CURRICULUM VITAE

NAME Michael Caedman James Marsh

Position Principal Archaeologist – Director Black Wattle Archaeology Pty Limited.

CONTACT DETAILS

PO Box 718

Fremantle WA 6162.

MOBILE: (+61) 0409 136 600

EMAIL: Michael.Marsh@bwa.net.au

ACADEMIC QUALIFICATIONS

Bachelor of Arts, Archaeology & Palaeoanthropology. The University of New England, NSW Australia.

Masters Candidate - Master of Heritage Studies. The University of Western Australia, WA Australia.

MEMBERSHIPS

Full member - Australia Association of Consulting Archaeologist Inc. (AACAI). Member – Australian Archaeological Association.

CAREER SUMMARY

I have worked professionally in archaeology and cultural heritage management since 2000. In the past 15 years I have completed or assisted with hundreds of Indigenous and Historical heritage projects in New South Wales, Australian Capital Territory, South Australia, Western Australia and Indonesia.

Prior to establishing Black Wattle Archaeology I held a number of senior roles for various heritage consulting firms and major resource companies. In these senior roles I had responsibility for the management of heritage studies and approvals, heritage management policy and development, archaeological research design and methods, large scale project management for heritage surveys and excavations. Through undertaking these roles I have gained extensive experience in consulting with Indigenous communities and remote area field logistics.

I have extensive experience in the Pilbara Region of Western Australia working there continually since 2008. In the Pilbara I have undertaken major heritage projects for BHP Billiton Iron Ore, the Telstra Corporation, Ironbark Heritage & Environment and Huonbrook Environment & Heritage. During these projects I have worked and consulted with Members of the Banjima (MIB & IBN), Barrimaya, Kariyarra, Ngarla, Ngarlawangga, Njamal, Nyiyaparli, Palyku and Yinhawangka Native Title Groups.

PROFESSIONAL SKILLS

MANAGEMENT EXPERTISE

- Management of heritage studies & approvals processes due diligence studies, feasibility studies, exploration drilling, resource definition, infrastructure developments, port and rail, mining operations & mining closure.
- Financial Management budgets develop, monitor & review, project tenders & project cost estimates.
- Staff Management & supervision workflow, development & training.
- Health & safety management development & implementation of health & safety procedures & safety management plans.



- Contractor & consultant management.
- Project management multiple concurrent projects, multi-disciplinary teams & large scale heritage projects.

CULTURAL HERITAGE MANAGEMENT EXPERTISE

- Obtaining heritage agreements, approvals & permits.
- Development & implementation of cultural heritage management strategies, guidelines & procedures.
- Development & implementation of cultural heritage management plans & cultural materials management plans.
- Cultural heritage site audits.
- Stakeholder consultations & liaison Indigenous communities, Government agencies & Statutory authorities & developers, mining & resource sectors & private stakeholders.
- Management recommendations for heritage sites.
- Heritage due diligence studies.

ARCHAEOLOGICAL EXPERTISE

- Archaeological research design.
- Technical reporting, editing & quality assurance quality control.
- Archaeological consultation Indigenous communities & proponents.
- Archaeological significance assessments & statements of significance.
- Archaeological survey Indigenous & Historical.
- Detailed heritage site recording.
- Archaeological Test & Salvage Excavation Rock shelters, middens, open sites, historical sites, palaeoanthropological sites and mechanical excavation.
- Systematic surface collections of archaeological materials.
- Archaeological material analysis Indigenous & Historical.
- GIS ESRI software applications. GPS/PDA and Total Station.
- Archaeological photography.

EMPLOYMENT HISTORY

2014-PRESENT BLACK WATTLE ARCHAEOLOGY PTY LTD

Principal Archaeologist - Director

Black Wattle Archaeology Pty Ltd. is an archaeological and heritage management company based in Western Australia. Black Wattle Archaeology currently provides archaeological and heritage management services to:

- BHP Billiton Iron Ore Pty Ltd.
- BHP Billiton Nickel West Pty Ltd.

2014-2013 BHP BILLITON IRON ORE PTY LTD

Superintendent Heritage Studies (Fixed-Term)

BHP Billiton Western Australian Iron Ore (WAIO) incorporates an overall area of some 7000 km² encompassing nine (9) Native Title Groups in the Pilbara region of Western Australia. The Superintendent Heritage Studies was responsible for obtaining and managing heritage compliance and approvals for BHP Billiton operations across the WAIO area, with an overriding commitment to health, safety, environmental responsibility and sustainable development. The position was required to identify and manage key heritage risks.



Key roles of the position included:

- Manage and coordinate BHPBIO internal heritage advisors, heritage field supervisors, external heritage contractors, Traditional Owners and government bodies to ensure land access on time and budget in line with agreed business requirements.
- Preparation and management of government approvals, cultural heritage management plans (CHMP) and cultural materials management plans (CMMP).
- The implementation of the BHPB Sustainable Heritage Strategy, establish and execute heritage research agendas and the maintenance of high heritage standards both internally and externally.
- Make a significant contribution to research and development initiatives to increase heritage knowledge and to support and promote the Heritage function within BHPBIO and externally.
- Development of heritage management systems, compliance processes and management of heritage data (both spatial and non-spatial).
- Improvement of performance and streamline processes to deliver safe, compliant and sustainable land access whilst maintaining a high standard of heritage management and heritage research.

2013-2008 IRONBARK HERITAGE & ENVIRONMENT PTY LTD (IHE)

Principal Archaeologist (2013 – 2012)

The Principal Archaeologist forms part of the IHE senior management team to deliver complex archaeological and cultural heritage management services to clients throughout Western Australia in a highly professional, safe, timely and cost effective manner.

Key roles of the position included:

- Manage, coordinate and supervise multiple teams and resources to successfully deliver
 IHE heritage projects.
- Contribute and Manage IHE's internal occupational health & safety programs. Ensure OH&S standards met the requirements of external resource sector clients including by BHP Billiton.
- Develop, prepare and review project tenders & project cost estimates.
- Make a significant contribution to research and development initiatives for IHE Pilbara archaeological methods and GIS data base management systems.
- Supervise IHE excavation projects.
- Undertake technical reporting, editing, quality assurance & quality control.
- Stakeholder consultations & liaison with Indigenous communities, Government agencies
 & statutory authorities, developers, mining & resource sectors & private stakeholders.

Supervising Archaeologist/Team Leader (2012–2010)

The Supervising Archaeologist role evolved to form part of the IHE senior management team as the IHE grew in response to growth in the WA resource sector.

Key roles of the position included:

- Responsible for the day to day management of multiple heritage surveys and excavations projects.
- Develop, prepare and review project safety management plans.
- Contribution to research and development initiatives for IHE Pilbara archaeological methods.
- Undertake technical reporting and editing.



Stakeholder consultations & liaison with Traditional Owners and clients.

Senior Archaeologist/Archaeologist (2009-2008)

The Senior Archaeologist role evolved as IHE grew in response to growth in the WA resource sector.

Key roles of the position included:

- Responsible day to day management of heritage surveys and excavations projects.
- Implementation of project safety management plans.
- Technical report preparation.
- Stakeholder consultations & liaison.

Professional Archaeologist on the IHE Board of Management (2013-2011)

The IHE Board of Management provides advice and guidance to the Directors of IHE on matters relating to business operation, improving IHEs professional heritage management approaches and techniques and reviews progress of employee development, recruitment, client liaison, business development and related issues.

CASUAL EMPLOYMENT & SUB CONTRACTING

2016-2001 South East Archaeology Pty Ltd.

Participation and supervision of archaeological heritage projects across NSW.

- Waterford County Eastern Sector. Thornton NSW. Salvage excavation program.
- Valarie Land. Thornton NSW. Sub-surface test excavation program.
- Waterford County Easter Sector. Thornton NSW. Sub-surface test excavation program.
- Australian Rail track up grade. Minimbah NSW. Aboriginal archaeological survey.
- Mundamia. Nowra NSW. Aboriginal archaeological survey.
- Ulan Coal Mines Limited. Mudgee NSW. Aboriginal archaeological survey.
- Maitland Wastewater Upgrade Stage 1. Maitland NSW. Salvage excavation and stone artefact identification.
- Oxley Highway Extension. Port Macquarie NSW. Sub-surface test excavation program.
- Clarendon Homes Development. Thornton North NSW. Sub-surface test excavation program.
- The Dairy Stage 1. Dolphin Point, Ulladulla NSW. Sub-surface testing and salvage excavation project.
- The Vintage. Rothbury NSW. Salvage excavation program.
- BHP Coal, Mount Arthur North. Muswellbrook NSW. Salvage excavation project.

2008-2006 Archaeo Analysis Cultural Heritage Management Pty. Ltd.

- Headquarters Joint Operations Command. Bungendore NSW. Stone artefact identification for a large assemblage (6000 artefacts).
- Headquarters Joint Operations Command. Bungendore NSW & ACT. Salvage excavation project.
- Headquarters Joint Operations Command. Bungendore NSW. Sub-surface test excavation program.

2007 Huonbrook Environment & Heritage Pty Ltd.

 Olympic Dam Special Mining Lease Extension. Olympic Dam SA. Aboriginal archaeological survey.

2006 New South Wales Archaeology Pty Ltd.

Merimbula NSW. Shell midden salvage excavation.



2002 Jo McDonald Cultural Heritage Management Pty Ltd.

Prospect Highway extension. Western Sydney NSW. Salvage excavation program.

2000 - 2008 Research Assistant (Casual basis)

ADDITIONAL EXPERIENCE

2014-Present Referee - Australian Archaeology.

Volunteer. Review of journal articles regarding Pilbara Archaeology for the Australian Archaeology Journal.

2012-2010 Soa Basin Project Flores Indonesia.

Volunteer. Excavation supervisor at Wolo Sege and Mata Mange. Chief Investigators Professor Mike Morwood, Dr Adam Brumm, and Dr Gert Van Den Bergh. Centre for Archaeological Science School of Earth and Environmental Sciences University of Wollongong.

- Responsible for the controlled excavation of early Pleistocene Paleontological and Paleoanthropological deposits (Age 800,000-1,000,000 years).
- Large scale excavations 20m x 7m trenches (>100m²) including supervision and recording of multiple trenches and up to 50 excavators.
- Multidisciplinary team work including archaeologists, palaeontologists, geologists, geomorphologists, volcanologists and absolute dating specialists.

2008 Architectural and Archaeological Studies at Ile de la Passe, Grand Port, Mauritius.

Volunteer. The Archaeology, Architecture and Conservation of an Historic Islet Project. Analysis of the worked bone material from archaeological excavations at Ile de la Passe. Assemblage held at the National History Museum, Mahébourg Mauritius.

AWARDS

- **2013** The University of Waikato Radiocarbon Dating Prize. Marsh, M. & D. Williams. Sampling and excavation strategies for a Pleistocene archaeological deposit in a rockshelter. Australian Archaeological Association Conference. Coffs Harbour NSW.
- 2013 BHP Billiton HSEC Awards. Highly commended award for Community. 'Watura Jurnti: uncovering and preserving Australia's ancient history for future generations' Western Australian Iron ore, Australia.

PAPERS

in prep Marsh, M. Watura Jurnti: Sampling and excavation strategies for a Pleistocene archaeological deposit in a rockshelter.

PRESENTATIONS

2015 Marsh, M., E. Beckett, M. Sullivan, P. Hughes & A. Grinbergs. A 40,000-year archaeological record from the Packsaddle & Jirrpalpur Ranges. Australian Archaeological Association Conference. Fremantle WA.



- 2013 Marsh, M. & D. Williams. Sampling and excavation strategies for a Pleistocene archaeological deposit in a rockshelter. Australian Archaeological Association Conference. Coffs Harbour NSW.
- **2010** Archaeological Consultancy. Lecture delivered for ARPA 302 Aboriginal Archaeology. University of New England Armidale NSW.
- **2010** Archaeological Consultancy. Lecture delivered for APRA 104 Archaeology: Studying the Human Past. University of New England Armidale NSW.
- **2009** GIS Technology and Archaeology. Lecture delivered for ARPA 343 Field Methods Unit. University of New England Armidale NSW.

MAJOR UNPUBLISHED REPORTS

- **2016** BWA. Heritage Assessment. Mininer Archaeological Baseline Survey Yinhawangka Area (E52/2667). Prepared for BHP Billiton Iron Ore. April 2016.
- **2016** BWA. Heritage Assessment. South Flank & Mudlark Well Archaeological Baseline Survey. Prepared for BHP Billiton Iron Ore. March 2016.
- **2015** BWA. Heritage Assessment. Rocklea Archaeological Baseline Survey for FY16 Expenditure Part 1. Prepared for BHP Billiton Iron Ore. October 2015.
- **2015** BWA. Heritage Consultation. Cattle Gorge Cultural Materials. Prepared for BHP Billiton Iron Ore. July 2015.
- **2015** BWA. Heritage Assessment. Yarrie, Callawa, Shay Gap and Nimingarra Remnants Archaeological Baseline Survey. Prepared for BHP Billiton Iron Ore. July 2015.
- **2015** BWA. Heritage Assessment. Marillana FY15 EXP Priority 1 Archaeological baseline survey. Prepared for BHP Billiton Iron Ore. July 2015.
- **2015** BWA. Heritage Assessment. Marillana FY15 EXP Priority 3 Archaeological baseline survey. Prepared for BHP Billiton Iron Ore. July 2015.
- **2014** Marsh. M., R. Stanger & A. Strano. A139_05 UMC Banjima Agreement Reconnaissance Project. Unpublished report submitted to BHP Billiton Iron Ore.
- **2014** Marsh. M. BHPBIO Heritage Off-Set Strategy. BHP Billiton Iron Ore.
- **2014** Marsh. M. Cultural Heritage Management Plan: Banjima Comprehensive Native Title Agreement. BHP Billiton Iron Ore.
- **2014** Marsh. M. Standard Operating Procedure: Significance Assessment Guidelines. BHP Billiton Iron Ore.
- **2013** Marsh. M. & J. Elder. A384_02 Burgess Point Boundary Definition Project. Unpublished report submitted to BHP Billiton Iron Ore.
- **2013**. Pervan. J & M. Marsh. Section 16 application to conduct archaeological research on rock shelters and open sites within the Banjima Claim Area. Research Plan. Prepared for the Western Australian Department of Indigenous Affairs.
- **2013.** Pervan. J & M. Marsh. Section 16 application to conduct archaeological research on artefact scatter FS95-1 (DIA#18773). Research Plan. Prepared for the Western Australian Department of Indigenous Affairs.



- **2013**. IHE*. Archaeological Consultation. Watura Jurnti. DIA #6287 Shay Gap 4B (PIL_987) Cundaline Ridge Yarrie Pilbara Region Western Australia. Report to BHP Billiton Iron Ore.
- 2013 IHE*. Archaeological Excavation. Watura Jurnti. DIA # 6287 Shay Gap 4B (PIL_987) Cundaline Ridge Yarrie Pilbara Region Western Australia. Report to BHP Billiton Iron Ore.
- **2013** HEH** Test Excavations DIA Permit # 453 P1 Deposit, Packsaddle Range, Mining Area C, the Pilbara. Report to BHP Billiton Iron Ore.
- 2012 IHE*. Aboriginal Heritage Assessment. Jinidi to West Angelas Optic Fibre Cable. Central Pilbara Region Western Australia the Pilbara. Nyiyaparli Section. Unpublished report to the Telstra Corporation.
- 2012 IHE*. Aboriginal Heritage Assessment. Jinidi to West Angelas Optic Fibre Cable. Central Pilbara Region Western Australia the Pilbara. Ngarlawangga Section. Unpublished report to Yamatji Marlpa Aboriginal Corporation.
- 2012 IHE*. Aboriginal Heritage Assessment. Jinidi to West Angelas Optic Fibre Cable. Central Pilbara Region Western Australia the Pilbara. Yinhawangka Section. Unpublished report to Yamatji Marlpa Aboriginal Corporation.
- 2012 IHE*. Aboriginal Heritage Assessment. Jinidi to West Angelas Optic Fibre Cable. Central Pilbara Region Western Australia the Pilbara. Banjima Section. Unpublished report to Yamatji Marlpa Aboriginal Corporation.
- 2012 IHE*. Review of Ironbark Heritage & Environment Pty Ltd Archaeological Methods Part One. Survey and Site Recording. Unpublished Report to Ironbark Heritage & Environment Pty Ltd.
- **2012** HEH**. Test Excavations DIA Permit # 453 A Deposit, Jirrpalpur Range, Mining Area C, the Pilbara. Unpublished report to BHP Billiton Iron Ore.
- **2012** HEH**. Test Excavations, DIA Permit #451, Cundaline Ridge Goldsworthy Hub, The Pilbara. Unpublished report to BHP Billiton Iron Ore.
- **2011** HEH**. Test Excavations DIA Permit # 453 A Deposit, Jirrpalpur Range, Mining Area C, the Pilbara. Unpublished interim report to BHP Billiton Iron Ore.
- **2011** HEH**. A & B Deposits North Flank Survey of Ridgelines and Gullies, Mining Area C, The Pilbara. Unpublished report to BHP Billiton Iron Ore.
- **2010** HEH**. Mining Area C to Jinayri Infrastructure Geo-Tech for rail link IB Section, The Pilbara. Unpublished report to BHP Billiton Iron Ore.
- **2010** HEH**. Wildflower Drill lines and Associated Access Tracks, Mining Area C, The Pilbara. Unpublished report to BHP Billiton Iron Ore.
- **2010** HEH**. Test Excavations, DIA Permit #451, Cundaline Ridge Goldsworthy Hub, The Pilbara. Unpublished interim report to BHP Billiton Iron Ore.
- **2009** HEH**. Interim Survey Report of the Packsaddle P2 deposit at mining Area C (MAC). Unpublished Short Report to BHP Billiton Iron Ore.
- **2009** HEH**. Survey of Jinayri Hydro Geology & Tracks (PEAHR 1005) at the Jinidi Jinayri tenements. Unpublished Short Report to BHP Billiton Iron Ore.

^{**}Report submitted to the Directors of Huonbrook Environment & Heritage Pty Ltd.



^{*}Report submitted to the Directors of Ironbark Heritage & Environment Pty Ltd.

- HEH**. Survey of Proposed Drilling Program at the Mindy & Coondiner Tenements (Yandi). Unpublished Short Report to BHP Billiton Iron Ore.
- HEH**. Survey of Jinayri Soil Sample Pits (PEAHR 873) at the Jinidi Jinayri tenements. Unpublished Short Report to BHP Billiton Iron Ore.
- HEH*. Survey of Hydrogeology Drill Pads (PEAHR 899) at the Jinidi Jinayri tenements. Unpublished Short Report to BHP Billiton Iron Ore.
- HEH**. Cundaline Ridge Goldsworthy Hub: Aboriginal Archaeological Survey sand Site Verification. Unpublished report to BHP Billiton Iron Ore.
- HEH**. Callawa Plateau Goldsworthy Hub: Aboriginal Archaeological Survey sand Site Verification. Unpublished report to BHP Billiton Iron Ore.
- HEH**. Assessment of the 1992 Callawa Plateau (Mesa) Survey. Unpublished Short Report to BHP Billiton Iron Ore.
- HEH**. Survey of Jimblebar Wheelara (Orebody 18) Priority One Area. Unpublished Short Report to BHP Billiton Iron Ore.
- 2008 Marsh, M. Preliminary report on the worked bone assemblage from Ile de la Passe, Grand Port Mauritius. The School of Archaeology and Palaeoanthropology, The University of New England, NSW.

