong

Sunday 27 September 2015

Field Trip to Bellarine Peninsula – Queenscliff, Clifton Springs and local wineries

DAILY SESSIONS AND PAPERS

Thursday 24 September 2015

9.00 – 9.15 Welcome to Country, Wathaurung Aboriginal Co-operative

9.15 – 10.15 Keynote Speaker: Dr Annaliese Corbin

The Archaeology of Innovation

For 15 years the PAST Foundation has been focused on linking the scientific community with the public. We are not talking about the traditional approach of public outreach and engagement so typical of scientific research projects across the globe. Instead, PAST asks the question, “Why not let the public be part of the research team?”

As anthropologists we look at the world and education holistically. As practicing archaeologists one of our primary aims is cultural heritage management – protecting, understanding and interpreting humanity. There are many avenues to reach the public – and we should be using all of them. Websites are nice, community lectures and “field days” add more dimensions and certainly capture the moment but do these efforts leave a lifelong impact? We at PAST would argue NO.

PAST embraces the idea of “*involve me and I understand.*” So, over the last 15 years we have begun to change how we involve the public, who we involve, when we involve them, and why. We use a trans-disciplinary approach blending science and humanities to get kids of all ages involved and engaged. Our goal is to create immersive programs that have a lifelong impact. Along the way we have tried many things, approached this with numerous methodologies, had stellar failures, and stunning successes. This presentation will share our journey of utilizing archaeological process as the primary driver for rethinking global innovation.

10.15 – 11.00 Morning Tea

11.00 – 12.30 Plenary Session: Digital Frontiers in Archaeology I

Convenors – Madeline McAllister and Andy Viduka

Digital technology pervades our everyday lives, and the discipline of archaeology is no different. Computer vision and algorithms, video and photographic equipment, software, size and processing capabilities of machines are advancing and evolving daily. But where does this leave us in terms of the archaeological process? This session aims to present the latest research into archaeological work that attempts to adapt and incorporate new and effective digital technologies into current the archaeological practices. Papers in this session seek to push the frontiers of archaeology in the application, integration and use of digital technology in planning, fieldwork or data collection, laboratory work, data processing, and in the interpretation and communication of results. This session will cover topics from GIS,

photography, videography, photogrammetry, virtual and digital 3D reconstruction of sites, laser scanning, immersive realities, interpretation through digital mediums and many more.

Use of photogrammetry for non-disturbance underwater survey: an analysis of in situ stone anchors

Carrie Fulton, Andrew Viduka, and Andrew Hutchison

In 2014, the authors implemented three-dimensional imaging practices in an underwater survey conducted along the southern Cypriot coastline off of two known Late Bronze Age sites: Maroni-*Yialos* and Maroni-*Tsaroukkas*. While many previous applications of three-dimensional recording have focused on large site recording, this project focused on recording singular anchors in situ through photogrammetry from which three-dimensional objects could be created for further analysis. The authors utilized two different software programs for photogrammetric analysis, PhotoModeler Scanner (Eos Systems, Inc.) and PhotoScan Pro (Agisoft), to assess their suitability for underwater survey activities, their potential for deriving more accurate documentation than traditional measuring tapes, and for typological characterization for archaeological and cultural resource management purposes.

Omeo, Mayfield and City of Perth: a trio of diverse 3D mapping challenges

Kevin Edwards, Nicolas Bigourdan, Ian McCann, Darren Cooper

The last few years have seen the widespread adoption of 3D photogrammetry to record aspects of the underwater cultural heritage. Nevertheless, while such applications have successfully demonstrated the utility of the technique, they have tended to stem from academic or commercial contexts, and be somewhat specialised in nature. As a consequence, there have been relatively few discussions relating to the practical application of underwater 3D photogrammetry in non-specialist contexts employing consumer-grade equipment and open-source and/or low-cost software. In order to redress this imbalance, we describe the outcomes - both positive and negative - achieved to date as part of the 3DMAPPR initiative (a community-based project), with a particular focus on shallow-water sites including the wrecks of *Omeo*, *Mayfield* and *City of Perth*, located in the Perth region of Western Australia. More specifically, we examine challenges faced in the development of a recording methodology that is not only rapid, accurate and repeatable, but which also has low technological and financial overheads.

Building 3D site maps of HMAS Sydney and HSK Kormoran

Andrew Hutchison

This paper will provide an overview of the approaches to proceed with the creation of accurate three dimensional, interactive site maps/visualizations of the WW2 wrecks of HMAS *Sydney* and HSK *Kormoran*. Two separate data sets exist, one from the 2008 discovery/survey, and the other from the very recently completed 2015 survey. Although both surveys recorded still images, video and sonar data, the data recorded in 2015 was of much higher resolution and frequency, capturing approximately 700,000 still images and over 200 hours of High Definition video, as well as close range multibeam data, and was designed to produce very detailed 3D Dimensional models. However, the relatively low

quality still and video images from the 2008 survey include critical areas of the debris field that were not re-visited by the later survey. This paper presents the early approaches and rationale for merging the two data sets together to produce an interactive visualization of the wrecks and their respective debris fields, for public presentation and scientific study.

The 'Magic Roundabout' of digitally recording coastal maritime heritage

Paddy Waterson

The Queensland Government has been working with the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and the University of Queensland to undertake digital recording of shipwrecks and coastal maritime heritage. The sites were largely recorded using the *Zebedee* laser scanner and range from intertidal shipwrecks, to convict built structures and colonial coastal defences. The results have been remarkable and will be progressively made publically available through the international CyArk website. The recording process has highlighted a number of potential applications for historic and maritime heritage managers but like all forms of technology, it also has some limitations.

12.30 – 1.30 Lunch

Presentations by Sponsors

1.30 – 3.00 Session 1: The Archaeology of Sealing and Whaling in the South Seas

Convenor – Ross Anderson

Sealing and whaling in the South Seas during the late 18th-19th centuries led to intensive maritime exploration, cross-cultural contact, and formative colonial development (both official and non-official settlement) across the Southern, Indian and Pacific Oceans. In 1997 the Archaeology of Whaling in Southern Australia and New Zealand (AWSANZ) project brought researchers together to promote strategic, collaborative research into colonial whaling sites, with their potential to reveal information on technology, social organisation and cross-cultural contact. It is timely to discuss outcomes of research conducted over the last 18 years into both foreign and colonial sealing and whaling activities in the Australasian region, and seek to extend thematic, collaborative research across the wider South Seas region. Researchers are invited to present papers on theoretical developments, site-specific investigations, regional surveys, early settlement studies, environmental, museological, material culture and technological aspects, cross-cultural contact and site management issues.

Archaeological evidence of an early 19th-century whaling venture across the Indian Ocean

Myra Stanbury

By 1785, or earlier, the first British and American whalers appear to have sailed as far as Walvis Bay (Namibia), the Cape of Good Hope and along the coast to Delagoa Bay (now

Maputo Bay), Mozambique. France also sent whalers to the African coast from an early date, official French records for the period 1784 to 1792 being more informative than the British and American records on account of the bounty being offered by the French government of Louis XVI to encourage a revival of whaling.

Until 1786, British ships were prevented from whaling in Indian Ocean waters that were regarded as the domain of the English East India Company. Under special license they were now permitted to whale in progressively greater areas of the Indian Ocean, gradually expanding their territory of waters by whittling away the East India Company monopoly. One tactic they used was to obtain contracts for carrying convicts and supplies to the New South Wales colony at Botany Bay. With permission from the East India Company they departed in search of whales immediately they had landed their human cargo. To reach their destination they followed the established trade routes across the southern Indian Ocean. In 1798, under the 'Southern Whale Fisheries Act' the Company's ban on whaling vessels in the Southern Oceans was finally lifted and Australian and New Zealand waters were opened to British whalers.

In the late 18th century many of the European whalers that had been cruising in the Indian Ocean in the waters off Madagascar, Mozambique and South Africa began to extend their territory eastwards towards New Holland (Western Australia). This paper outlines the discovery and identification of an early 19th-century whaler lost in the Rowley Shoals, Western Australia.

South African Archaeology in the Sub-Antarctic

Jaco Boshoff

The Sub-Antarctic islands of Prince Edward and Marion have been South African possessions since 1947. The Islands' history, however, is deeper than that, being discovered in the 17th century by the Dutch who never landed and only exploited from the early 19th century by mostly American, British and Cape Town based sealers. They left behind remains of their activities visible as camping sites, production sites, shipwreck survivor camps and related shipwrecks. Unfortunately, the importance of these very ephemeral sites was not recognised until the 1980s, with heavy souvenir hunting taking place. The archaeological investigation of these remains has been sporadic and rather opportunistic, which is in marked contrast to other research programmes on the islands. New research opportunities provided an impetus for a more stable approach with the current NRF (National Research Foundation) funded 'Archaeologies of Antarctica' project. This paper will give an overview of archaeological interventions on Marion in the past and will discuss current and possible future directions for archaeological research on the islands.

Case Study: The Solglimt Survivor Camp on Marion Island

Tara Van Niekirk

What can the long forgotten remains of the Solglimt, a Norwegian sealer grounded on Marion Island in 1908, add to the archaeology of survivor camps in the Southern Seas. This paper looks at the investigation of the Solglimt ship wreck survivor camp in this remote sub-Antarctic environment, which was once a hot spot for the sealing and whaling industries during the late 19th and early 20th Centuries. The study makes use of archaeological

signatures left behind as a way to understand the possible cultural behaviour that took place during an event of disaster, isolation and the need to survive; and can be used as a comparison for similar studies that have taken place in the Australasian region.

Modelling maritime economy and society on the Southern Ocean frontier

Ross Anderson

Sealing and whaling led to cross-culture contact between Indigenous peoples and newcomers along Australia and New Zealand's southern coasts – the 'Southern Ocean frontier'. This paper presents the results of recent historical and archaeological research investigating the nature, extent and duration of these maritime activities on Western Australia's south coast. A significant aspect to early cross-cultural contact and settlement processes along the Southern Ocean frontier was the development of hybrid, regional exchange economies where Indigenous peoples, settlers, government and sealers and whalers interacted to barter a variety of goods and services, including seal and whale oil, seal skins, kangaroo and wallaby skins, vegetables, fish, mutton bird meat, eggs and feathers, knowledge and labour. Because of its access to shipping this Southern Ocean frontier economy was directly integrated with the broader colonial Australian and global markets. The significance of the Southern Ocean frontier economy and society to broader Australian colonisation processes will be discussed.

1.30 – 3.00 Session 2: Digital Frontiers in Archaeology II

Recording Inscriptions at the Quarantine Station: an Application of Polynomial Textural Mapping

Pam Forbes and G. Jackson

The Quarantine Station at North Head, Manly has over one thousand inscriptions that provide a tangible and personal link to the past and document social patterns and historical incidents over the nineteenth and twentieth century. Their valuable research potential is under threat from continuing degradation of the rock surfaces on which they were created. Polynomial Textural Mapping (PTM) is a method of photographically recording textural information in a way which aids the analysis of inscriptions and provides an interactive record of them. The PTM software creates images of the inscriptions that allow them to be viewed under different lighting conditions, magnifications and using a variety of renderings to optimise their readability. This paper will discuss the equipment and methods developed during fieldwork in 2014, which continue to evolve to meet the challenges presented by access to inscriptions, their condition, size and orientation.

At the Coal Face: 3D laser scanning to identify and quantify change across dynamic landscape features

Annita Waghorn, David Roe and Rod Brumby

Landscape features such as those found on mining sites can be subject to complex erosional forces. Developing effective strategies for conservation of these features requires an understanding of the relationship between fabric loss and environmental forces. However it

has always been difficult using traditional recording techniques to systematically identify and quantify areas of fabric loss across large and amorphous features. Digital recording technologies such as laser scanning offer the ability to produce high resolution, highly accurate recordings of very complex topographical surfaces. Comparisons of sequential scans can identify and quantify material loss and/or deposition. This can be used to inform our understanding of the role of various environmental agents, and what, if any, mitigation measures might be undertaken. This paper will discuss the contribution of laser scan analysis towards a larger project of identifying environmental factors acting upon a convict-period coal screening dump in a highly dynamic coastal location at the Coal Mines Historic Site, Tasmania.

3D Conservation of Archaeology at the Sydney Opera House Site

Anita Yousif

A recently completed redevelopment of the Sydney Opera House site known as the Vehicle & Pedestrian Access Safety Project (VAPS) entailed construction of a new basement level and access vehicular tunnel to enhance visitor safety. The VAPS project is the largest redevelopment project undertaken at the SOH site since its opening in 1973. Archaeological excavations undertaken as part of the project yielded significant relics associated with the early days of the Colony and establishment of Sydney. However, the location of the relics could not warrant in situ retention or adequate sampling and comprehensive interpretation outside the original context. The solution to conservation and interpretation of the relics was found in 3D modelling. The Sydney Opera House Trust commissioned a 3D digital site scanning and comprehensive historical analysis to create a permanent research platform and a short film that interprets significant archaeological features that could not be retained in situ. The loading dock site was scanned by a small team of 3D specialists at a highest possible resolution available to date. The scanned relics and archaeological research were presented in narrated film *Revealing Archaeology*, which has been awarded a commendation reward by the National Trust of Australia in 2014.

Going with the flow on the Fryerstown goldfield: LiDAR, GIS and conflict over mining water

Peter Davies, Susan Lawrence and Jodi Turnbull

Gold miners extensively manipulated water supplies on Victoria's colonial goldfields. Most mining water systems were established and controlled by capitalists who effectively became water merchants. At Fryerstown in central Victoria, however, small miners dominated the field. The River Loddon Water Supply Company established a race network in the 1860s that continued in operation, on and off, for the next century. In this paper we use a combination of digital technologies, including Historical GIS, LiDAR and geo-referencing of historical maps to explore and understand the development of this race system and its relationship to water supply more generally.

3.00 – 3.30 Afternoon Tea

3.30 – 5.00 Session 1: In Situ Preservation and Conservation of Cultural Heritage

Convenors – Vicki Richards and Jonathon Carpenter

The aim of this session is to broaden discussions with respect to *in-situ* preservation and management of terrestrial and underwater cultural heritage sites and their associated archaeological finds. The session also encourages discussions with respect to the stabilisation and treatment of archaeological remains *ex situ*. Papers discussing these basic themes include the ideology of on-site preservation and conservation, legislative requirements and present directions of *in-situ* preservation, assessment of site and artefact deterioration and subsequent stabilisation techniques, principles for development and implementation of mitigation and conservation strategies, long-term effects of past stabilisation and conservation techniques, and *in-situ* monitoring of sites to determine the effectiveness of management and conservation strategies.

Trial sub-bottom survey on the James Matthews (1841) shipwreck site using a parametric SES-2000 compact sub-bottom profiler

Trevor Winton, and D. Bergersen

Burial depth and continuity of coverage are the most important *in-situ* variables influencing the rate of degradation of shipwreck material. This paper describes a recent sub-bottom profiler (SBP) trial survey undertaken on the *James Matthews* site using an INNOMAR parametric SES-2000 compact SBP. The aim of this trial survey was to ascertain the performance of the parametric SBP as a potential tool for *in-situ* management of underwater shipwreck sites.

The *James Matthews*' site represents one of the more difficult environments to survey with a SBP-type tool because the density and velocity contrast between the sand overburden and the bulk of the shipwreck structure was presumed to be minimal. Hence strong reflectors from the hull were not anticipated.

Longitudinal and transverse seismic lines across the shipwreck site depict the tips of concretion-encrusted iron knees and the windlass protruding above the seabed. Strong reflectors are seen to a depth of approximately 1+m below seabed near the stern, and up to 2 m below the upper surface of the windlass, reflecting the buried hull remains. Sand coverage on top of the wreck is seen from a depth of near zero to approximately 20 cm – 40 cm between the stern and the windlass. Reflectors of similar intensity to those measured at the bow are also seen outside of the previously excavated section of the shipwreck. It is postulated that these may represent partially intact or scattered remains of the vessel that have been subsequently buried during the wreck formation processes.

In-situ preservation of the ex-slaver James Matthews – the cofferdam strategy

Vicki Richards

The *James Matthews* was wrecked in 1841, near Woodman Point, south of Fremantle. The site has been identified as historically and archaeologically important because of its significance as an early colonial trading vessel to Western Australia and it remains one of the world's best preserved examples of a 19th century purpose-built illegal slave trader. The wreck was fully excavated in the 1970s, documented, recorded and subsequently reburied

in-situ. The site remained relatively stable until the late 1990s when changes in the natural near-shore sedimentary processes and increased industrial activity in the immediate area caused significant site exposure. Since 2005, a number of different small scale reburial techniques have been trialled on-site and the most successful was the ‘cofferdam’ strategy. Hence, with funding from the ARC Australian Historic Shipwreck Preservation Project (AHSP) and the support of many local and interstate volunteers, the full scale “cofferdam” remediation strategy was implemented by the WA Museum in November 2013.

Management of UCH sites: Conservation and planning for the future

Jon Carpenter, Vicki Richards, Kalle Kasi and Ian MacLeod

As the management of UCH sites is the main priority the acquisition of baseline conservation data should be considered of primary importance and complimentary to archaeological recording. In Australia, only two conservation scientists and two conservators from the Western Australian Museum regularly conduct this work. All recognize that there is a need to train other professionals. Every two years, at Flinders University, a week intensive Conservation Field School is presented, which provides post-graduate archaeologists with an appreciation and understanding of the importance of obtaining baseline data from UCH sites, with a view to introducing appropriate conservation management strategies. Infrequent courses are also conducted for international universities. Although a number of maritime archaeologists have embraced conservation assessments of their UCH sites intrastate, interstate and internationally, the acquisition of this basic conservation data is not common place. The current practitioners propose to investigate the possibility of establishing a dedicated training school for professional and newly qualified conservators and archaeologists, so basic conservation surveys become an integral part of any management strategy for UCH sites.

It's a wrap – Preserving the historic shipwreck Clarence

Cassandra Philippou, Vicki Richards and Peter Veth

In 2012 the Australian Historic Shipwreck Preservation Project commenced investigation of the colonial trader *Clarence* (1841-1850). One of the primary aims of the programme was to test *in-situ* preservation methods. While *in-situ* preservation has been adopted for decades in Australia and abroad, underwater cultural heritage managers agreed that longitudinal scientific research was required. The AHSP joins the ranks of similar *in-situ* preservation projects underway in Europe, which are also undertaking regular visual and scientific monitoring of reburied submerged sites to assess the efficacy of these techniques.

Intensive fieldwork took place over a series of months in 2012, involving excavating, recording, and reburying *Clarence* under layers of sandbags, shade cloth and tarpaulins. Since the shipwreck site was finally ‘wrapped’ in November 2012, the team has returned to the site annually to recover sacrificial samples and gather sediment cores for analysis. Marine biologists undertook a final survey of the site in January 2015 to assess to re-colonisation of the site post-disturbance. This paper will present the results of the post-reburial monitoring programme, and introduce the *in-situ* preservation implementation guidelines drafted by the project team.

3.30 – 5.00 Session 2: Research Problems in Historical Archaeology

Chinatowns: Reinterpreting Overseas Chinese archaeology in North Queensland

Melissa Dunk

The current challenges in studying Overseas Chinese archaeology in Australia relate to a lack of integration of data from isolated site studies and the use of less than sophisticated theoretical approaches into race, identity and ethnicity. Chinatowns in North Queensland during the nineteenth and early twentieth-century were well established Chinese residential, business and cultural spaces that provided a range of services to both the permanent as well as transient population. This presentation provides an update on the research into Chinatowns in North Queensland by describing the material culture and current archaeological interpretations of these sites. The significance of this research is its contribution to what we know of the Overseas Chinese and how reinterpretation can apply to Overseas Chinese archaeology.

From the ground up: understanding the construction of class in 19th-century Christchurch

Jessie Garland and Katharine Watson

The archaeological work resulting from the Christchurch earthquakes of 2010 and 2011 has produced large quantities of data relating to 19th century European settlement of the city. Amongst the many questions that can be asked of this, those relating to class/status/wealth loom large. The work to date has highlighted the discrepancies between what buildings archaeology and traditional below ground archaeology can offer with regard to this subject. This has implications for historical archaeology in New Zealand, Australia and further afield, and for understanding how class is reflected in a city's material culture.

Parramatta: Developing a Research Framework 2002-2015

Mary Casey

I have been digging in Parramatta since 1988 and Tony and I ran our first project there in 2002. The significance of the archaeology of Parramatta is something most Sydney historical archaeologists acknowledge and we love to dig there because of the challenges involved, which present many different types of sites that are generally a rich resource which test us to identify and properly excavate these sites. Parramatta sites should make those who work there better archaeologists. But this is not why they are often of State significance. It is because they allow us to investigate a range of sites which are rich and multi-layered. Parramatta consistently has early sites, beginning in November 1788 and continuing into the 20th century. These sites and landscapes relate to the archaeology of the beginnings of Australia, the profound event which would have shocked Aboriginal people with the first inland settlement, far from the coast and Sydney Cove. These early sites range from the agricultural settlement of Rose Hill and how it morphed into Parramatta, the convict accommodation (convict huts) which became the homes of emancipated convicts and free settlers, followed by the development of the convict town and its major convict institutions: gaol and female factory, hospital, soldiers barracks, government house, and the transformation of the town during Macquarie's

administration. We are not even past 1825 and yet this resource is so rich, so layered. As part of a major project in North Parramatta which involves the Female Factory (1821-1844) we will be developing an Archaeological Research Framework to provide strategies for interpreting the archaeology within the development of parts of the site, as well as providing strategies to be pursued in public interpretation. This paper will discuss the beginnings of this framework and the key questions which should be asked of the archaeology.

Considering Hospital Construction: The Buildings Archaeology of Ashburton Hospital, New Zealand

Luke Tremlett

This paper presents an outline and preliminary results from my MA thesis research which considers the extent to which hospital buildings reflect changing approaches to medical treatment in the 19th and 20th centuries. It uses as a case study Ashburton hospital where construction began in 1880, with subsequent additions and remodelling up until the present day. The focus here is on four of the oldest buildings, and both historical information and buildings archaeology recording are used to define a room-by-room sequence of construction and modification events. Attributes including room size and provision of ventilation are then examined for change over time. Preliminary results indicate that over time patient rooms became smaller and more specialised in function, and that ventilation decreased. Probable reasons for these changes will be considered.

Friday 25 September 2015

9.15 – 10 Keynote Speaker: Professor James Symonds

Biography

I am a historical archaeologist and study the archaeology of the modern world (c.AD 1500-present). I have worked at the universities of Sheffield and York in the UK, and am currently the Professor of Historical Archaeology (North of the Alps) at the University of Amsterdam. I am also a Docent in Historical Archaeology at the University of Oulu in Finland and a Visiting Professor in Historical Archaeology at the University of West Bohemia in the Czech Republic. My research interests include the study of capitalism, colonialism, and landscapes of Improvement and diaspora, urban and industrial archaeology, and the archaeology of poverty. My research has for the most part concentrated on the historical archaeology of the 18th and 19th centuries, with occasional forays into the 20th century. I am currently working on a project to explore the archaeology of the Thirty Years' War in 17th-century Europe.

Where are we now? A personal reflection on the past, present, and future of historical archaeology

Why do we do historical archaeology, and what can we hope to achieve? In this talk I will take the opportunity to reflect upon some of the projects that I have undertaken over the last 25 years and relate these projects to changing trends in historical archaeology. Over this period of time the practice of historical archaeology has grown exponentially but definitions of the sub-discipline vary; is it a methodology, a period specific study, or the archaeology of capitalism? It has become clichéd to say that historical archaeologists “dig locally, but think globally” but in reality most historical archaeology is undertaken at a local level, either in support of local heritage initiatives, or as a commercial activity in support of CRM. I will argue that we should perhaps be more ambitious and aim to devise more transnational projects, with multi-sited investigations. Finally, if historical archaeology is the study of the modern world, should our work simply document and *reflect* that world, or should we aspire to influence that world by addressing major issues such as the persistence of poverty, the plight of displaced peoples, the origins of racism, and the reasons for human conflict? My case studies will be drawn from the city of Sheffield, and the Western Isles, in the UK, Cape Breton Island, Canada, Finnish Lapland, and Bohemia, in the Czech Republic.

10 – 10.30 Morning Tea

10.30 – 12.30 Plenary Session: ‘With, for and by’: Community engagement and the two big ‘I’s in archaeology

Convenors – Kurt Bennett and Maddy Fowler

'With, for and by' is a community-based theoretical and methodological approach that has been used to define Indigenous Archaeologies. Many attempts and inroads have been made in the field of archaeology to engage with Indigenous communities in relation to their heritage (including, more recently, with their maritime heritage). The approach, however, remains to be more fully considered within the less-critiqued area of non-Indigenous (historical) heritage and community engagement with another stakeholder in archaeology: industry. Archaeologists should recognise the implications of Indigenous Archaeology, which need not be solely applied to and done by Indigenous populations, but by, with and for all of the stakeholders of heritage.

This session highlights projects, research and daily practices that are endeavouring to establish a 'with, for and by' approach within the commercial sector or that continue to creatively build upon this approach with Indigenous communities. Participants from academia and cultural heritage management in Australia and New Zealand will discuss issues which have largely been unaddressed in community engagement and emphasise the role that industry and Indigenous stakeholders can play in the development of research programs.

Rethinking working 'for' industry: A case study from the Lyttelton Port redevelopment, New Zealand

Kurt Bennett

Here is the scenario, your client says you have two hours to record an archaeological feature before it is destroyed, but you as the archaeologist know that you need to take longer. You now find yourself questioning your ethical relationship to archaeology and working 'for' your client. It is this juggling act between cost, time and protecting heritage that prompted me to ask, are we also able to work 'with' and 'by' the client, in addition to 'for'? This paper will attempt to answer this question using recent experiences as a consultant archaeologist in New Zealand.

Decolonising maritime archaeology: A case study from the Point Pearce/Burgyana Aboriginal community, South Australia

Maddy Fowler

Archaeology with local communities is often associated with a decolonisation of the discipline, an undertaking that has questioned its theoretical and methodological roots. Recent research with the Narungga community at former Aboriginal mission, Point Pearce/Burgyana, South Australia, has attempted to begin to deconstruct, decolonise and transform maritime archaeology and its associated language, discourse and underpinning attitudes. Findings suggest that caution and care is required when reassigning certain terminology and word choices, as commonly used within maritime archaeology, to Indigenous contexts. Maritime archaeologists are therefore encouraged to deeply consider and analyse the use of language when communicating research conducted with, for and by Indigenous and non-Indigenous communities alike.

Community Archaeology in Quinhagak, Alaska – Yup'ik Eskimo Culture and Continuity

Colleen Lazenby, Warren Jones and Rick Knecht

The University of Aberdeen (UA), Qanirtuuq Corporation (QCorp) and Quinhagak Heritage Inc. (QHI) are cooperating to rescue pre-contact archaeological sites threatened by climate change and sea level rise in Quinhagak, Alaska, located on the Bering Sea coast at 49N latitude. Over 40,000 objects of Yup'ik cultural material have been recovered to date, the result of near-perfect preservation of organic materials in permafrost soils. Community projects that directly link with the archaeological investigations include a UA/QCorp Village Archaeology Training Manual, QHI Traditional Arts Workshops in 2014 bringing together Culture Bearers with primary school students, and a 2014 Elders Interview Oral History Project to record information about items recovered in the field as they were excavated. In 2015 QHI delivered an Alaska Youth: Culture: Heritage Incubator Project of four arts-themed workshop modules for 10-20 years olds. The next important phase of the relationship will be a cooperative project to manage return of the cultural collection from Scotland to Alaska commencing in 2017.

Giving back: Community engagement and the State Government

Peta Straiton

The Department of Environment, Water and Natural Resources (DEWNR), has, for the first half of 2015, been involved in an intensive community engagement project concerned primarily with its management of historic relics in South Australia. The primary focus of this engagement was the transfer of custodianship of historic shipwreck relics to museums and collection institutions, with a secondary focus on increasing awareness and understanding of the state's maritime history. Relics held at the State Heritage Unit, DEWNR were part of a large-scale recording and transfer program. This paper will present the interim outcomes of this program while simultaneously highlighting the benefits of community engagement.

12.30 – 1.30 Lunch

AIMA Tutors Meeting

Poster Session

From Digging Stick to Plough: The Change from Traditional Maori horticulture to European Market Gardens, Archaeological Evidence

Hans Dieter-Bader

Recent development driven excavations in North Taranaki, NZ, uncovered pre-Contact and post-Contact Maori horticultural systems. A late eighteenth-century system, pre Land Wars system and a late nineteenth-century system show the gradual change from traditional Maori gardening to European market gardening. These three systems were cultivated by the same group of people, at least the two later ones, most likely by the same family group. They are all within the same environment and same soil type, therefore differences between them show social changes over time, not any environmentally driven different adaptations. The change of technology from digging stick to plough and the less labour

intensive planting soil preparation is visible, but the principles of the planting soil preparation remain unchanged. The interpretation of the excavation results is only preliminary and leads to many new questions. The locations of the research are also driven by the development needs of the gas and oil industry in Taranaki rather than any archaeological research approach.

Vietnam Underwater Archaeology Training

Charlotte Looram

The Vietnam Maritime Archaeology Project has been involved in developing maritime archaeology in Vietnam since 2007. In June-July 2015 the VMAP conducted a four-week field school with participants from Vietnam, Thailand, Cambodia, Indonesia, the Philippines, Sri Lanka, Australia, the Netherlands, South Africa, and the United States. The Vietnam Underwater Archaeology Training participants were taught the basics of underwater archaeology while working on several sites around Cu Lao Cham island off of Hoi An in central Vietnam. These sites included a stone anchor site, an assemblage of ceramics near the shore, and the Bai Ong 1 shipwreck site. Bai Ong 1 had been found by VMAP in previous years and was surveyed during VUAT. The team was able to identify it as a 16th or 17th century Cham vessel through the hundreds of ceramic fragments found on the seabed. The participants were also involved in land projects such as recording shipwreck ceramics, documenting traditional vessels and boatbuilding techniques, and interviewing local fishermen. The work conducted by the VUAT participants, in particular the interviews and underwater searches, has shown that the Vietnamese coast has enormous potential for research in maritime archaeology.

HMAS Voyager (II)

Stirling Smith

'Trash talking': A historical archaeological interpretation of 19th-century cesspit discard from Sutherland Street, Melbourne

Caitlin Holzheimer

In order to enhance the value of historical archaeological investigations, it is becoming increasingly necessary to not only explore and interpret individual sites, but also to compare and contrast archaeological assemblages so as to develop broader understandings of the neighbourhoods and cities of the past. Separate from the previously analysed sites of 'Little Lon' and Casselden Place, this thesis has provided an opportunity to explore consumer trends and relative social and economic themes at both an individual and neighbourhood scale. This Honours thesis firstly examines two cesspit assemblages excavated in 2011 by Andrew Long + Associates at 2-9 Sutherland Street, 280-286 Little Lonsdale Street in Melbourne, Victoria. Subsequently, the socioeconomic patterns detailed within the cesspit assemblages will be contrasted against previous investigations into cesspits from 'Little Lon' (Pepdjonovic 2012). The integration of historical records and tenant information is an important facet in characterising archaeological data, and is a necessary part of this thesis. However, the role of material culture from historical sites has moved beyond analysing the lives of individual occupants and families, with emphasis within the thesis placed on

understanding the social processes and impacts of urbanisation within larger interpretative units through comparative analysis of the Sutherland Street and 'Little Lon' sites.

1.30 – 3.00 Session 1: Conflict Archaeology in the Pacific I

Convenors – Brad Duncan and Stirling Smith

The 100th anniversary of WWII has highlighted the importance of heritage related to various conflicts throughout the Asia/ Pacific Region. WWII was the world's first truly global war, which brought conflict to Australia's doorstep for the first time. The mechanisation of these wars led to technological innovation changing and driving the archaeological signatures of these activities. This session highlights the diversity of archaeological investigations currently taking place around Australasia and the Pacific Rim.

WW1 Shipwrecks and Maritime Heritage Sites in NSW

Stirling Smith

One hundred years ago Australia was in the midst of fighting the so-called 'War to end all Wars'. The fledging Royal Australian Navy had only been formally established for three years prior to the outbreak of WW1 but was tasked with not only protecting Australia and its maritime interests but also engaging in battles and escorting transports with thousands of men aboard half way around the world.

Today there are numerous reminders of this important phase of Australia's maritime history dotted throughout NSW. Some sites are visible and easily accessed such as the HMAS *Sydney* (I) tripod and memorial at Bradleys Head and the SMS *Emden* trophy gun in Hyde Park. Others are less accessible such as the deep water sea dumping grounds off Sydney Heads where the greatest concentration of Australia's WW1 naval power was scuttled. This paper will look at the variety of WW1 shipwrecks and maritime heritage sites that exist in NSW today. It will also explore some of the heritage management strategies being employed to preserve and interpret these sites.

WWII Heritage in Solomon Islands – A Crisis

Martin Gibbs

Following the surprise raid on Pearl Harbour, the Solomon Islands was where U.S. and Japanese forces first fully engaged in intense battle on land, sea and in the air, in many cases formulating or testing tactics and materiel for the first time. These conflicts left an immense body of sites, artefacts and human remains across the islands, as well as generating a rich legacy of story and song. Despite the Wreck and War Relic Act (1980) which protects WWII items from export without permission, the archaeological resource related to WWII in the Solomon Islands has suffered from progressive deterioration, lack of local recognition, and mixed or indifferent management and government support for the preservation of these important heritage and tourism resources. Many aspects of the non-material WWII heritage have also been overlooked. This paper reviews the current state of the WWII heritage of the Solomon Islands, especially the growing recovery and destruction of WWII materials for

export as scrap metal. It also outlines an emerging framework for future management and research.

The Battle of the Coral Sea: Searching for the wrecks of USS Lexington Sims and Neosho

Andrew Viduka, Alan Williams, James P. Delgado, Nicholas Bax, William S. Lange, David L. Conlin, Dave Gallo, Ronald Thresher and Grant Luckman

In 2011 Prime Minister Julia Gillard and the US President Barack Obama jointly announced a desktop research project to locate the USS *Lexington*, USS *Sims* and USS *Neosho* lost in the Battle of the Coral Sea in 1942. Following the successful completion of the desktop project, an application for sea time on the RV *Investigator* was submitted by an interdisciplinary science team led by Dr Alan Williams of the CSIRO Marine and Atmospheric Research division. The project titled, *Informing science-based management of natural and cultural assets in the deep Coral Sea* will aim to physically locate and document several of these shipwreck sites, the associated battlefield and nearby sea mounts. The project will determine the effects of the deep-sea environment on these shipwrecks and their effect on the deep-sea environment. This presentation will discuss the proposed project, which remains subject to funding, and looks at the interdisciplinary science objectives and methodology.

Exploring muddy waters: recent work on WWII infrastructure in Darwin's intertidal area

David Steinberg

The well-known WWII coastal sites of the Darwin region has been well documented, but it is common that inspections and surveys stop at the high tide mark. Masked by mangrove and mud, examples of jetties, slipways and kitchen refuse dumps are hidden from plain sight. This paper will explore the results of some recent adventures into the 'mud zone' of Darwin harbour showing the rich archaeological record of its intertidal zone and how the full extent of these historic sites have been under-estimated.

50 years of Military Archaeology in Western Australia

Michael McCarthy

As an adjunct to its traditional shipwreck and maritime exploration studies, the Department of Maritime Archaeology at the Western Australian Museum has been active in military site inspections and in military archaeology itself: i.e. the study of material remains emanating from a declared war, providing new evidence about the people and societies involved, their methods, equipment, organisation and technology. This paper will examine the body of work as practiced by one institution, for the first time tying it together into a cohesive whole, providing critique and suggesting further directions.

1.30 – 3.00 Session 2: Urban Archaeology in Melbourne

Convenor – Jeremy Smith

Over the last 15 years there have been 153 historical archaeological investigations conducted in Melbourne's central city. Some, like the Casselden Place dig of 2002, ran for

many months and attracted high levels of academic and public interest. Most have been more modest in size, and have come and gone quietly behind construction site hoardings. But all have made some contribution to the understanding of the condition, complexity and significance of the city's archaeology.

A more detailed understanding of Melbourne's archaeology is emerging as this mosaic of digs takes place across the city. The strong residential character of Chinatown and the Little Lon precinct is attested in the city's north-east. Recently, more industrial and commercial history has been revealed as the city's west becomes a hot-spot for development. A focus on courthouses, the Melbourne Gaol, the Old Melbourne Cemetery, the Exhibition Buildings and the Royal Mint has thrown light on the operation of government institutions.

It is important that this significant body of archaeology research is used to inform and refine the research questions that direct excavation methodologies and lines of enquiry. This session will look at five excavations conducted recently in Melbourne.

The other side of the coin – subsurface remains at the Former Royal Mint, Melbourne

Ian Travers

The Melbourne branch of the Royal Mint, at the corner of William and La Trobe Streets in the Melbourne CBD, was officially opened in June 1872. Built on a site that had previously accommodated Melbourne's original Exhibition Hall, the complex comprised the extant Administration Building and its flanking Guardhouses (which together form the basis of the site's inclusion on the Victorian Heritage Register) and substantial 'operative departments' to the rear. The latter were demolished in the early 1970s, but recent desktop studies and excavation have revealed that substantial remains survive, while geotechnical investigations have also shed light on preparatory works at the site. This paper will convey the results of the recent investigations at the Former Royal Mint, and use this example to explore the relationship between standing heritage items and their associated archaeological deposits and the implications for heritage management.

Archaeological Excavations at the former Stork Hotel

Meredith Filihia

In 2013, test archaeological excavations were conducted at three adjoining Heritage Inventory sites at the corner of Elizabeth and Therry Streets in the Melbourne CBD, one of which was the site of the former Stork Hotel. The Stork, opened in 1855, was an example of a gold rush era hotel that operated continuously until its closure in 2007. Historical research identified a succession of industries at the sites adjacent to the hotel. This paper will outline the historical background including site usage, detail features and finds and what the investigations revealed regarding industries and land modification in early Melbourne.

280-286 Little Lonsdale Street (2-8 Sutherland Street) and 290-292 Little Lonsdale Street (Bucks Head Hotel) in Melbourne

Alison O'Connor and Paul Pepdjonovic

The historical archaeological sites located at 280-286 Little Lonsdale Street (2-8 Sutherland Street) and 290-292 Little Lonsdale Street (Bucks Head Hotel) in Melbourne were subject to a testing programme and subsequent detailed open area excavation in 2011. The contrasting richness of these sites and artefact assemblages from the Western and Eastern sides of Sutherland Street could not be starker. The Bucks Head Hotel constitutes a typical historical site in the CBD with shallow deposits and a limited Victorian era assemblage while Sutherland Street represents a highly unusual and unique historical site within Melbourne. The richness of the assemblage including coins and tokens, domestic items, a gun stash, evidence for children, several religious items of Catholic and Masonic origin and a previously unknown and rare light industrial landscape pre-dating the establishment of Melbourne as we know it today. It has enormous potential to illuminate not only the social context of Melbourne and Little Lonsdale Street in this period but also to provide intimate insights into the daily lives of the people who lived there from the 1850s-1920s. In addition to this, the site provides an unprecedented opportunity to examine an early light industrial site, the likes of which have never been found in Melbourne.

Excavations at 556-560 Flinders Street, Melbourne; Preliminary Results

Sarah Myers

Over July and August 2014, ArchLink Archaeologists and Heritage Advisors P/L undertook historical archaeological excavations and monitoring at 556-560 Flinders Street, Melbourne. A redevelopment proposal for the property included the demolition of two extant, but dilapidated buildings and the construction of a new 30-storey apartment block. The dilapidated buildings were constructed in 1864 and 1876. They were not included on the Heritage Overlay for the City of Melbourne, but were listed on the Victorian Heritage Inventory as a potential archaeological site (H7822-1847). The archaeological program was carried out in accordance with Heritage Consent C912.

The property formed part of Batman's garden during the early European settlement of Melbourne. Following its incorporation into the city grid, however, it was occupied by Victoria's first iron foundry established in 1842 by Robert Langland. In subsequent years the property was occupied by Stooke's shipping butcher (1864-1930s), the Bank of NSW (1876-1920), and several other commercial enterprises.

Excavation of the site unearthed some evidence for the butchery phase of occupation; represented by the stone footings of the dilapidated buildings facing Flinders Street, brick tanks perhaps used for processing meat and accumulation deposits comprising much bone. But, somewhat surprisingly, the most substantial remains uncovered were associated with the earlier iron foundry phase; and, among other things, comprised a ubiquitous, hardened layer of ferrous waste material or compacted slag. This presentation will present preliminary results from the excavations, providing some insights into the challenges faced, but also a glimpse of the fascinating discoveries that lay beneath the near impenetrable layer of slag.

Salvage archaeology at 452 Elizabeth Street: reflections upon documentary sources and the "instant city" of gold-rush Melbourne

Geoff Hewitt, Natalie Paynter, Meg Goulding, Sharon Lane, Jodi Turnbull and Bronwyn Woff

Early this year a salvage investigation and monitoring project was carried out at a location on the corner of Elizabeth and Franklin Streets in Melbourne's CBD by Ochre Imprints Pty Ltd for Sinclair Brook acting as agents for the owners of the 'Victoria One' development planned for that site. The 'Victoria One' apartment tower, with its basement, is intended to occupy the entire site and hence all historical archaeological features and traces within the Heritage Inventory sites H7822-2028 and H7822-2029 would be removed.

Demolition of the extant brick buildings on the site that had been constructed ca. 1905 and removal of rubble and fill, revealed the substantially intact footings of three earlier buildings formerly fronting to Elizabeth Street, together with a further two outbuildings. This excavation has provided an opportunity to analyse the usefulness of the pictorial and mapped record of nineteenth century Melbourne. Although the suite of early buildings on the property was identifiable as being present when the 1895 MMBW detail block plan was drawn, reference to the ca. 1856 Bibbs' cadastral map of Melbourne revealed that the majority had also been present in the mid-1850s. Fortuitously, photographer Charles Nettleton had captured images of the rears of these buildings in 1870 and this remarkable fact has allowed a detailed comparison between the archaeological remains, the 1866 De Gruchy and Leigh isometric view of Melbourne and Nettleton's photographs. This comparison revealed that the De Gruchy and Leigh isometric is not entirely reliable as a reference tool for both the spatial distribution of structures and the purported fabric of those structures. Importantly, Nettleton's images also clearly show that two of the early main buildings on the site were constructed of iron. One of these was almost certainly a prefabricated import erected upon red gum stumps before 1855 and remaining in use until its structural failure ca 1900. A full-colour scan of the Bibbs' map has permitted analysis of the built fabric of Elizabeth Street Melbourne revealing the intensive use of iron – and probably prefabricated - structures during the gold-rush years.

3.00 – 3.30 Afternoon Tea

3.30 – 5.00 Session 1: Conflict Archaeology in the Pacific II

What was General Blamey up to on Hombrom Bluff?

Matthew Kelly

AHMS has been conducting research and survey of a WWII site outside Port Moresby. It was rumoured to be a 'retreat', hide-out, or even headquarters for General Thomas Blamey during the war. Blamey and the site have been the subject of criticism and rumour since 1943 with claims that Blamey attempted to cover up his activities and involvement by blowing up the only bridge that furnished access. The real use of the site, while less sensational, is nevertheless a curious application of military authority during wartime.

A living history of the last Royal Australian Air Force World War II operation from Australia's mainland

Fiona Shanahan

World War II witnessed a development in air warfare like no war had before. Due to the advancement of aircraft and their related technologies an increase in the horrors of war was experienced by many civilians and those who fought in the armed forces throughout the Pacific. Why then do we try to remember these times, their related sites and objects? An anniversary of Coomalie Airbase (Northern Territory, Australia) in 2015 will be explored in order to highlight the significance and necessity of maintaining living histories in relation to Australia's involvement in World War II.

Early results of the high resolution imaging of HMAS Sydney and HSK Kormoran

Andrew Hutchison

This paper gives an overview of the early results from the April 2015 high resolution photographic survey of the WW2 wrecks HMAS *Sydney* and HSK *Kormoran*, which sank each other in the Indian Ocean in 1941. Aspects that will be covered are the intention of the project to provide enough images to produce a detailed 3D Reconstruction, the novel equipment systems developed to allow this volume of images to be recorded from the two ROVs to the surface vessel in near real time, and the use of the two ROVs to provide lighting for each other that enhanced the HD stereoscopic video recording. Additionally, the paper will present the preliminary results of the science program, new items found, evidence of decay of the wrecks over the seven year interval since the last survey, and the role of interviews with veterans of service on the HMAS *Sydney* providing critical eye witness evidence to facilitate forensic identification for the cause of damage to the wrecks.

Project Longshot: Locating the Shell that was the first shot fired by the Allies in WW1

Mark Ryan

Fort Nepean, Melbourne, Victoria, Australia was the scene of the first shot fired in WW1 by the Allies. The shot was fired at a German Steam Ship, the *SS Pfalz*. Project Longshot aims to find this shell, which lies some where on the seabed in Port Philip Bay. With the centenary of WW1 now being commemorated and the centenary of Gallipoli in 2015, this project could not be more timely. Our mission is 'to mount a search in an attempt to find one of Australia's most historically significant artefacts'.

'Invincibility lies in the defence...': The Queensland Colonial Navy and its heritage legacy – is it significant?

Paddy Waterson

Concerns about Russia's imperial ambitions in the Pacific during the late nineteenth century led many of the colonies on continental Australia to establish military defences. As a large northern colony, Queensland authorities were particularly nervous and invested in both coastal batteries and a small navy. While many of the extant *land based* facilities have been entered onto the Queensland Heritage Register, only *one* of the former naval vessels is officially protected under heritage legislation. The hulks now lie in different parts of Moreton Bay, two largely modified by other applications. They all present a major conservation challenge. While a *prima facie* assessment of the wrecks indicates they are significant, it does raise the question; do major modifications and deterioration degrade their significance and condemn them to history?

3.30 – 4.30 Session 2: ASHA General Workshop

**4.30 – 6.00 pm Annual General Meeting of the Australasian Society for Historical
Archaeology**

DRAFT

Saturday 26 September 2015

9.00 – 10.30 Session 1: Lessons from the past and opportunities for the future in Australasian maritime archaeology

Convenor – Matt Carter

Since its inception in the early 1970s maritime archaeology in Australia has been at the forefront of the methodological and management practice of underwater cultural heritage worldwide. This expertise was gained through large-scale projects of shipwrecks such as: *Batavia* (1629), *Pandora* (1791), *Sydney Cove* (1797), *Xantho* (1872) and more recently *Clarence* (1850) excavations and day-to-day site management with the lessons learned from these activities continue to inform the practice of maritime archaeology today. However, the future of maritime archaeology in Australasia is facing considerable challenges including increasing financial pressures, static or declining membership in interest groups, and an ever growing number of shipwrecks being discovered outside of the traditional working depths of professional maritime archaeologists. This session will discuss how the lessons learned from over 40 years of maritime archaeological practice can be used to counter these challenges, and what opportunities there are for the future of maritime archaeology in Australasia.

A decision support tool for managing diver impacts on underwater cultural heritage

Joanne Edney

Underwater cultural heritage site sites, particularly ship and aircraft wrecks are becoming increasingly popular and important attractions for recreational scuba divers. Divers' use of these sites can result in a range of adverse impacts on their cultural heritage values. The balance between allowing divers access to important underwater cultural heritage sites whilst ensuring their cultural heritage values are maintained can present a challenge for managers. Any management strategy adopted for managing diver impacts should be unique to each site, and largely dependent on the levels of impact occurring and the cultural significance of the site. This paper presents a decision support tool designed to assist managers in deciding on appropriate management strategies for particular sites. It provides a framework for decisions and suggested management actions and priorities.

Will dive for helium? The Professional Maritime Archaeologist Diver and the Deep Shipwreck Resource

Matt Carter

Every week shipwrecks in the 30-100+ m depth range are being dived by technical diving enthusiasts with varying ethical standards. This unprecedented popularity in technical diving poses considerable challenges to maritime archaeologists, but also significant opportunities for investigating what are typically better preserved shipwrecks than their shallower counterparts. This presentation will outline some of the issues associated with maritime archaeologists working outside of recreational depths and will offer examples of how maritime archaeologists and technical divers can work together to investigate deep shipwrecks for their archaeological values before this information is lost forever.

Maritime Archaeology: Hijacked

Iain Gately

A good deal of literature has explored the relationship between archaeology, the public, and popular culture. The same cannot be said for maritime archaeology, however. As a discipline that has grown up in the eyes of the camera, maritime archaeology has never quite shaken off the last vestiges of its early conception in the treasure hunting and salvage of the 50's and 60's. Although, as a discipline, we have tried to move forward from this history, it can be argued that public perception has not. Central to this perception is the portrayal of maritime archaeology within popular culture, with representational structures from the 60's and 70' still being used to 'sell' the product. This presentation will explore how maritime archaeology is being presented to the public, how we as maritime archaeologists can counter this, and if we are doing enough to 'rebrand' ourselves.

The archaeological study of the ketch Hawthorn [1875-1959]: Understanding centreboard construction in 19th-century Australian-built trading vessels

Daniel Petraccaro

Shipbuilding industries within the Australian colonies established in the early 18th century due to the economic pressures linked with growing coastal trade. As shipbuilding commenced, the methods and form of ship construction adapted to suit the specific coastal environment of Australia. This paper presents an archaeological investigation of how one major adaption in Australian trading vessels, the centreboard, was necessary as it enabled shallow water navigation, prevented a ship moving leeward and allowed safe beaching at low tide. This study argues how the form of centreboard construction was not just influenced by environment and economics, but was constrained by available technology and the cost association with shipbuilding and shipbuilding materials.

An archaeological case study of the ketch *Hawthorn* will be presented that recounts the structural elements, design and quality of centreboard construction. The ketch *Hawthorn* was built as a trading vessel in Franklin, Tasmania in 1875 then transferred to South Australia in 1876. In 1949 the ketch foundered in the shallow waters of Bucks Bay, Carpenter Rocks in South Australia's South-East. This paper will also introduce the results of the 2013 and 2014 archaeological field surveys with an emphasis on the centreboard assembly.

9.00 – 10.30 Session 2: Artefact Studies & Material Culture in Historical Archaeology I

Convenor – Jennifer Jones

Beer bottle blues: a study of bottle reuse in early Melbourne

Bronwyn Woff

The paper focuses on bottle reuse and its implications for archaeological analysis and interpretation. It aims to examine bottle reuse in the context of archaeology, and proposes a guide to the reliability of bottle shape in informing bottle contents.

Bottle reuse was part of the commercial cycle by which bottles were filled, emptied, washed, refilled and reused. Historically, the refilling process was not necessarily completed by the original beverage manufacturer, nor was the bottle necessarily filled with the same product each time. Considering that bottles were often reused multiple times before entering the archaeological record, bottle reuse is an important aspect of historical archaeology, especially as consumption analyses and interpretations of the archaeological record are based to varying degrees on assumptions about bottle contents.

This paper provides a broad view of the bottle reuse cycle based on historical and secondary sources, before investigating which bottle forms were most commonly reused as evidenced by the analysis of artefacts excavated from 35-37 A'Beckett Street, Melbourne. Its site is known to be the location of four consecutive bottle merchants businesses between 1875 and 1915. The paper then proposes a guide to the likelihood that bottles were being reused for products other than those which their form is currently assumed to contain. This guide uses a scale of low, medium and high reliability, and draws on evidence from the archaeological record, supplemented by historic documents. The paper concludes by briefly discussing implications of bottle reuse on archaeology, suggesting ways in which bottle reuse can be taken into account whilst interpreting the archaeological record.

The Dirk Hartog Inscription Plate: Its Archaeological and Historical Context

Wendy van Duivenvoorde

Located at the northern tip of Dirk Hartog Island in Western Australia, Cape Inscription is one of the most significant cultural heritage sites in Australia. It marks the accidental landfall of Dutch skipper Dirk Hartog and his crew on 25 October 1616. This paper investigates the archaeological and historical context of the Hartog Inscription Plate, emphasising the nature of similar monuments left by European explorers in the Indian Ocean region and contemporary ship communication practices. It also provides a brief historic overview of Dirk Hartog's life and seafaring activities, and places his arrival in Western Australia into the broader setting of seventeenth-century Dutch exploration.

Here, There and Everywhere: Development of an Analytical Technique for Provenancing Mother of Pearl Buttons

Celeste M. Jordan, Ian Moffat and Renaud Joannes-Boyau

Australia has historically been a significant part of the pearling industry, exporting 80-90% of the shell made into Mother of Pearl (MOP) buttons from the 1860s to WWI. Despite this, very little research has been undertaken into geochemically provenancing MOP buttons found on archaeological sites. In this study stable isotope and trace element analysis was performed on manufactured MOP buttons and their corresponding raw shell from modern samples of four oyster shell species. Several elements such as B, Mg, Mn, K, Sr, Na and Zn appear to retain characteristic abundances during button processing, but the environmental source for the heavy elements is not clear. Stable isotopes appear to be more diagnostic of provenance, although the effects are difficult to interpret in areas with complicated ocean circulation such as the Abrolhos Islands where $\delta^{18}\text{O}$ values are shown to vary by 0.65‰ over a few kilometres.

Archaeological investigations at the Eureka Historic Precinct (2011-2012): the artefact assemblage

Wendy Dolling, Adrienne Ellis and Simon Greenwood

Archaeological investigations were conducted at the Eureka Historic Precinct, Ballarat East, Victoria, between September 2011 and November 2012 by Matrix Archaeological Services. Listed on the Victorian Heritage Register (H1874), the archaeological significance of the site in part relates to the potential preservation of archaeological deposits and artefacts associated with the Eureka Stockade rebellion in 1854. Numerous *in situ* mining-era features and deposits were identified during the investigations, including: mining shafts/pits, water management features and occupation surfaces. The artefact assemblage was overwhelmingly recovered from secure deposits associated with the historical mining era (1852-c.1867), and contributes significant new information regarding mining activities and occupation at the site.

10.30 – 11.00 Morning Tea

11.00 – 12.30 Session 1: Voices About the Past: Oral History and Local Knowledge in Historical and Maritime Archaeology I

Convenor – David Steinberg

This session will explore the contribution oral history and local knowledge have made to the research, discovery and understanding of historic places. The oral record can provide invaluable details about past events. It can provide a rich ‘people focused’ social history, in which historic sites can be seen from new perspectives. Local knowledge can provide invaluable practical information about the location of sites, observations about the condition of places decades earlier, and can lead to new evidence such as previously unseen photographs. Researchers must also appreciate the potential pitfalls, such as the inherent limitations of memory. This session may also explore the connection between oral history, local knowledge and the task of defining the social significance of specific heritage places.

Community participation and co-operation in preliminary archaeological investigations

Peta Straiton

Country colonial ports were often a lifeline to many early communities, providing a means of transport, communication, and trade, but their importance can often be lost to modern development and societal progress. A preliminary examination of the historic port at Normanville Beach, South Australia, combined the concept of communal memory with the existing historical and archaeological records to assist in understanding the site’s various layers of significance. This paper will identify the benefits and limitations of using communal memory as a source of information as experienced during the preliminary archaeological examination of Normanville Beach.

Through the Eyes of Henry Gray: Investigating the influence of the Temperance Movement and Wesleyan Methodism on the Greenough Flats, Western Australia, 1839 – 1900

Melissa Hetherington

This presentation will explore the ways oral histories, put together by local historians and descendants of settlers on the Greenough Flats, have defined our understanding of a colonial settlement in WA's Midwest. Drawing upon a review of the literature, this presentation will show how integral oral histories are during the lead-up to archaeological investigation. The settlement along the Greenough River Flats is located 400km north of Perth, and dates from 1857. Archaeological investigations will be conducted at 'Gray's Store' (a general store) and the 'Temperance Lodge' (a community hall), which were both constructed in 1860. This research will also involve a micro-historical study on Henry Gray, his son Charles and William Moore, who managed 'Gray's Store.' This presentation will demonstrate how photographs and stories shared by, and connected to, living descendants of settlers in Greenough have shaped previous archaeological research in Greenough.

'We used to dive off there when we were kids': Utilising oral histories and community sources to discover the maritime cultural landscapes of the Murray and other NSW Rivers

Brad Duncan

In 1995, Kenderdine's study investigated the inland riverine world of the maritime cultural landscapes along the Murray River. Although this paper was a seminal work in its scope, interest in inland waters gradually waned over time. This paper will explore the role that communities play in the identification and location of maritime heritage sites along NSW rivers systems. It will explore how community driven concern to preserve their maritime heritage has led to a dramatic increase in the number of wreck sites reported in rivers across the state. Focussing on recent fieldwork in NSW inland waterways, this paper demonstrates how, often with a little bit of prompting, local oral histories and sources are revealing a whole range of previously unknown heritage sites and values to the wider world.

Community engagement with maritime archaeology in Vanuatu

Mal Venturoni

11.00 – 12.30 Session 2: Artefact Studies & Material Culture in Historical Archaeology II

An assemblage of transfer-printed pottery from a south Tanna (Vanuatu) mission site

James Flexner and Andrew Ball

Protestant missionaries brought a variety of consumer goods with them when establishing remote mission stations throughout the world. Western objects played a dual role, allowing missionaries to maintain some material connections with habits from "home", and providing a consumer exemplar for potential converts. Excavations at a mission house at a site called Imua on Tanna Island, Vanuatu recovered a significant sample of transfer printed refined earthenwares. These artefacts were left behind when the Tanna mission was abandoned overnight in 1862. The Imua house had been inhabited by the Mathesons, a Presbyterian missionary family, for less than one year at that time. The ceramic material culture provides material for consideration of identity, religious conversion, consumption, conspicuous

display, and economic ambitions of missionary families in Oceania. At the same time, it begs the question of how such materials may have been interpreted and understood by local Melanesian people.

Old lives, changing entities and new narratives: An object biography of the Mayoral Chair of Port Pirie, South Australia

Christeen Schoepf

On a hot January evening in 1888, the Prussian barque *Saturn* was set alight while anchored near Port Pirie South Australia, by a kerosene lantern that had fallen in the galley. Scuttled to nearby Cockle Spit the fire raged for days until all that remained were some oak timbers of the ship's carcass. As this phase of *Saturn's* life course came to an end, a new life and entity emerged as the timbers were bought at auction by Prussian immigrant and local merchant, Theodore Kneese, who later created the Mayoral Chair for the infant Port Pirie Corporation as a token of new beginnings. This research has engaged with the philosophies underpinning the notions of object biography and life cycle studies and utilises extant documentary, illustrative, oral, aural, material and archaeological sources and methods to explore the transformation of each entity as it has moved through the phases of its life course – from creation, use, discard, death and reincarnation. This paper will explore how such an object centred approach has added new dimensions and meanings to the changing layers to the stories of the barque *Saturn* and the Mayoral Chair as each moved across contextual spaces and time.

Measuring the quality of personal goods: challenges and opportunities for the archaeology of consumption

Penny Crook

The practice of the systematic indexation of quality in 19th-century mass-produced goods offers a new approach for historical archaeology and studies of consumption. This paper will discuss current efforts to expand the systematic measurement of quality of archaeological goods from ceramic and glass to personal goods, specifically footwear and pressed-metal ornaments (including buckles, buttons and brooches) known as the 'Birmingham wares'. This has the potential to address another important area of consumption—that of the individual rather than the household—but presents new challenges with regard to artefact preservation and assemblage diversification.

A Stitch in Time: the discovery, analysis and conservation of a Melbourne c1870 frock coat

Susanna Collis, Louise McCulloch, Megan Goulding and Natalie Paynter

In an Australian context, historical archaeological textiles are rare, and potentially significant finds. In 2015 during an historic archaeological excavation in Melbourne CBD, archaeologists unearthed a bundle of fabric and thread from an unlined rubbish pit that when examined by conservators was found to be pieces of what once was a frock coat or jacket dating to c1870. This presentation will discuss the discovery, conservation treatment and subsequent analysis of this archaeological textile. The discovery of the textile, and the story of its conservation and analysis, provides a rare insight into the manufacture of mid to late nineteenth century clothing and is highly evocative of Melbourne's urban past.

12.30 – 1.30 Lunch

1.30 – 3.00 Session 1: Voices About the Past: Oral History and Local Knowledge in Historical and Maritime Archaeology II

Back in the Day: Drawing on decades of local diver knowledge for the Darwin Harbour Wreck Inspection Project

David Steinberg

The NT Heritage Branch has come to the end of a multi-year project to inspect the seven WWII shipwrecks of Darwin Harbour. Before the results of this project, there were no inspection reports on these wrecks to work from, and we now understand that many of the most basic assumptions about these sites were wrong. These wrecks are large, broken up and complex, and dive operations are hampered by depth and poor visibility. The success of these inspections have hinged on the assistance of local divers, divers with an extensive knowledge of these wrecks following years, and in some cases decades, of visitation. These are divers that can navigate these complex sites as guides. These are also divers that can recall when the wrecks were 'different', such as when more was visible above the sand, or more artefacts were *in situ*. A wreck inspection is a snapshot of a wreck at one time. How does one reconcile what is seen on that day, with the wealth of accumulated knowledge of others?

The loss, discovery, loss, rediscovery, archaeology and social history of Koombana Bay's shipwrecks, Western Australia

Ross Anderson

Koombana Bay in southwest Western Australia provides an ideal anchorage for the port of Bunbury in prevailing southwest winds, but is exposed to northwest winter gales. Between 1840 and 1903 twelve ships were blown ashore and wrecked in northwest gales, including three North American whaling ships. The mast of Koombana Bay's first wreck, the Salem whaler *Samuel Wright* (1840) was used as a trig point for the first official Bunbury town survey, making it the only town in Australia to have its town planning scheme based on a shipwreck. Following port development, coastal changes resulted in the wrecks being buried in up to 5 metres of sand, 200 metres inland. In the 1960s remains of wooden shipwrecks were discovered during sand mining activities, including the hull of at least one American whaler. The discovery of the sites prior to establishment of the WA Museum's Maritime Archaeology Department and historic shipwreck legislation in Western Australia created significant local interest at the time, however following reburial under five metres of sand and mine tailings their exact positions were lost. WA Museum projects to relocate the shipwrecks in 1981-82 and 2011-12 benefited greatly from local support, knowledge, oral histories and previously unseen photographs held in private collections. This paper will describe the public process of archaeology involved in rediscovering Koombana Bay's shipwrecks, and their significance to the Bunbury's social history and identity.

The Voice of William Cotton and the Archaeology of Pēwhairangi

Angela Middleton

The Rev. William's Cotton's journals were written between 1842 and 1847, the years he spent in New Zealand as chaplain to George Selwyn, the first Anglican bishop of this country. On his arrival in Pēwhairangi (the Bay of Islands), Cotton described his experiences of the Ngāpuhi (northern Māori) world with the startling immediacy of a newcomer, as he participated in novel cultural rituals and began to learn the Māori language. He met individuals who were critically important in the political dynamics of the north, where the first land war would soon break out between Ngāpuhi and the British administration. Moreover, his cryptic, witty journal entries and illustrated pages provide a window into the inner social world of mid nineteenth century European New Zealand, where charades, mimicry and ridicule could form drawing room entertainment.

Cotton's journals provided an essential tool to the understanding of the relationship between missionaries and Māori in unravelling these dynamics for my recent book, 'Pēwhairangi'. His descriptions and drawings also contributed to a deeper understanding of the archaeological context of the places he lived and stayed in, such as Waimate, Paihia and Kerikeri.

William Cotton himself was an eccentric, tragic figure, who would die in an English asylum. Although not oral history, Cotton's own voice can be heard clearly in his journals. This paper looks at the contribution Cotton's archive brings to historical archaeology in the Bay of Islands and to New Zealand more generally.

Norfolk Island – Heritage surveys and Remote Sensing across three periods of settlement

Martin Gibbs and Brad Duncan

In 2014 the authors commenced a community based heritage project which applied remote sensing techniques to a sample of sites from the First European/British Settlement (1788-1814), the Second 'Convict' Settlement (1825 – 1855), and the Third 'Pitcairner' Settlement (1855 to present) on Norfolk Island. Allied with this process was an oral history program on the sites investigated, a review of past archaeological research, and consideration of a more unified approach towards the archaeology and heritage of Norfolk Island. This program has become particularly timely given community uncertainty in the face of recent changes in its relationship with Australia, including the move towards open immigration and property purchase which will significantly shift the nature of the community and undoubtedly place traditional site and landscape use and knowledge at risk. One of the questions that may require consideration is whether and/or how heritage studies should respond to the Norfolk Island (Pitcairner) community's claim as having an 'indigenous' status.

1.30 – 3.00 Session 2: Rural homesteads

The Scottish pastoral landscape in Tullamarine

Gary Vines

The Scottish settlers at Tullamarine provide a useful data set for testing some assumptions about the landscape of colonial settlement. They are a distinct group with a close and dense

settlement pattern; they arrived in two waves but within a short time span, and conducted similar economic activities. Their social networks were reinforced through church, school, marriage and politics. They were stable and long-lived, with a number staying for a century or more. But most usefully, the clearance of the area in the 1960s to build the Tullamarine Jetport, sealed the record, and created a group of archaeological sites for us to examine.

Two households... in Truganina

Sylvana Szydzik, Pamela Ricardi and Oona Nicolson

Ecology and Heritage Partners Pty Ltd excavated two late nineteenth to early twentieth century rural homesteads between 2013 and 2014. Both sites comprised bluestone ruins and were located on Leakes Road and Boundary Road in Truganina. Similar excavation methodologies were employed at both sites. However, despite being structurally similar and located within close proximity to each other, analyses of the artefact assemblages reveal that the two rural households were rather different from one another. Differences were particularly noticeable in terms of recreational pursuits. For instance, while residents from one house appear to have enjoyed having a drink and smoking a pipe, residents at the other seem to have practiced a more restrained lifestyle. This paper will discuss some of the key findings resulting from the two projects.

Silverwells: constructing a home, farm and community in colonial Victoria

Wendy Morrison

The Ure family were amongst the earliest selectors to settle in the Gembrook area of southeast Victoria, where they constructed a home, farm and small commercial centre, and made a significant contribution to the early development of the township. This paper explores this process through a discussion of the architecture and layout of the extant domestic, farm and public buildings. It traces their origins in pre-industrial Scottish farming traditions, and assesses the role of the Ure family in nurturing a sense of community amongst dispersed and isolated farming families.

Oak Park, Portland: Historical Archaeological Investigation

Fiona Weaver

This paper outlines the results of fieldwork undertaken in October 2012, to uncover, define and record the extant remains of "Oak Park", West Portland, South-West Victoria. "Oak Park" was a two story bluestone mansion, built for Thomas Finn (Police Magistrate) in 1854, amidst a property totalling 889 acres. The house was located on a hill overlooking Wattle Hill Creek and Portland. The mansion was demolished by 1961. The site consisted of a large mound of overburden, approximately 1.2 metres in height and covering an area of approximately 19 x 25 metres. Fieldwork was instigated by the owner Mrs Trudy Farley, not for development, but for information. Fieldwork was undertaken over six days. Through research, excavation, oral history and photography, "Oak Park" has provided an opportunity to explore what once was a "showpiece" property of Portland, and is an example of the many Historic archaeological sites in the Portland area, which remain to be worked on.

Flour Power: Public archaeology at the Thomas Mill

Maddison Miller and Brandi Bugh

During Australian Heritage Week and National Archaeology Week this year Heritage Victoria conducted an archaeological investigation of the Thomas Mill Site, located on the Plenty River 28 kilometres northeast of Melbourne's CBD. In addition to increasing our knowledge of the area and early phases of flour milling in Greater Melbourne, the aim of the project was to raise community awareness of historical archaeology. The site of the 1855 mill was chosen for its potential to contain archaeological material from both industrial and domestic contexts, and for its location within the Plenty Gorge Park (situated within the nation's top growth area in 2013-14). In addition to the excavation, the project included site tours, hands-on experiences, information sessions, and a Community Day. Nearly 600 people visited the site during the two weeks of excavation, and many others heard of the project through social and traditional media. As well as creating invaluable relationships with key stakeholders, the project continues to produce great outcomes including local exhibitions, social media chatter, website hits, newsletters articles, ongoing research in schools, and requests for presentations to the community. This presentation will outline the preliminary findings of the excavation and how the stakeholders and the broader community were engaged at various stages of the project.

3.00 – 3.30 Afternoon Tea

3.30 – 5.00 Session 1: General Session I

The Former Moorabool Street Pier, Steampacket Place, Geelong

Fiona Weaver

The Moorabool Street Pier was commenced in 1850 and completed in 1854/55. It was the third pier, or jetty, constructed along the Geelong waterfront, and catered for the Bay Steamers which tied up daily during their runs from Geelong to Melbourne via Portarlington, Clifton Springs and Queenscliff, and return. During the 1880s, land was reclaimed along the foreshore to the east and west of Moorabool Street, resulting in the burying of almost 30 metres of pier. The Pier ceased being used by the 1940s and was later demolished. During the 1990s, the Geelong waterfront was again being improved. The Moorabool Street Pier precinct became the subject of landfill excavation for the creation of a small harbour. This paper outlines the results of the Watching Brief, including features and artefacts located during the project, and discusses the working life of the Pier in the context of the Geelong waterfront.

Maritime cultural landscapes of the 'middle ground': the development of the Pākehā shipbuilding industry in pre-colonial New Zealand (1792-1840)

Matt Carter

Between 1792 and 1840 at least 22 sailing ships were built in 11 different shipbuilding yards around New Zealand. These shipbuilding enterprises often involved considerable interaction between Pākehā and Māori and were the locale for the manufacture of the largest and most

complex artefact of the period: sailing ships. This industry is the subject of a recently commenced Ph.D. thesis aimed at exploring the motives, strategies and products of Pākehā and Māori entanglement during this significant period in New Zealand's history, which, along with the proposed methodology, will be the subject of this presentation.

M.T. Næs: The analysis of an early Ertebølle coastal site, and an examination of the role of watercraft in hunter-gatherer mobility

Iain Gately

M.T. Næs is a site located in Denmark, dated to the early Ertebølle (Trylleskoven) period of the Mesolithic, which was excavated in 1989 as part of the construction of the Great Belt Bridge. Although the assemblage was recorded in 1989, no further analysis was conducted on it. The following presentation details the fieldwork undertaken by the author, recording and analysing the assemblage, including the application of new techniques, never before used in Scandinavia. The results will be discussed; in addition to a further discussion of the role that watercraft may have played in influencing the mobility and archaeological signature of aquatic hunter-gatherer groups.

Identifying, surveying and registering the remains of Hawthorn, an Australian built trading ketch wrecked at Carpenter Rocks in South Australia's South East

Daniel Petraccaro

This paper describes the archaeological research of the ketch *Hawthorn*, a Tasmanian built trading ketch wrecked in Bucks Bay at Carpenter Rocks, South Australia. *Hawthorn* was initially reported by community members which resulted in a site survey by the Flinders Archaeology Department as part of their annual Maritime Archaeology field school in February 2013. The wreck was re-surveyed and targeted excavation was conducted by the Department of Environment, Water and Natural Resources (DEWNR) Heritage Division in November 2014. Field work comprised of position fixing, determining the site extent, recording features and minor excavation.

This paper also identifies a number of challenges associated with the management of the integrity of an archaeological site such as *Hawthorn* which is wrecked in a shallow environment, exposed to seasonal burial and exposure cycles, easily accessible and located in a high boat traffic area. Other important issues such as legal protection and heritage listing will also be addressed. Community involvement has also been a strong aspect throughout the *Hawthorn* research and as a result, possible future research includes effective public interpretation that highlights the research potential and community values associated with *Hawthorn*.

3.30 – 5.00 Session 1: General Session II

Another Snapshot for the Album: Results from the 2015 Australian Archaeology in Profile survey

Geraldine Mate and Sean Ulm

In 2015, the third iteration of the *Australian Archaeology in Profile* survey was undertaken. The most recent of three consecutive surveys shows a changing landscape for archaeology,

with 23% of respondents working primarily in historical archaeology and a further 42% of respondents nominating historical archaeology as a secondary area of focus. With two-thirds of professional archaeologists active in historical archaeology, what does the discipline profile look like? In this paper we present results of the 2015 survey and, building on results from surveys in 2005 and 2010, focus on trends in historical archaeology. We examine employment conditions, qualifications and skills, and areas of outreach in historical archaeology and highlight areas of convergence and divergence with other sectors of the discipline in Australia.

'A mill for grinding rogues honest': the archaeology of the Port Arthur Historic Site Penitentiary Precinct

Ashley Matic

This paper will discuss the results of the archaeological research excavations and monitoring works undertaken as part of the Penitentiary Precinct Conservation Project in 2013 and 2014 at the Port Arthur Historic Site in Tasmania. The first systematic sub-surface investigation within this iconic structure were conducted ahead of structural stabilisation works and provided significant new data on this key area within the convict settlement. As a result of this new work our understandings of the development of the area have been very significantly enhanced, particularly in respect of early industrial activities in the 1830s and 1840s, through the construction and later conversion to penitentiary accommodation of a cereal mill and granary, to the destructive impact of bushfires in the 1890s.

The Risk of Ruins: the role of archaeology in managing the Port Arthur Penitentiary Precinct Conservation Project

David Roe and Peter O'Donoghue

In 2011 a major storm event at the Port Arthur Historic Site in Tasmania was the catalyst for a complete re-assessment of the structural integrity of Port Arthur's famous penitentiary building and its internal support/walkway system. The alarming results of that assessment led to a multi-million dollar conservation and interpretation project which is now entering its final phase. The execution of that project included some extensive archaeological research excavations, engaging with the implications of the longest-running sea-level change research in the southern hemisphere, constructing a range of innovative and award-winning strengthening systems, and completely re-thinking the area's interpretation for the visiting public. Controlling risk was a major factor in project management and required a surprisingly interesting engagement with contract design and the concept of latent conditions. This paper will provide a commentary on this complex project and demonstrate that controlling risk in heritage management projects is more complicated than simply undertaking OH&S job safety assessments. Planning for and controlling risk – in the sense of “an intentional interaction with uncertainty” – can profitably engage the archaeological process to deliver cost-effective, timely and sound conservation solutions.

HMS Tortoise, Sailors Grave and the Camp in the Forest

Neville Ritchie and David Wilton

The authors have been investigating sites associated with HMS Tortoise; a spar-gathering ship, operating near the Tairua River, eastern Coromandel Peninsula, in 1842-43. Thomas Laslett was the Timber Purveyor on HMS Buffalo, and, after Buffalo was wrecked, on HMS Tortoise. Laslett's 4th journal provides sketch maps of the general area the Tortoise crew were working in; and detailed plans of the main camp at Te Karo beach and a 'camp in the forest' (CITF) about a kilometer inland. There were up to about 60 members of Tortoise's crew residing and working at CITF, over about 10 months. Extrapolating Laslett's map data to a topographic map, and an extensive search, revealed a likely site for CITF. Preliminary archaeological investigation, including metal detection and geomagnetic scanning, has produced some archaeological evidence that supports the location. This includes three likely whare/pit sites, terraces that were possibly tent sites, and rocks that may have come from a fire place. (The latter is thought to be part of the officers' cookhouse.)

5.00 – 6.00 *Annual General Meeting of the Australasian Institute for Maritime Archaeology*

Conference Close

7.00 – 10.00 Conference Dinner: Black Bull Tapas Bar and Restaurant
www.blackbulltapas.com.au
48 Moorabool Street, Geelong

Sunday 27 September 2015

Field Trip to Bellarine Peninsula – Queenscliff, Clifton Springs and local wineries

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