



Canberra Archaeological Society Inc

Monthly Newsletter **Old News**

April 2010

Canberra Archaeological Society/Centre for Archaeological Research
Public Lecture

Manning Clark Theatre 6

7:30pm Wednesday 21st April 2010

Orroral Valley NASA tracking station: the archaeology of Australia's
space heritage
Dr Alice Gorman

From 1965 to 1985, the Orroral Valley Tracking Station in the ACT played a critical role in tracking NASA's orbital observatories, space shuttle missions, and Australia's own WRESAT-1 satellite. Components of the station included a 26 m antenna, four SATAN receiving and command antenna, and the Minitrack, one of the original tracking systems from the International Geophysical Year of 1957-58. Hundreds of Australians worked 24 hour shifts at the station in support of some of the major missions in the development of space exploration.

With the introduction of new tracking systems in the 1980s, the station was closed and subsequently demolished. Now only the concrete footprints remain to remind the visitor of Australia's space heritage.

In February 2010, a Flinders University team conducted a geophysical survey of the tracking station using magnetometer, to identify the location of sub-surface infrastructure that may remain after the demolition of the site. This talk reports on the results of the survey, and discusses the contemporary significance of Orroral Valley in the light of new research. The project is funded by an ACT Heritage Grant.

Dr Alice Gorman is a lecturer in Archaeology at Flinders University and a pioneer in the emerging field of space archaeology. Before becoming an academic, she was a heritage consultant working with Indigenous communities in NSW, Queensland and South Australia. She has investigated the archaeology and heritage of "space junk" in Earth orbit, the launch sites of Woomera (South Australia), and Kourou (French Guiana), and is currently researching the Orroral Valley Tracking Station in the ACT. More about her work can be found at her blog *Space Age Archaeology* (<http://zoharesque.blogspot.com/>).

Please join us after the lecture to talk to Alice and some of the people who used to work in the space tracking stations. Refreshment will be provided

Dr Space Junk talks about space junk on Radio National April 4th



Sunday 4th April following the 9.00 am news on Radio National: *Space rules the world*
Transport, banking, food production, social networking, global supply chains, the world economy - would all grind to a halt if the satellite system failed. It's a fragile system, but also the best place from which to see how fragile the earth is. Australia lags behind.
Reporter, Ian Townsend. Repeated Tuesday 7 pm.
<http://www.abc.net.au/rn/backgroundbriefing/stories/2010/2859162.htm>

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Up Coming Events, Conferences & Tours

ACT HERITAGE FESTIVAL EVENTS

Saturday, 17 April
10am-12pm. Free

Stories of Acton, from ancient geology to modern geography Part 1

Find yourself in new and old spaces as we walk around the scenic foreshores of Lake Burley Griffin. Stories and insights provided by Dr. Doug Finlayson (Geological Society ACT). Meet outside National Capital Exhibition entrance at Regatta Point, Commonwealth Park. Bookings essential: Email info@actonwalkways.com, Ph 0437 301 390.

Saturday 17th April
3pm-5pm. \$10.

Acton Arts and Heritage Walk

Join our guides on a scenic walk through Acton, and gain insights into sculptures, heritage and local history. Tour led by James Collett, Heritage Officer ANU and Jesse Steins (Design Historian). Meet at Old Canberra House, Lennox Crossing, Acton. Bookings essential: Email info@actonwalkways.com, Ph 0437 301 390.



Photos
Linda Roberts



Saturday, 17 April

10.30am – 3pm

Elm Grove Open Day

This recently heritage listed rural property in northern Canberra will be opened up for the day by the owner, Paul Carmody. As well as an example of an archaeological excavation there will be storytelling, the Monaro Bush Dancers, sheep shearing demonstration, a garden tour by ABC TV presenter Mark Carmody, Sing Australia Choir, Devonshire tea and a sausage sizzle. There will also be drives up to Oak Hill on the border of the Territory for a magnificent view of Canberra.

Please contact Helen or Peter if you can help with the 'dig'. We need donations of suitable 'artefacts' such as broken crockery and other household items, single earrings, broken costume jewellery, cleaned bones and any other items that can be salted into the hole. You won't get them back but some child will get their bag of 'treasure'.

And we will welcome helpers on the day – no experience necessary – to help kids and others to learn how we record, measure and analyse, and dig their bit and bag their finds.

A joint event between the National Trust (ACT) and the Canberra Archaeological Society

Saturday, 24 April

11am-3.30pm.

Geology & Archaeology & History at London Bridge

The tour will be conducted by members qualified in geology, history and archaeology.

Members of the NT and CAS: \$20.

Non-members: \$25.

Bookings essential: 6230 0533 or the Old Parliament House Shop on 6273 4744

As this place can be a bit tricky to find, we will meet at the turn off to Googong Dam from the Old Cooma Road at 11.00 am.

Old Cooma Rd can be reached from Queanbeyan – if you are coming from Canberra on Canberra Ave/Kings Hwy turn right into Lowe St after the Showgrounds. Keep on Cooma St until you see the Googong Dam turn off. There is space there to pull off the road; and a representative from the National Trust, Robert Abel, will be waiting to meet you.

The Canberra Archaeological Society will have sausages sizzling waiting for you arrive at the car park for London Bridge.

The walk will start at 12.30, heading to London Bridge Homestead which the Rangers will have open for inspection, then the London Bridge Arch/Tunnel where Robert and Helen Cooke will provide some background information. We should be at the Arch by about 2.30 pm and from there it is about a 20 minute walk back to the car park.

However for those who would like to walk further, Robert will lead you on the Dhurrawarri Buranya Walk which takes about an hour and provides views of the Reservoir.

This sausage sizzle will be supplied and cooked by CAS - please contact Helen or Peter if you can help cook on the electric BBQ on site or butter bread and hand out snags.

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Friends of the Australian Archaeological Institute at Athens

8.00 pm, Thursday 29 April 2010

Aegean Room, Hellenic Club, Woden

“The ancient theatre at Nea Paphos in Cyprus: 15 years of Australian archaeological research”

Dr Craig Barker (University of Sydney)

This will be a special event, held in conjunction with the Cyprus High Commission as one of their events marking the 50th anniversary of the creation of the Republic of Cyprus in 1960.

Very appropriately, the lecture will be about work being done by an Australian team at a major archaeological site on Cyprus.

All members, supporters and friends are very welcome to this free public lecture.

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Disaster Proofing Heritage Collections the Blue Shield Australia & DISACT Symposium 2010

6 May 2010 at the National Library of Australia (Canberra).

The Symposium will encompass two themes;

Regional Disaster Preparedness for Heritage Collections and

The Risk Management of Energy-Efficient, Heritage Collection Storage.

For details about the symposium registration and speakers please follow the links below or contact Gemma Walker at gemma.walker@alia.org.au or 02 6215 8222.

Registration: http://www.alia.org.au/events/disasterproofingheritagecollections_rego.pdf

Speaker Abstracts:

http://www.alia.org.au/events/disasterproofingheritagecollections_abstracts.pdf

NATIONAL ARCHAEOLOGY WEEK

Sunday 16th to Saturday 22nd

Once again the week to showcase archaeology to the public is nearly upon us. We have a great talk scheduled from our member Trish Saunders on the presentation of archaeology at The Rocks. This talk will be preceded by the launch of Prof Graham Connah's latest book; more on this in the next issue.

We are also planning another talk on one of the National Museum of Australia's collections.

Any other ideas of events, particularly offers of liaisons with other historic, heritage or teaching institutions or groups will be welcomed.

And of course, if you can help with any promotion or on the day, please let us know.

Check out the website: <http://www.archaeologyweek.com>

Saturday 22nd May

2.00 – 4.00 pm

Visit to archaeological sites at Gungahlin:

The Ginninderra Blacksmith's Shop and 'The Valley' homestead.



Peter Dowling will tell us about the history, results of excavations and conservation saga of the Blacksmith's shop, with some good news this year due to interest from our Chief Minister.

Helen Cooke will then tell us the history of 'The Valley' homestead, the past residents and the plans for conservation.

Meet at the Ginninderra Blacksmiths Shop, Barton Highway, Nichols at 2pm. Take the unsealed entrance towards the Golf Club maintenance depot (south of Gold Creek Road) on the left hand side heading towards the city

We will arrive at 'The Valley' about 3pm and we can then all retire to the George Harcourt around 4pm for a beverage and discussion of what roles CAS can play in conserving and presenting these historic places – or the footy scores or any other topic that strikes us.

National Native Title Conference

Tuesday 1–Thursday 3 June 2010,

Held at the National Convention Centre in Canberra, the annual National Native Title Conference is the largest Indigenous policy conference in Australia and is a flagship event for the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS).

This year, the Native Title Conference will be co-convened by the National Native Title Council and hosted by the Ngunnawal peoples, the traditional owners of the Canberra area.

The conference website is : <http://www.aiatsis.gov.au/> Phone: 02 6246 1161 Email: ntru@aiatsis.gov.au

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Australian Historical Association Biennial Conference

Monday 5–Friday 9 July 2010

This conference will be held in Perth at the University of Western Australia and the University of Notre Dame. For postgraduates or independent scholars, there is the opportunity to participate in a writing and publication mentoring scheme which is sponsored by the

The conference website is <http://www.ahareviewinghistory.com/index.html>

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ASHA Conference Brisbane 2010

Thursday 30 September to Saturday 2 October 2010

This Conference will be held at the Mercure Hotel, North Quay Brisbane. Further details on the conference including online registration will soon be available on the website hosted by the University of Queensland - <http://www.socialscience.uq.edu.au/>

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2010 Australian Archaeological Association Conference

Thursday 9 – Monday 13th

The Australian National University is hosting the 2010 Australian Archaeological Association conference at the Coachhouse Marina Resort, Batemans Bay.

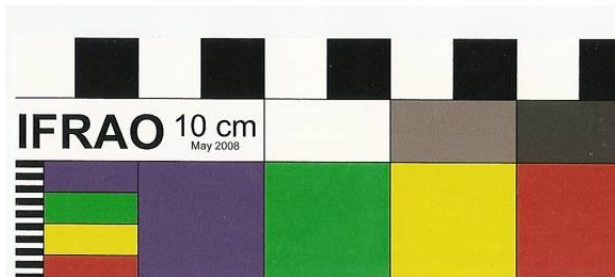
For detailed conference information please visit the conference website

<http://arts.anu.edu.au/AandA/archaeology/aaaconference/>. The website is a ‘work in progress’ so please check back in for updates.

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Introducing the IFRAO Standard Scale

CAS thanks Robert Bednarik for supplying us with a number of these photographic scales to be given to members at meetings and events. His description of the scales follows:



No known photographic dye is fade-proof, and we still lack any form of fully perdurable photographic or digitised storage of imagery. Rock art researchers need a precise means of recording calibrated colour information, and for that reason the International Federation of Rock Art Organisations (IFRAO)

established in 1994, after years of consultation (Bednarik 1991), a simple standard scale. Its main purpose is to render recordings permanently useful, through digitised colour reconstitution or reconstruction. To maintain precise colour fidelity, the IFRAO Standard Scale is being reprinted every few years. So far, about 70,000 copies of it have been distributed worldwide, mostly to rock art specialists and archaeologists. However, practitioners of numerous other disciplines have begun to use the Scale, ranging from museology to soil science, geology to medicine (apparently the precise colour of some internal organs is diagnostically significant) – even for the forensics people of the FBI it is the colour calibration device of choice.

Computers can discriminate several times as many colours as the human visual system can. In 1994, electronic colour re-constitution of rock art images was first achieved at the National Museum of Man in Bhopal, India, calibrated with the IFRAO Standard Scale as the profile device (Bednarik and Seshadri 1995). The original colour values of colour-distorted and even faded rock art photographs can now be reconstituted. The only precondition is that the photograph must bear a colour standard against which the computer can calibrate. The computer does not recover the colour properties of the original photograph, before it faded, but goes beyond that – all the way back to the true colour of the rock art image at the moment it was photographed. It reconstitutes the actual colour properties of the subject at the time. Colour reconstitution can compensate for photographic distortion as well as for the subsequent fading of dyes.

For future rock art research it is essential that all photographs we currently take of rock art bear a colour scale of known values. This technology can facilitate mathematically precise monitoring of deterioration of rock art pigment or patinae over any period of time (Pager 1992; Ward and Maggs 1994). It permits the recovery of objective colour information, free of the 'technical subjectivity' of conventional photography. It facilitates the digitisation of real colour information, which can then be permanently stored; it can be used as the basis of enhancement procedures (Rip 1989); or it can be cross-checked in intra- and inter-site studies for various purposes by engaging computer search functions.

The Scale must never be placed over rock art, or very close to a motif. Preferably it should not be attached to the rock face. In vertical or overhead locations, the Scale should be hand held. A very useful technique is to attach it to a car radio antenna that can then be extended in the field. Only where definitely undecorated and structurally sound rock surface is available may the use of small double-sided adhesive pads be considered, but this is to be avoided whenever possible.

The IFRAO Standard Scale is distributed free to all rock art researchers of the world (the members of the forty-nine IFRAO-affiliated organisations). Specimens are available from the IFRAO Convener's office (P.O. Box 216, Caulfield South, VIC 3162, Australia). The sale of the IFRAO Scale for profit is not permitted.

Robert G. Bednarik
IFRAO Convener

References

Bednarik, R. G. 1991. The IFRAO Standard Scale. *Rock Art Research* 8: 78-8.

Bednarik, R. G. and K. Seshadri 1995. Digital colour re-constitution in rock art photography. *Rock Art Research* 12: 42-51.

Pageer, S.-A. 1992. Deterioration of the rock paintings in Botha's Shelter, Ndedema Gorge. *Pictogram* 4(2): 1-2.

RIP, M. R. 1989. Colour space transformations for the enhancement of rock art images by computer. *Rock Art Research* 6: 12-16.

Ward, V. and T. Maggs 1994. Early copies as an indicator of rock art deterioration. *Pictogram* 6(2): 36-7.



Advertisement for Archaeological Geophysical Surveys

Hunter Geophysics is a Melbourne-based business providing archaeological geophysical surveys throughout Australia. The director, having worked on numerous digs while studying his archaeology degree, saw the need for an improvement in the accessibility of geophysical services for Australian archaeology. Geophysics is a means of detecting buried objects. Originally developed for detecting the presence of buried minerals, archaeologists have adapted geophysical techniques over the last few decades, allowing the rapid and low-cost detection and mapping of buried archaeology. Hunter Geophysics provides geophysical and other forms of archaeological prospection, such as earthwork analysis and oblique near-infrared photography.

By assessing the potential for archaeology, our services can speed up excavations and make cultural management plans more effective protectors of Australia's heritage.

E-mail: hunter.geofizz@gmail.com Web: <http://huntergeophysics.eb2a.com>

INTERESTING NEWS

Ancient Secrets Uncovered

Damien Brown *The Mercury* March 10, 2010

A stunning archaeological discovery at Brighton could change scientific understanding of human occupation. The discovery of artefacts that could be among the oldest in the world has prompted the State Government to consider adding a multi-million-dollar bridge to its Brighton bypass plans.

In a new development set to rock the scientific world, the artefacts found in the path of the proposed bypass could be twice as old as previously thought.

The discovery of the remains, that preliminary estimates show could be at least 40,000 years old, would give the scientific world a unique glimpse of a previously unknown period of human occupation this far south on the planet.

The remains found in the contentious Jordan River valley section of the \$176 million bypass have forced the Department of Infrastructure, Energy and Resources back to the drawing board this week. Plans have been redrawn to include a 70m elevated bridge span over the site, costing an extra \$10 million to \$15 million. With a University of Melbourne report expected to be finalised this week, principal archaeologist Rob Paton has estimated the findings of stone tools and evidence of everyday life could be anywhere up to 40,000 years old. The previous estimate was about 18,000.

It has been estimated that anywhere up to three million artefacts could be uncovered in the 600m by 60m riverbank area. The estimate places settlement of the area at about the time of Mungo Man, a discovery that challenged human evolutionary theory.

In 1974, scientists discovered the skeletal remains of a man near Lake Mungo in south-western NSW dated about 40,000 years old. Previously, the oldest researched human DNA came from a Croatian Neanderthal who died about 28,000 years ago.

Mungo Man brought about a complete rethink on mainstream evolutionary theory, referred to as the "Out of Africa" theory that all humans were descended from modern homo sapiens who left Africa about 100,000 years ago.

"If the ages for the site prove to be correct, this is the oldest site in Tasmania and among the oldest in Australia," Mr Paton told the Mercury.

"Moreover, it would be the oldest most southern site on the planet, giving us a glimpse into an unknown part of world history and the spread of homo sapiens across the Earth.

"Our readings of the sediments also seem to be telling us that the part of the levee that contains the archaeological material is mostly undisturbed.

"This is almost unheard of from an open-air site, anywhere in the world.

"Most events of this kind come from cave deposits that often reflect only a very small and specialised part of the lives of people.

"Our work so far certainly indicates this is a scientifically important and exciting site. It will be an important place for interpreting the deep history of Tasmania, but also of archaeology on a worldwide scale."

Department secretary Norm McIlfatrick has said the Government will do all it can to protect the significant site.

"If it is 28,000 years old or 40,000 years old, it doesn't matter, this is a significant find and we will be protecting it," Mr McIlfatrick said.

"We believe we can take a management plan to Environment Minister Michelle O'Byrne that protects this levee and allows this important bypass to go ahead.

"We are not going to be draconian here, we want to see this protected."

The new management plan that will include the extended bridge span is also expected to include a covenant to protect and conserve the area.

To test the potential importance of the site, Mr Paton was engaged as archaeological director to work alongside heritage officers Aaron Everett, Bob Hughes and Leigh Maynard, geomorphologist Dr Tim Stone and archaeologist Cornelia de Rochefort.

The method used to date the river levee site is known as optically stimulated luminescence, OSL.

Mr Paton said while this was a complex form of dating, it told researchers the last time sunlight fell on the sandy deposits before they were covered, encasing the stone artefacts.



Pre-history rewritten as new human discovered: German scientists have discovered a new human species that lived in Siberia around 30,000 to 50,000 years ago.

The evidence changes the picture of pre-human habitation on Earth.

The species lived at the same time as modern humans and Neanderthals and shared a common ancestor with them.

<http://www.abc.net.au/news/stories/2010/03/25/2855548.htm>

Stone Age sights, sounds, smells at Croat museum KRAPINA, Croatia
(Reuters Life!)

Forensic science and computer simulations are just a couple of the high tech tools used to explain one branch of the evolutionary tree at a new museum in Croatia.

Full story at <http://www.reuters.com/article/idUSTRE6202EW20100301>