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Kimberley Foundation Australia Annual Research and Activities Report For the year ended 30 June 2015



Traditional owner at Wanjina gallery in NW Kimberley

(All images courtesy of Kimberley Foundation Australia)

Researching, preserving and promoting Kimberley rock art

CHAIRMAN'S OVERVIEW

In the past year the KFA Board has made constructive steps towards our major objectives with clear indications this year these developments will continue and expand.

The public lectures where the findings of one of our big research projects, *Life Ways of the First Australians*, were presented gave new information about the people living in the southern Kimberley 40,000 – 50,000 years ago. The lectures were presented around Australia and were well attended. It was particularly interesting to learn that a ground edge stone axe was developed in Australia well before there is evidence of this technological advance anywhere else in the world.



As one research project came to an end excitement mounted around the Dating Project with a pre-season sample gathering expedition into Freshwater Cove in the N W Kimberley. This work was done in collaboration with the Dambimangari Traditional Owners with more to come in the Drysdale National Park this year with the Balanggarra people.

Kim Akerman's long awaited, learned paper on Wanjina culture was posted on the KFA website. A number of other papers related to KFA-sponsored research were published in the *Australian Archaeology* journal and the *Journal of Archaeological Science*.

We have continued to forge stronger bonds with the Traditional Owners and view relationships with the various Ranger Groups and prescribed Body Corporates as underpinning achievements in our objectives of researching and preserving Kimberley Rock Art with outcomes that advantage the Traditional Owners. Invitations to attend Ranger Forums and Kimberley Land Council AGM's are always accepted by a member(s) of the Board and are now an anticipated feature on the KFA calendar.

The nexus with the University of Western Australia's Centre for Rock Art Research + Management has given the KFA a strong presence in academic circles which has been matched and enhanced by the breadth of experience our Science Advisory Council offers us. University of Melbourne geochronologists and Australian National University palynologists, University of Wollongong and ANSTO scientists bring expertise that makes the KFA voice credible.

Board meetings in our customary way have taken place in Melbourne, Sydney, Perth and Broome where we noted again the importance of meeting in Broome and spending a few days there connecting personally with representatives of the organisations with whom we are working closely, especially the KLC and WA Education Department. We welcomed a new Perth-based Board member, Mr Julian Burt. The annual KFA Strategy weekend took place under the flawless hospitality of the Kennedys at Horse Island, NSW, and the lively discussions resulted in the formalities of a new initiative to see rock art studies included in cultural studies in Kimberley schools.

This year has been rich and varied in its achievements and challenges. We have a Board of committed and hard working individuals with a surprisingly varied range of skills and experience. Chairing the KFA is a collaborative and satisfying role.

Mano Junge

Maria Myers, Chairman Kimberley Foundation Australia

LETTER FROM THE CEO

Awareness of Kimberley rock art and interest in its Aboriginal origins and significance is gathering momentum. This is largely due to the scientific research initiated and sponsored by KFA as well as the growing appetite for it from Aboriginal communities, historians, anthropologists, archaeologists and a wide range of scientists.

The Foundation's reputation and profile also grows as we expand our networks through increased public engagement and consultation with Indigenous stakeholders, industry and partners. As some of the large ARCfunded projects the Foundation has supported near completion the number of research publications has increased.



We had our busiest 3rd quarter ever presenting three lectures and two fundraising events before the end of March. With the support and collaboration of Profs Peter Veth and Jane Balme (UWA) we presented lectures in Adelaide and Canberra for the first time. We also held our first fundraising event in Adelaide and generated new supporters. It is worth noting that we presented 13 events during the year as well as four Board meetings and a Strategy weekend. The Foundation's administration is very lean with less than two full time staff.

A significant number of new donors contributed to the Foundation this year which is gratifying and individual donations increased 36% on the previous year. A highlight of my year was speaking to a full house at the World Monuments Fund, Empire State Building, NYC. The introduction to Kimberley rock art talk was presented by the American Friends of the National Gallery of Australia and sponsored by Westpac.

The Foundation entered the Facebook era and made significant advancements in the digital world. It has whetted our appetite for an improved communication and online presence and the website will be redesigned and upgraded in the latter half of 2015. A leading front page article in *The Weekend Australian* in April by Victoria Laurie told the story of the collaboration the Foundation has fostered amongst scientists, archaeologists and Aboriginal communities as well as the work KFA puts into driving public appreciation of rock art. It was a wonderful boost for rock art research – and a tribute to the KFA Board and our supporters.

Cal Sermath

Cas Bennetto CEO

DIRECTOR'S REPORT

In accordance with a resolution of the Directors, the Directors state:

Vision Statement

Researching, preserving and promoting Kimberley rock art

Our vision is to promote scientific research into the rock art of the Kimberley and, in conjunction with the aboriginal people of the region, ensure it is preserved and recognised for its national and international significance. We believe the more the significance of the rock art is understood, the more likely it is to be preserved.

Mission

The Foundation supports and encourages integrated scientific research into the rock art of the Kimberley region for the purpose of increasing our knowledge of the earliest Australian people, their art and cultures and their relationship with a changing environment. We recognise the importance of traditional knowledge and support the presentation of it alongside the scientific.

We work with the assistance of local aboriginal people and we are committed to sharing and using this knowledge to ensure the ancient rock art is recognised and promoted for its national and international significance and protected and preserved accordingly.

The Foundation raises and allocates funds with the following aims:

- To foster scientific research into the rock art and its chronological, cultural, ecological and climatic contexts;
- To promote research outcomes to ensure the broadest possible appreciation of the national and international significance of Kimberley rock art;
- To collaborate and share knowledge with aboriginal groups, the public, academic institutions and museums;
- To closely involve local aboriginal people in field research and training;
- To encourage new young scientists into these fields of research;
- To encourage protection and preservation of Kimberley rock art.

With respect to all the objects, the Foundation respects the sensitivity of aboriginal people to their cultural beliefs.

Review and Results of Operations

The Company was incorporated on 24 September 1998.

The Company did not conduct any fundraising appeals during the year. A number of sponsored fundraising lunches, public lectures and private donor events were held.

Donations and grants relating to these events totalling \$885,473 (2014: \$1,165,946) were received. The net surplus for the year 2015 was \$524,161 (2014: \$306,297). At 30 June 2015 the sum committed to research in the next 12 months is \$220,962.

The Foundation continues to advocate for Kimberley rock art to be researched, preserved and promoted for its national and international significance.

Kimberley Foundation Ian Potter Chair in Rock Art at the University of Western Australia

The funds received from The Ian Potter Foundation to establish the Chair (\$1.5 million over 3 years) have now been passed in full to UWA.

The Kimberley Foundation Ian Potter Chair in Rock Art became active in February 2013 and resides within the University of Western Australia's Centre for Rock Art Research + Management (CRAR+M; <u>www.uwa.edu.au/rock-art</u>). CRAR+M Faculty comprises six fulltime researchers, and over a dozen adjunct researchers covering fields as diverse as chemistry, cultural heritage visualisation and chemistry. This makes CRAR+M Australia's largest rock art research and management entity, and also one of the world's largest and foremost such entities. Governance is thus important, and CRAR+M Director and staff regularly report back to the Advisory Board, membership of which covers academic, Indigenous, industry and public interests (see <u>www.uwa.edu.au/rock-art/advisory</u>). Two Kimberley Foundation Australia Directors sit on the CRAR+M Advisory board.

Currently, four CRAR+M staff feed actively into the Kimberley research hub making the Kimberley one of CRAR+M's major hubs.

In the **First Reporting Period** (2012-13) the focus was on establishing the Chair's financial stability, its governance principles, and its Project Goals. This involved much 'behind-the-scenes' negotiation and advocacy; all brokered by the Kimberley Foundation (KFA) and major partners: The Ian Potter Foundation, University of Western Australia, INPEX and later the Department of Indigenous Affairs.

In the **Second Reporting Period** (2013-14), Chair-elect Professor Peter Veth assumed duties on 1 February. Work focused on establishing guidelines as per the four Project Goals set out in 2012, and on formulating a 10 year research plan.

In June, Dr Sven Ouzman became part of the Chairship by virtue of Professor Veth's Australian Research Council's (ARC) Discovery Outstanding Researcher Award, which allowed Chair funds to be leveraged with ARC funds to increase project personnel.



Prof Peter Veth presenting at Alta Conference in Norway 2015

Major Achievements of the Kimberley Foundation Ian Potter Chair in Rock Art

The following relates to the third Reporting Period (2014-15):

- Research: This is the primary responsibility of the Chair. In the reporting period 13 peer-reviewed articles were produced in high-impact journals (at quadruple the normal UWA benchmarked impact-factor), 20 academic and over 24 public presentations ensured knowledge was disseminated along professional and public networks and 2 major reports were produced. The Kimberley *Rock Art Dating Project* was initiated in July 2014 with the first fieldtrip and sampling of rock art in context.
- Fund-raising: The Chair (Peter Veth) has existing ARC funding for the Barrow Island Archaeology Project (\$1.2 million; 2013-2015/16) and the Australian Historic Shipwreck Preservation Project (\$680,000; 2012- 2014. The 3-year ARC Linkage Project Dating Kimberley Rock Art (\$480,000), with the Kimberley Foundation (KFA) as major partner funder was successful and began in June 2014. The Chair is also part of a three year ARC Linkage project (2015-2018) on Murujuga (Dampier Archipelago) rock art that totals over \$1.3 million. In November 2014 a 5-year project (cash + in-kind) called *Kimberley Visions: Rock Art Provinces of Northern Australia* was submitted to the ARC, again with the KFA as a major partner (also Department of Parks and Wildlife and Indigenous collaborators).
- The successful bid was announced in June 2015. The ARC has awarded *Kimberley Visions* \$866k over 5 years. With KFA as the Partner Organisation contributing a cash contribution of \$500K this represents a total of 1.36M for the duration of project. Various smaller funds were obtained for fieldwork, conference travel and equipment.
- Capacity-building: The start of fieldwork in the Kimberley is a combination of Indigenous consultation and of creating advanced and robust field data capture via tablets running FileMaker Pro. From mid-2015 we plan the most significant capacity-building part of the project through establishing postgraduate projects and funding.
- Indigenous engagement: A cornerstone of all work. Kimberley Land Council AGMs have been attended (by invitation) and 2014's fieldwork (three expeditions) was conducted in partnership with Ranger groups. In 2014 a collaborative research agreement was signed with Balanggarra Aboriginal Corporation and we seek to replicate this in FY2016 with two other Corporations.
- Heritage management: The optimum vehicle to initiate cultural heritage management is via Kimberley Aboriginal Corporations' Healthy Country Plans. These are sophisticated, decadal management plans for natural and cultural heritage in which rock art features prominently. Rock art sites are proving to be a powerful focal point around which to research and record other heritage values accessed by, inter alia, scientific excavation, capturing oral history, and associated landscape survey. A major portion of time was given to providing expert input to proposed changes to Western Australia's Aboriginal Heritage Act of 1972. The Chair has mobilised a range of opinions on the proposal and provided reliable advice.
- CRAR+M was also, with UWA's Cultural Precinct, able to repatriate to Western Australia six historic Kimberley rock art copies made for Joseph Bradshaw for public lectures beginning in 1891. These copies have also been shown to the Indigenous communities on whose estates the rock art sites depicted are located. These are irreplaceable records of how Europeans saw and interpreted the art at the end of the 19th century.
 - Public engagement: This is an area where the partnership with KFA is especially effective; notably through the lecture series it runs. Peter Veth gave almost a dozen lectures in this and related events organised by KFA throughout Australia. Regular other public events usually by invitation means that in this reporting period over 24 public lectures were given. This engagement is taken

further through commentary in state and national press, radio and television appearances, and answering many dozens of queries from the public on rock art, archaeology and the Kimberley. Presentations have been given in Perth, Adelaide, Melbourne, Sydney, Canberra and Brisbane; Austin, Berkeley, Sacramento; Mendoza (Argentina), La Paz (Bolivia); and Szczecin (Poland).

SCIENCE WORKSHOPS

Annual Science Advisory Council (SAC) Workshop

"Building New Directions - New Ideas and New Opportunities"

The Foundation is unique in its collaborative approach in support of scientists. Each year the KFA Board hosts a **Science Workshop**. The 9th annual Science workshop was held on Thursday 30 October 2014 at the University of Western Australia ('UWA'). Researchers funded by KFA come together at the multi-disciplinary workshop to report on progress and present and share their research findings with each other and with members of the KFA Board.

It was attended by KFA Directors, CEO, 14 SAC members, 15 invited researchers and students from UWA's Centre for Rock Art Research + Management plus an additional six researchers from other universities. It was KFA's largest and most comprehensive science workshop' to date with a **total of 46 attendees**.

Annual Public Lecture Series

KFA's annual public lecture series – an important component of the Foundation's commitment to the dissemination of research information and public engagement has grown from a one-city venue to a five city series. KFA presented the largest number of public lectures in its history in the 12-month reporting period demonstrating KFA's commitment to expanding its networks and outreach.

The Foundation's first public lecture was delivered by Grahame Walsh in 2006 at Newman College, University of Melbourne. Since 2009 KFA has presented an annual public lecture at the University of Western Australia, Perth.

On 29 October 2014 the Foundation presented its 6th Annual KFA Public Lecture at UWA. The lecture **50,000 Years of Aboriginal people in the southern Kimberley** was delivered by Prof Jane Balme from the University of Western Australia. The lecture was sponsored by Indigenous Construction Resource Group. Prof Balme presented the same lecture in Melbourne at the National Gallery of Victoria on 25 March and in Canberra at the Australian National University on 26 March. Both lectures were sponsored by premium WA wine producer Voyager Estate.

Prof Peter Veth, Kimberley Foundation Ian Potter Chair in Rock Art delivered a lecture **The Living art of the Kimberley** at the SA Museum Adelaide on 3 March. The SA Museum partnered KFA in presenting the event which was a first in Adelaide for the Foundation. The event was sponsored by Voyager Estate. Peter Veth spoke to a full house – 200 people.

Kim Akerman, Adjunct Prof Archaeology and leading anthropologist delivered a lecture *Meeting the Wanjinas* at Allens Linkaters in Sydney on 29 April. This event was attended by 175 people and was generously sponsored by Allens Linklaters.



Kim Akerman delivering Meeting the Wanjinas in Sydney in April

Events

During the year KFA presented 12 events. Five of these relate to the lectures (above).

Three other talks were presented: *An introduction to Australia's Kimberley Rock Art* was delivered by CEO Cas Bennetto at the World Monuments Fund, Empire State Building on 17 September 2014. The talk was presented by the American Friends of the National Gallery of Australia and sponsored by Westpac. The event was fully booked well in advance of the date and suggests there is an enthusiastic audience beyond Australia's shores. Chairman Maria Myers delivered *An introduction to Kimberley rock Art* at Impact 100 Club WA on 18 September in Perth to an invited audience of young WA philanthropists.

Prof Peter Veth also delivered **An introduction to Kimberley rock art** to an audience of KFA friends, business leaders and US expats at the Chamber of Commerce & Industry in Perth on 28 October 2014. The event was hosted by the US Consul General Cynthia Griffiths.

Two of the 11 events were fundraising events: KFA supporter Tess Crotti hosted a lunch for KFA in Adelaide at the Queen Adelaide Club on 4 March 2015. Prof Peter Veth and Chairman Maria Myers spoke at the event.

INPEX, the Japanese oil and gas producer which helped to fund the Kimberley Foundation Ian Potter Chair at UWA sponsored a lunch for KFA in Perth on 5 March 2015 at Must Winebar, Perth. KFA patron Nicola Forrest spoke and Peter Veth delivered an excellent summary of the Kimberley Foundation Ian Potter Chair's achievements. The event was attended by KFA supporters, philanthropists, business leaders and political figures.

Two other events were held: KFA Director Susan Bradley hosted a cocktail party and dinner in Broome for Broome-based stakeholders and KFA supporters visiting the Kimberley; and KFA's annual Christmas party for supporters was held in Melbourne on 8 December at the Alexandra Club hosted by the Chairman Maria Myers.

Event Breakdown

Year	Public engagement & dissemination of research information	Fundraising events	Positioning & Profiling events	Total Events
2012	1	2	2	5
2013	5	3	3	11
2014	5	6	2	13
2015	7	2	3	12

EVENT SPONSORSHIP AND IN KIND CONTRIBUTIONS

During the financial year the Foundation secured an \$18,000 sponsorship for its annual public lecture in Perth from the Indigenous Construction Resource Group and Aboriginal Marine; and \$3,776 from INPEX who sponsored the lunch in Perth on 5 March. In-Kind contributions were received from Westpac USA who sponsored the talk in New York in September 2014; Tess Crotti, sponsor of the lunch in Adelaide in March; Allens, sponsor of the lecture in Sydney in April; and Voyager Estate who generously provided the wines at three of KFA's lectures. KPMG provided pro bono audit services. The total in-kind contribution was \$81,285.

Communications

The Foundation distributed four quarterly e-newsletters to 1960 email subscribers over the 12 month period and one four-page full colour printed newsletter to its supporters. KFA produced one new Prospectus – *Protecting Australia's Indigenous Cultural Heritage* for new supporters and reprinted two print publications for marketing purposes: *Rock Art Styles of the North & Central Kimberley* and *Who we are what we do & why.*

Research Publications relating to KFA-sponsored research

- 1. **Quaternary Science Reviews** *Transient coupling relationships of the Holocene Australian monsoon* F.H. McRobie, T. Stemler, K.-H. Wyrwoll May 2015
- PNAS Extreme rainfall activity in the Australian tropics reflects changes in the El Niño/Southern Oscillation over the last two millennia Rhawn F. Denniston, 1, Gabriele Villarini, Angelique N. Gonzalesa, Karl-Heinz Wyrwoll, Victor J. Polyak, Caroline C. Ummenhofer, Matthew S. Lachniet, Alan D. Wanamaker Jr., William F. Humphreys, David Woodsi, and John Cugley March 2015
- 3. Australian Archaeology Journal Aboriginal landscape burning and its impact on the summer monsoon of northern Australia. Karl-Heinz Wyrwoll and Michael Notaro December 2014
- 4. Australian Archaeology Journal Backed Points in the Kimberley: Revisting the north-south division for backed artefact production in Australia. T. Maloney and S. O'Connor 2014
- 5. **Quaternary Science Reviews** *A continental narrative: Human settlement patterns and Australian climate change over the last 35,000 years.* Alan Williams, Peter Veth, Will Steffen, Sean Ulm, Chris Turney, Jessica Reeves, Steven Phipps, Mike Smith June 2015
- 6. Archaeology in Oceania Innovation and change in northern Australian Aboriginal spear technologies: the case for reed spears. Harry Allen and Kim Akerman. 2015
- 7. Journal of the Australian Association for Maritime History *A Review of the Indigenous Watercraft of the Kimberley Region, Western Australia.* Kim Akerman 2015.

Science Advisory Council

The Kimberley Foundation is underpinned by a Science Advisory Council (SAC) made up of a diverse group of eminent scientists from tertiary institutions across Australia. The SAC guide and shape KFA's long term research program. The Chair of the SAC is Professor Andrew Gleadow FAA, Professor of Geology and former Head of the School of Earth Sciences at the University of Melbourne.

The SAC comprised of ten members plus three ex officio member organisations. Two new members were appointed in 2014, Dr Bruno David from Monash University and Cecilia Myers from Dunkeld Pastoral Company.



Science Advisory Council in Perth 2014

Members

- Chairman, Prof. Andrew Gleadow, University of Melbourne
- Deputy Chairman, Prof. John Dodson, previously ANSTO
- Mr. Kim Akerman, Adjunct Professor of Archaeology and member of the CRAR+M Advisory Board at The University of Western Australia (UWA)
- Prof. Jane Balme, University of Western Australia
- Prof. Hamish McGowan, University of Queensland
- Ms Cecilia Myers Dunkeld Pastoral Co
- Dr June Ross, Adjunct Professor of Archaeology, University New England*
- Professor Peter Veth, Kimberley Foundation Ian Potter Chair in Rock Art, University of Western Australia
- Dr Karl-Heinz Wyrwoll, University of Western Australia
- * Dr June Ross retired from SAC in November 2014

Ex Officio members

- West Australian Museum represented by Dr Moya Smith
- Kimberley Society represented by Dr Mike Donaldson
- UWA Centre for Rock Art & Research+Management represented by Prof Jo McDonald

Alternate members

- Assoc Prof Sven Ouzman, CRAR+M alternate for Professors McDonald and Veth
- Prof. Sue O'Connor, Australian National University, alternate for Jane Balme
- Dr Mikael Sivverson, Western Australian Museum, alternate for Moya Smith

Members and alternates of the Science Advisory Council do not receive fees.

During the current financial year the SAC participated in the annual workshop (November 2014) and in three teleconferences. Formal agendas and minutes were recorded and kept.

KFA Directors

The following information is supplied in respect of persons who acted as Directors during the financial year:

Chairman - Maria Myers AO

Maria Myers is Chairman of the Kimberley Foundation Australia and director of the Australian String Quartet, McClelland Sculpture Park and Gallery and Dunkeld Pastoral Company Pty Ltd. She is also a member of the State Library of Victoria Foundation Council, Loreto College Ballarat School Council and a member of St Mary's College Council, University of Melbourne. Maria joined the Board in 2001.

Deputy Chairman - Laurie Brereton

The Hon Laurie Brereton is a Director of EADS Australia Pacific Pty Ltd, Australian Aerospace Ltd, Beelgara Estate (Australia) Pty Ltd and John Curtin House Limited. In 2004 Laurie retired from public life after a distinguished parliamentary career spanning 34 years in the New South Wales Legislative Assembly and the Australian House of Representatives. Laurie is a former Member of the Council of the University of NSW and the Australian National Commission for UNESCO. He joined the Board in 2006.

Director/Treasurer - Brenda Shanahan

Brenda Shanahan has served in senior executive and Board roles in Australia and overseas, primarily in stockbroking, funds management and investment consulting. She was appointed Director of DMP Asset Management in 2010. Brenda is a former member of the Australian Stock Exchange, partner of May Mellor Laing & Cruikshank and principal of Investment Consulting and worldwide partner at WM Mercer. Brenda is currently the Chair of St Vincent's Medical Research Institute and a director of Challenger Limited, Clinuvel Pharmaceuticals Ltd and Bell Financial Group. Brenda joined the Board in 2009.

Director - Susan Bradley

Susan Bradley is a founding member of the KFA Board which she joined in 1998. She is a pastoralist and has lived in the Kimberley for over 40 years. Susan has held many local community positions and public and private board positions relating particularly to Northern Australia. She lives on a pastoral property in the North Kimberley and manages three cattle stations. She is a member of the Regional Development Australia Council.

Director - Julian Burt

Julian Burt is director/owner of Metzke Pty Ltd and MJW Rail Pty Ltd. He is also a director of Margaret Court AO Community Outreach Foundation and West Australian Opera. Julian is Chairman, Finance Committee, Liberal Party of Australia (WA); Member, Royal Historical Society; Foundation Member, National Gallery of Australia; Member, Western Australian Cricket Association; Member, St George's Cathedral Foundation for the Arts; Chairman, St George's Cathedral Heritage Precinct Fundraising Committee and is involved in many other community organisations. Julian joined the KFA Board in October 2014.

Director - John Calvert-Jones AM

John Calvert-Jones is the Executive Chairman of Seafirst Australia, a family investment company. He is a Trustee of the McClelland Gallery and is on The National Gallery of Australia Council. He is a former member of the Australian Stock Exchange Limited, former Chairman and Managing Director of Prudential Bache Securities (Australia) Ltd and has been a director of several public and private companies. John joined the KFA Board in 2010.

Director - Bruce Cameron

Bruce Cameron is a graduate of Monash University and holds a Bachelor of Jurisprudence and Bachelor of Laws. He is a commercial lawyer with around 30 years experience in the law and business. Bruce is a senior member of a boutique commercial law practice he established with others in Melbourne in 1986. Bruce assisted the Foundation for several years on a pro bono basis on matters concerning Aboriginal rock art and culture. He is a director and trustee of a number of private companies and trusts which are involved in matters of business and the care of others. Bruce joined the KFA Board in 2010.

Director - Prof Andrew Gleadow FAA

Andrew Gleadow is a Professor of Geology and former Head of the School of Earth Sciences at the University of Melbourne. He has researched and published widely on the development and application of radiometric dating techniques, particularly in fission track analysis and thermochronology. His work has included dating of hominin fossil sites in East Africa. Andy has received numerous awards for his research, is a Fellow of the Australian Academy of Sciences, and a former President of the Geological Society of Australia. Andy was appointed Chair of the Science Advisory Council in November 2013 and joined the Board in 2014.

Director - Nolan Hunter

Nolan Hunter is CEO of the Kimberley Land Council, an organisation representing Traditional Owners in the Kimberley. Nolan is a Bardi man with strong links to his people and culture across saltwater country in northern Western Australia. He spent 14 years with various Commonwealth agencies specialising in indigenous affairs, and has worked with indigenous communities in Australia. Nolan is Chairman of the National Native Title Council and an indigenous leader representing the Kimberley in Empowered Communities, a group of indigenous leaders informing policy development to the Dept. of Prime Minister & Cabinet, Indigenous Affairs. Nolan was appointed to the Board in 2014.

Director - Christina Kennedy

Christina Kennedy is a founding member of the KFA Board and served as treasurer from inception until 2012. She is a director of the Institute for Professional Practice in Heritage and the Arts (IPPHA), and a former director of Film Australia. Christina operated a private physiotherapy clinic in Sydney for 25 years and she is now a farmer at Bodalla NSW. Christina is a member of the University of Western Australia's Centre for Rock Art Research + Management Advisory Board. She joined the Board in 1998.

Director - Wal King AO

Wal King holds a Bachelor of Engineering, a Master of Engineering Science and an Honorary Doctorate of Science from the University of NSW. Wal has worked in the construction industry for over 40 years and was CEO of Leighton Holdings Limited from 1987 until Dec 2010. He is Deputy Chairman of Ausdrill Ltd and UNSW Foundation Ltd and a Director of Coca-Cola Amatil Ltd and Garvan Research Foundation Ltd. In 2014 Wal was appointed Non-Executive Deputy (NED) and Chairman of Sundance Resources Ltd. He is an Honorary Fellow of the Institution of Engineers Australia, a Foundation Fellow of the Australian Institute of Company Directors, and a Fellow of the Australian Institute of Management, the Australian Institute of Building and the Australian Academy of Technological Sciences and Engineering. Wal joined the Board in 2008.

Sam Lovell AM

Sam Lovell lives in Derby in the Kimberley. He has been employed by Aboriginal Economic Development (AED), Department of Industry and Resources as an Aboriginal Tourism Project Officer since 1995 and works as an indigenous consultant for Western Power. Sam has a background in tourism and established his own business 'Kimberley Safari Tours' in 1981. A tourism award in his name is presented annually by the Kimberley Tourism Association. Sam is regarded as the 'father' of Indigenous Tourism in WA and is affectionately known as 'Mr Kimberley'. Sam is a musician and travels across the country to Queensland every year to play at the Tamworth Music Festival. Sam joined the Board in 2009.

Justice Henric Nicholas

The Hon Henric Nicholas is a former Judge of the Supreme Court of New South Wales, retiring in 2013. He is a former director of NSW Cultural Management Ltd., a former chairman of St. Paul's College, University of Sydney, and an honorary councillor of the Royal Agricultural Society of NSW. He is an arts/ law graduate of Sydney University. Henric joined the KFA Board in 2000 and was Chairman of the Board from February 2000 until November 2009.

Deidre Willmott

Deidre Willmott is Chief Executive Officer of the Chamber of Commerce & Industry WA. Deidre holds law degrees from the University of Western Australia and a Master of Laws from the University of Melbourne. She has been a senior executive at Fortescue Metals Group Ltd and Chief of Staff to the Premier of Western Australia. Deidre joined the KFA Board in 2010.

RESEARCH

Kimberley rock art is a complex archaeological issue and KFA has responded by developing a research program that spans key scientific disciplines. KFA supports researchers from the fields of geochemistry, geochronology, environmental research, geomicrobiology, paleoecology, palynology and archaeological science to work in partnership with Aboriginal communities to uncover Australia's earliest untold settlement history through rock art.

The **priority research themes** summarised below, reflect leading questions in Kimberley rock art research and guide KFA in identifying and funding research projects:

- 1. Reconstructing past climate and environments
- 2. The production, composition and conservation of Kimberley art
- 3. The antiquity of engraved and pigment art in the Kimberley and how we understand its variability across space and time.
- 4. The chronology of human occupation of the Kimberley in the context of archaeological and genetic data from Sunda (southeast extension of the continental shelf of Southeast Asia) and Sahul (part of the continental shelf of the Australian continent)
- 5. Strangers on the shore: Macassans, the mercantile class and pastoralism

Project Selection

The SAC assesses each project proposal in the context of KFA's long-term research interests, and with consideration of the interests and participation of indigenous communities, sustainable research outcomes and the wider academic discourse.

Selected projects are anticipated to produce research results that will inform both policies and practical measures, leading to better protection and preservation of Kimberley rock art. Findings will also contribute to measures to find an optimum balance between access and conservation, which is increasingly becoming an issue.

Research findings are communicated via professional journals, the media and a series of public lectures in order to meet these goals.

In FY15 KFA approved funding for four projects:

- 1. A five-year commitment was pledged to the **Kimberley Visions** project which was awarded an ARC grant of \$866,000 over 5 years. The project will start in FY 2016 and will be led by Prof Peter Veth. It was the largest grant received for any project within UWA and one of only six in the country to be awarded for 5 years. KFA's cash contribution of \$500,000 represents a total of \$1.36 million for the duration of the project. KFA is the major funding partner with the ARC. Other significant partners providing support and in-kind assistance are Department of Parks and Wildlife; Department of Environment and Conservation and Dunkeld Pastoral Co. This work is being done with and for Balanggarra Aboriginal Corporation.
- \$17,421 was approved for Prof Simon Haberle's Past Environments/Palaeoecology project to conduct a survey of potential palaeoecological sites in the Charnley River region. The results will provide critical proof of concept information on the viability of extracting long-term environmental change records from a range of environments in the Kimberley in June. This information will support Haberle's ARC submission towards the end of 2015.
- 3. A project to *Promote knowledge of rock art* was approved with a budget of \$15,000 to produce a DVD on rock art research to raise awareness of the rock art, what it can tell us and why it's important.
- 4. \$6,000 was approved to assist UWA Press publish Kim Akerman's Wanjina essay *Notes on Some Iconic Ancestral Beings of the Northern Kimberley.* \$2,175 has been spent on editing the Wanjina essay.

Current Research Projects

 Life Ways of the First Australians – Ancient cave dwellings & rock art, Oscar Napier Ranges Project, led by Chief Investigator Prof. Sue O'Connor, Professor of Archaeology at ANU, CI Prof. Jane Balme, Professor of Archaeology of UWA and Partner Investigator Dr Moya Smith, West Australian Museum.

Industry partners: Department of Environment, Water, Heritage and the Arts (DEWHA), Kimberley Foundation of Australia (KFA), Western Australian Museum (WAM).

Lifeways of the First Australians was reported on in the 2014 Annual Report and KFA has no further financial commitment to this project. During the 2015 reporting period Sue O'Connor Professor of Archaeology at ANU and Jane Balme, Professor of Archaeology at UWA (*Lifeways*) carried out further field work with Bunuba and Goonyandi communities to investigate their needs in terms of interpretation and Indigenous cultural heritage in the traditional lands in the Devonian reef.

The *Lifeways* research team continues to write up findings and undertake further analysis of material that they have excavated previously. Several papers have been submitted for publication. The project will formally end in 2016.

2. Palaeoecology project – *Environmental Transformations linked to Early Human Occupation in Northern Australia* led by Dr Simon Haberle [ANU], with Dr George Perry (University of Auckland), Dr Simon Connor, Prof Peter Kershaw and Dr Sander van der Kaars (Monash Uni).

KFA committed \$60,000 this project. The first \$30,000 went towards Haberle's Stage One **Palaeoecology** project (completed) and a further \$30,000 to the ARC-funded *Environmental Transformations* project. At 30 June 2014 there was a balance of \$1,748 remaining. An additional \$17,421 was approved to conduct a survey of potential palaeoecological sites in the Charnley River region (cited above). At 30 June 2015 there is a balance on \$4,984 remaining. These funds will go towards funding a workshop in September 2015 to bring together a large number of researchers for a planning meeting for the proposed ARC submission called *Past Environments of the Kimberley: Late Pleistocene to Anthropocene*.

3. Palynology project – Unlocking Environmental Archives/Palynology led by Associate Professor Hamish McGowan, Climate Research Group, The University of Queensland, and includes Dr Patrick Moss, The University of Queensland, Dr Samuel Marx, The University of Wollongong and Dr Andrew Hammond, University of Central Queensland, Mackay.

This project is Stage 2 of the KFA-funded Stage 1 Palynology project – Unlocking the archives of the Kimberley's past: A pilot study of sediment cores from the North West Kimberley.

Research Team:

Mrs Emily Field (PhD Candidate), Professor Hamish McGowan and Associate Professor Patrick Moss; Climate Research Group, School of Geography Planning and Environmental Management; The University of Queensland, Brisbane. Dr Samuel Marx, Wollongong Isotope Geochronology Lab (WIGL), School of Earth and Environmental Sciences, The University of Wollongong.



Emily Field in the Kimberley 2015 gathering samples

Project Aim:

To develop new, high temporal resolution multi-proxy paleoclimate records for the Kimberley. The objective is to gain insight into late Quaternary environmental conditions including vegetation, climate (precipitation, temperature and atmospheric circulation), and anthropogenic burning.

Achievements:

Additional pollen and charcoal analysis has been conducted in 2015 on the Black Springs sediment core collected in 2005 by Dr Grahame Walsh and Dr Andrew Hammond from North Kimberley. This additional analysis has increased the temporal resolution of the record published by McGowan et al., 2012 and has extended this record from ~6000 cal. yrs BP to ~9000 cal. yrs BP with reliable age control. Pollen and charcoal analysis has also been undertaken on ~0.7m of previously unanalysed deeper core sediments without reliable age control, although with extrapolated ages to ~15,000 cal. yrs BP. The pollen record indicates a significantly drier environment prior to (extrapolated age) 14,000 cal. yrs BP with very few aquatic taxa and ferns, *Pandanus* virtually absent and with extremely low pollen and charcoal concentrations, suggesting a period of reduced monsoon activity. The timing of this inferred dry phase prior to 14,000 cal. yrs BP is corroborated by other records from the Kimberley (Denniston et al., 2013; Wyrwoll and Miller, 2001) and offshore NW Australia (Van der Kaars and De Deckker, 2002; Kuhnt et al., 2015) suggesting that these extrapolated ages are perhaps accurate. Therefore two further samples have been submitted for dating to Waikato Radiocarbon lab in an attempt to constrain the chronology for this deeper section of the record.

Peat humification analysis will be undertaken on the 2005 core which will enable further identification of wet and dry shifts in the spring environment. The research team is now preparing the results of this study for publication with the manuscript to be submitted in October 2015.

Field work was undertaken in June 2015 and 11 sediment cores were collected from six spring sites on Drysdale River Station, Mount Elizabeth Station and Charnley River Station. Core lengths recovered varied between 0.90 – 2.50m with the longest cores being recovered from Black Springs (2.50m) and Fern Pool (2.30m).

The new Black Springs core extends the 2005 Black Springs core length by ~0.90m. The spatial range of the coring sites covers ~130km on a broadly north-south gradient. Basal radiocarbon ages will be obtained for cores from each of the six sites and the three cores offering the greatest potential for developing continuous records with a high temporal resolution will be used for multi-proxy analysis. Cores will also be chosen from sites as geographically separate as possible in order to gain insight into climate and environmental changes at a regional scale.

KFA has committed \$40,000 to this project. As at 30 June 2015 there is a balance of \$33,724 remaining.

4. Dating the Aboriginal rock art of the Kimberley region, WA - landscape geochemistry, surface processes and complementary dating techniques led by Professor Andrew Gleadow, The University of Melbourne.

The project is led by Prof Andrew Gleadow with Prof John Woodhead, Prof Janet Hergt, Dr Russell Drysdale and Dr John Moreau, all from the University of Melbourne, Prof Bert Roberts from the University of Wollongong, Prof Peter Veth from the University of Western Australia, and Prof John Dodson and Dr David Fink, from ANSTO. The Project also includes Partner Investigators (CEO Cas Bennetto representing the KFA), Cecilia Myers representing Dunkeld Pastoral Co Pty Ltd and Fiona Hook representing Archae-aus Pty Ltd.

The Rock Art Dating (RAD) Project was awarded a major grant of \$480,000 under the Australian Research Council's Linkage Projects scheme at the end of June 2013. The Project (RAD) formally commenced on 1st

July 2014, after the Linkage Partner Agreement between all of the participating organisations was signed off. The project will run for three years from this starting date.

Consultations with Traditional Owners:

Extensive consultations took place with Traditional Owners (TOs) and representative groups during 2013-2014 in preparation for commencement of the project as reported in the 2014 Annual Report. A Research Agreement between Dambimangari Aboriginal Corporation (DAC) and the UWA CRARM group was negotiated and signed off in 2015 with assistance from the KLC, which explicitly includes the RAD project. On the basis of this agreement an S16 permit was issued by Department Aboriginal Affairs (DAA) covering work with TOs across the whole areas of the Balanggarra Indigenous Protected Area (IPA). A separate Memorandum of Understanding between the Armbangardi group within Balanggarra, the University of Melbourne and the KFA was signed by Elders and senior TOs from Kalumburu.

Personnel:

Four new personnel have now started work on the RAD project: Dr Helen Green (Research Fellow, UoM, appointed October 2014), Mr Damien Finch (PhD Student, UoM, started November 2014), Mr Jordan Grinpukel (MSc Student, UoM, July 2015), and Mr Gael Cazes (PhD Student, UoW, July 2015).

In addition to the originally named project personnel, the RAD has now attracted significant interest and involvement from additional expert research personnel from within the participating organisations. These include Drs John Hellstrom (UoM), Sven Ouzman, Martin Porr (UWA), Tibi Codilean (UoW) and Reka Furlop (ANSTO).

These additional personnel add greatly to the expertise available to the project across a spectrum of geochronological and archaeological disciplines. Sven Ouzman has played a critical role in establishing the formal permits necessary for the project, as well as providing archaeological support in the field.

Field Work:

Three field trips have been carried out to July 2015 in collaboration with TOs to collect sample material for dating and surface characterisation. These field trips have seen a progressive refinement of the sampling strategy and a transition in emphasis from understanding surface processes to on-art samples for dating. The third field trip which took place in July 2015 (i.e. FY 2016) is also reported.



Post Doc researcher Helen Green and Jordy Grinpukel from University of Melbourne work on the KFA sponsored Rock Art Dating field trip in Drysdale River National Park July 2015

Oomarri 10-17 August 2014: Sampling trip with ground and helicopter support to the Oomarri site on the King George River with project personnel: Andy Gleadow, John Hellstrom, Sven Ouzman, Martin Porr, and Cecilia Myers, and Senior TO Ambrose Chalimieri and members of the Balanggarra Ranger group. Work involved sampling of Mud wasp nests, mineral accretions and floor deposits over a small number of sites for both surface process studies and a smaller number for on-art dating.

Freshwater Cove, Dambimangari 13-20 May 2015: Various coastal and near-coastal sites were visited with helicopter and boat support and on foot from the Freshwater Cove (FWC) fishing camp. Attended by Andy Gleadow, Helen Green, Damien Finch, Peter Veth and Sven Ouzman with local TOs based at FWC. A total of 102 on-art and off-art samples were collected from across 15 sites including wasp nests and mineral accretions for characterisation and dating analysis, complemented by potential source materials including animal droppings, bedrock fragments, soil and lichen samples for understanding geochemical and geomicrobiological processes. A number of bedrock samples from promising slab falls were also sampled for cosmogenic radionuclide (CRN) dating.

Drysdale Barking Owl Camp, Balanggarra 1-21 July 2015: A field camp on the Drysdale River over nearly three weeks was attended by Andy Gleadow, Janet Hergt, Helen Green, Damien Finch, Jordan Grinpukel (UoM), Sven Ouzman (UWA), David Fink, Reka Furlop, Tibi Codilian, Gael Cazes (ANSTO-UoW), and Cecilia

Myers (DPC). TOs included Augustine, Mark and Scottie Unghango, Ernie Boona and Adrian and Ethan Karadada. Professor Mark Harrison from UCLA (USA) also visited the camp and is to provide access to new advanced Ion Microprobe equipment not currently available in Australia. The camp was extremely successful with some 280 samples collected across 19 sites. Samples collected included mineral accretions, mud wasp nests, and bedrock samples (for CRN dating) as well as a range of geomicrobiological materials (pigment swabs, lichen, biological films, fungi, soil and animal droppings). A wide range of off-art samples collected between 2011 and 2014 have provided a substantial background collection that has been extensively analysed for preliminary surface process studies. In addition the three project field trips detailed above have now produced a large collection of well over 400 samples for the full spectrum of on-art and off-art dating and characterisation studies.



Researchers from the University of Melbourne and TO Ernie Boona work on the KFA sponsored Rock Art Dating field trip in Drysdale River National Park July 2015

Analytical Protocols:

Work in the first year of the project has built on earlier pilot studies and established suitable analytical protocols that are now being routinely applied to all the samples. The initial step is for each of the collected samples to be carefully logged and prioritised before each individual accretion or wasp nest is split into two portions, respectively for dating and sample characterisation processes, wherever possible. Sample preparation involves mounting a piece from one half in an epoxy resin block and polishing the surface to a 1 micron finish allowing assessment of any internal layering. The polished surface is then scanned with a high-powered 193 nm ultraviolet laser microprobe using laser-ablation inductively coupled plasma mass spectrometry (LA-ICP-MS) facilities at the University of Melbourne. This allows the trace element composition of the individual layers to be mapped on top of a high-resolution image of the bisected fragment. This trace element mapping allows high uranium (above 1 ppm) and relatively low thorium layers to be identified for later sampling for Uranium-series dating. These target areas in the mount are then microscopically milled out using a 500 micron sized drill bit under an automated micro-sampling system, and the resulting sample powder collected (<2 milligrams) for Uranium-series analysis using high-precision solution methods.

Layers exhibiting high calcium but low sulphur levels (i.e. likely to be enriched in the oxalate mineral whewellite, but not in gypsum) are separately targeted in the same way for radiocarbon dating methods. These sample powders are processed and analysed at the Australian Nuclear Science and Technology Organisation (ANSTO) in Sydney. The powder collected for Uranium-series dating is geochemically processed using an adapted column chemistry method for the particularly low sample sizes and the samples subsequently analysed using a highly precise multi-collector plasma mass spectrometer (MC-ICP-MS) at the University of Melbourne.

The reliability of the Uranium-series method is dependent on demonstrating closed system behaviour with respect to both uranium and thorium. To do this, individual layers are sampled in different places to give co-genetic samples that are of the same age. For thicker crusts, samples are also extracted at several points in the layered stratigraphy to test for a consistent stratigraphic order in the ages and to further constrain the potential detrital thorium contribution to the system.

The remaining sample portion is prepared for geochemical and mineralogical characterisation methods. Initially sample fragments are finely powdered and homogenised for X-Ray powder diffraction (XRD) analysis which is used for phase identification of the crystalline material. The analysed powder is then retrieved for further use in Fourier Transform Infra Red (FT-IR) spectroscopy, which enables mineral identification based on the specific characteristic absorption bands of individual minerals and organic compounds in the mid-range of the infrared spectrum. The remaining powder from those samples identified as containing sulphates, is then prepared for sulphur and carbon isotope analysis with an aim to aid the identification of deposition mechanisms for the layered sulphates observed in many of the mineral accretions. As a final step, the remaining sample pieces are mounted on carbon tape and sputter coated in gold for Scanning electron microscope – energy dispersive X-ray spectrometry (SEM-EDS) analysis which enables further identification and confirmation of key mineral phases via imaging of topographic features coupled with qualitative and quantitative elemental analysis. These characterisation techniques can then be used together to build a robust and reliable picture of the crust formation history and to support the various dating analyses.

For those samples identified as containing high uranium layers and consequently with a high potential for dating, a further procedure currently underway is mineral separation of lightly crushed accretion fragments and solution trace element analysis on the varying, separated mineral phases. This procedure will hopefully confirm a widespread uranium bearing mineral phase across the sample set and from here geochemical and geomicrobiological work can focus on fully understanding the likely shelter conditions

and the mechanisms by which this phase is deposited, further aiding the identification of key target sites during future sampling.

Sampling for Cosmogenic Radionuclide dating of slab-falls from rock shelters and erosion rates for background landscape evolution has also begun and several very promising sites for CRN dating of rock art have been identified and sampled. The first batch of these CRN samples, from the Coke Can Creek site near Freshwater Cove, have been processed in the preparation facilities at the University of Melbourne and are currently being processed at ANSTO.

To date sample analysis has been completed as follows: XRD (30 samples), SEM-EDS (30 samples), FT-IR (30 samples), LA-ICP-MS (40 samples), Stable Isotope Analysis (10 samples), Uranium-Series (10 samples), ¹⁴C (10 samples), CRN (10 Samples).

Building on earlier pilot studies, the dominant mineral constituents and variations within surface crusts, mineralised wasp nests and floor glazes have been identified as sulphates, oxalates and phosphates, characterised respectively by gypsum, whewellite and newberyite in varying proportions. These are accompanied by a broad range of associated minor mineral constituents, often related to the major phases.

Progress and Results to date

Progress in the first year has been excellent and follows the original plan whereby initial work would emphasise understanding surface processes operating within rock shelters based on off-art samples. The geochemical characterisation of off-art samples has identified those with the highest potential for both Uranium-series and ¹⁴C dating and these samples have been used to test the most reliable dating procedure. These tests have shown that mineral crusts and floor glazes are both typically layered and that uranium is concentrated only within specific layers, both of which are good indicators for closed system behaviour. Uranium is particularly associated with the magnesium phosphate, newberyite, which is now our principal target for uranium-series dating. Interlayered Calcium Oxalate layers in the thicker mineral accretions potentially allows for a ¹⁴C dated stratigraphy which will be used to support and provide increased reliability in the associated Uranium series dates.

Uranium concentrations of 1-20 ppm identified in the newberyite crust layers are suitable for uraniumseries dating and extremely promising results are now being obtained that cover a range of ages (on both off-art and on-art samples) spanning a broad period from 5,000 to over 100,000 years. These are very exciting results and further, the analysis of specific layers and sequences of layers provide strong evidence of closed system behaviour with respect to uranium and thorium. Consistent results have been obtained from multiple samples of the same layer within a crust, and in consistent stratigraphic order from multiple layers within a layered crust sequence.

This is an extremely important breakthrough and a firm foundation upon which to proceed to dating the large collection of on-art samples now available. Work is currently underway to further adapt and advance the Uranium-series methodology to reduce the age uncertainties for on-art samples collected during the 2015 field seasons.

KFA's commitment to the ARC linkage project, starting 1 July 2014, is \$225,000 to be spent over three years. The balance of funds at 30 June 2015 is \$150,000.



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