February 2014 progress for "The archaeology of Sulawesi" project

Between the 9th and 22nd of February 2014, David Bulbeck spent two weeks in Jakarta and Makassar, Indonesia, for "The archaeology of Sulawesi: a strategic island for understanding modern human colonization and interactions across our region" project (DP110101357), on which Sue O'Connor, Jack Fenner, Janelle Stevenson and Ben Marwick (University of Washington) are the project Investigators. On the 10th and 11th, David accompanied in presenting the final project report to Indonesia’s National Centre for Archaeological Research and Development (ARKENAS) and the Subdivision of Administration for Foreign Research Permit at Indonesia’s Bureau of Research and Technology (RISTEK). Sue, David, and two ARKENAS team members (Fadhila Arifin Azi and Adhi Agus Oktavio) also presented a seminar on the project findings at ARKENAS on the morning of the 10th.

Subsequently, David documented the decorated pottery, metal ornaments and glass beads associated with extended inhumations at Gua Talimbue, a large cave in southeastern Sulawesi that was excavated in 2013. The main concentration of these finds is in association with a supine skeleton recovered from Square A, but the presence of similar decorated pottery and glass beads in the upper spits of two squares some metres away (B and E) suggests there may have been more than one extended inhumation at the site. On preliminary impressions, the quite beautiful pottery decorations would conform to W.G. Solheim’s "Sa-Huynh Kalanay tradition" and, along with the likely status of the glass beads as "Indo-Pacific monochrome drawn beads", suggests a first millennium CE antiquity for the Gua Talimbue extended inhumation(s).

David also collected sediment associated with a large earthenware burial jar (70 cm girth) at Gua Lampetia, some 60 km northwest of Gua Talimbue, for radioactivity measurement. The jar currently has a TL date of around 1000 CE (courtesy James Feathers, University of Washington) but this date relies on an estimate of the external dose rate experienced at the site. Direct measurement of the external dose rate at Gua Lampetia should either confirm or correct the burial jar’s current dating.

David also supervised two of the local team members in at the Makassar Archaeology Office in their documentation of the finds from the project excavations, while he finished recording the excavated pottery. One category of finds is the flaked lithics from Gua Sambagowala (near Gua Talimbue), dating to the fourth to sixth millennia BP, recorded by Suryatman. His colleague Fakhri (better known in Canberra by his nickname, Pay) documented the baked clay recovered from the Holocene levels of Gua Talimbue. This baked clay includes both plain and patterned variants. Interestingly, the patterns of this mysterious artefact class clearly changed over time.

Pictured: (Left to right): Suryatman, Fakhri and David documenting the excavated finds from the Sulawesi project at the Makassar Archaeology Office

Pictured: Reconstruction of the base to the burial jar at Gua Lampetia, excavated in 2012

Pictured: Patterned impressed clay from Spit 4, Gua Talimbue, excavated in 2013
By Stuart Bedford

Barry Lee Fankhauser (b. 1943) passed away peacefully in Canberra on the 21st January 2014. Barry was originally from the US but after spending 6 years in New Zealand at Otago University in the early part of the 1980s completing a PhD he came to start work at the ANU in the old Division of Prehistory in 1988. Barry was born into a large family during WWII and was brought up on a dairy farm in Wisconsin. The very exotic family name, the varied spelling and pronunciation of which over the years always amused him, related to his Swiss heritage. He was the only one of his family to go to university, getting BSc in chemistry and immediately got a job with the giant 3M Company in Wisconsin. But Barry was not someone who wanted to stay put and there was also the issue of the Vietnam War and the strong possibility of being drafted. He was in fact drafted but at the same time applied for a posting with Peace Corps and appealed the draft. Draft letters (and subsequent appeals) followed him all the way to Nigeria where he was posted by Peace Corps...the only thing that saved him was turning 25, soon after he arrived in Nigeria...the army let him go.

His next stop was Hawaii in the 1970s where he gained an MSc in Chemistry and work in a lab. He thought he had arrived in paradise but was miraculously encouraged by Foss Leach in the late 1970s to shift to Dunedin and start a PhD. Barry set up a thermoluminescence dating lab at Otago and focused on the dating of the relatively under-researched pre-European Maori earth ovens that are scattered across much of New Zealand. These enormous oven features, often containing tonnes of rock, took Barry into entirely new avenues of research. He looked at the food chemistry of the cabbage tree after pressure-cooking samples in the laboratory, and residue analysis of archaeological soils. His final dissertation remains the seminal work.

He had arrived in Canberra in 1988 and had a 6 year contract at the Australian National University where he continued his research into residue analysis amongst other things. He set up the lab from scratch and did pioneering research into residues found in earthenware cooking pots. He was often frustrated however by his colleagues lack of understanding in relation to the complexities of residue analysis. Many sent him sherds that had been excavated some 30 years before, stored in less than ideal conditions for any residue preservation, and yet were surprised he could find no residues. He was also heavily involved in the sourcing of Australian ochres. He spent time as an editor of various Departmental publications and was always available to advise and mentor students with their various research projects. He also spent many years in various positions with the Canberra Archaeological Society. His last period of full-time employment, from which he retired in 2008, was with the Therapeutic Goods Administration (TGA), an Australian government organisation that screened all applications for the introduction of new foods and drugs. His broad scientific and particularly chemistry background came to the fore. He wrote a defining document in 1999 on kava which prevented it being banned in Australia. Nobody who knew him would be surprised to know that he was the only one of the dozens of researchers at TGA who personally trialled every one of the drugs he was assigned to research. He remained a Visiting Fellow at ANH until he had a massive stroke in 2009.

The massive stroke was a cruel blow particularly for someone so gregarious and keen to get out and about...he also had always detested TV so that didn't keep him entertained at the St Andrews retirement village. He adjusted to life in his own particular Fankhauser-style...inviting fellow residents of St Andrews out for dinner and music, mostly ladies well into their 80s, who for some of them it was the first date for a long time and probably for most of them a first visit to the National Press Club and listening to blues bands. Barry always liked a get together, whether with one or two people or large parties often indulging in fine homebrew and other things cultivated from his garden and fine music also not far away. He knew how to have a good time and he tended to gravitate towards like-minded individuals. He will be sadly missed, but perhaps we can leave him with a final parting line. I will never forget after a full-on house warming party at my new student house in Ainslie, Canberra in the late 1990s, at about 2am Barry said to me "Thank goodness I brought the car because I certainly can't walk".

Pictured: Barry, Judith Cameron and Wal Amrose
Indo-Pacific Prehistory Association Conference held in Siem Reap, Cambodia

The Indo-Pacific Prehistory Association Conference was held this year in Siem Reap in Cambodia. Many of the staff and students of ANH attended the IPPA Conference including Dr Sally Brockwell, Dr Anthony Barham, Dr Ambra Calo, Dr Judith Cameron, Daryl Wesley and Mirani Litster. Professor Sue O'Connor delivered a paper entitled 'The tool kit of the earliest colonists to Wallacea'. In this paper she described an unusual bone artefact which dates to 35,000 cal BP which was recovered from Matja Kuru Cave in East Timor. In this paper she suggests that organic tools such as this hafted projectile (pictured bottom right) were probably common in prehistory and more regularly made on wood than bone. As they were made on perishable materials they are only rarely found in the archaeological record. This paper has been recently published in the journal of Human Evolution. During the conference there was a field trip to Angkor and after the conference many of the delegates visited the temples around the Siem Reap area (pictured top right).

Following this Professor O’Connor visited Dr Mahirta at the University of Gudjah Madah in Yogyakarta to discuss future excavations in the Alor Islands of Indonesia. Her visit lasted longer than expected due to the eruption of Mt Kelud which covered the city in thick volcanic ash delaying flights etc.

In Other News

Congratulations to Michelle Langley on the submission of her ARC DECRA application!
“...in the Magdalenian context, a large part of this situation is owing to the fact that the form and proportions of osseous points at the time of initial manufacture have rarely been clearly described, nor particularly well understood, by researchers....”


Maintenance and discard patterns are a central aspect of projectile point analyses. Unfortunately, while the examination of maintenance and discard patterns for lithic technologies is well advanced, osseous projectile point maintenance and discard analyses remain in their infancy. In the Magdalenian context, a large part of this situation is owing to the fact that the form and proportions of osseous points at the time of initial manufacture have rarely been clearly described, nor particularly well understood, by researchers. This paper focuses on uni- and bilaterally barbed points manufactured from antler and dating to the Late Magdalenian. Through examination of 732 artefacts, recovered from 18 sites located throughout France and Germany, along with engravings on portable art, and a brief consideration of ethnographic data, an updated proposal for the original proportions of these iconic barbed weapon tips is presented.


This paper details the study of a 6-m-long sediment core from the King River region of north-west Australia that has been analysed using sedimentological and palynological techniques. The core spans most parts of the Holocene and contains a detailed record of early to mid-Holocene landscape development.


This paper deals with the perception that there is little rock art known in Southeast Asia and brings to light research efforts over the last 30 years that have led to the discovery of many new sites. Over a thousand rock art sites are known in the form of rock paintings, petroglyphs and megaliths; and their distribution across the various territories are uneven. This paper summarises the state of rock art research in Southeast Asia and discusses the challenges of studying rock art in this region, research trends and new finds from recent research.
Bogs have their seasons – in September last year Ben, Fenja, her husband Eike and myself went to core Bogong Creek near Gudgenby (ACT) but it was so wet that after wading around Middle Creek swamp we found that the profile at Bogong had separated and was floating so was not good for correlation to Fenja’s results from her recent rock shelter excavations. But all was well in November despite more rain that had Ben, Tom Taverner and Alan Wade sloshing around to bring Fenja and I cores to describe and wrap up as we sat in a gazebo – a new height in luxury coring, though it did blow down as we put it up on the second day. An innovation was to use a handsaw to cut a neat divot from the tough surface mat as this contains the record of European disturbance. We also unlimbered the Livingstone corer which greatly impressed Fenja as it sliced through gravel layers to 585cm depth. Since then Fenja has amazingly cut the core, run a duplicate through ITRAX and counted the first high quality CHAR curve and we will submit dates soon. I haven’t faced the pollen counting but that will come – at least we didn’t follow normal practice and let it dry out for several years before trying to slice it. However a cheap meat slicer, bought to provide even slicing of the peat, didn’t follow normal practice and let it dry out for at least we didn’t follow normal practice and let it dry out for several years before trying to slice it. However a cheap meat slicer, bought to provide even slicing of the peat, was useless at it mangled each slice into a mash. Any- one like to adopt it?

I did not have a very successful return (in rain of course) to Bogong Creek in December with experts from the International Mire Conservation Group symposium attendees – HiAce buses do have limits so we couldn’t drive to the very edge. Scott Mooney (UNSW) was most impressed by our peaty riches and had to be discouraged from taking a sequence home. Line Rochfort, the Canadian peatland restorer also liked the sedge fen but as usual Sphagnum people like our visiting Fellow, Dr Jenny Whinam, thought it pretty uninteresting (though to be fair Jenny was in pain from a broken leg at the time). Once the weather finally dried out, Ben and I took HiAce vans (and Mat Prebble’s wonderful new Colorado 4WD that he had forgotten to lock while away in NZ) up the Orroral Valley with the Fenner Fire Science course students and Geoff Cary to get a core from the upper swamp there – about 3m of stuff but missing the upper peats. Fenja whipped up an interesting CHAR diagram that contradicted student counts somewhat.

By February, Fenja was champing at the bit for new dirt and a day visit with Scott Mooney, Richard Bradshaw and the UNSW crowd to Stingray Swamp near Bundanoon couldn’t satisfy her (yes, it rained) so she, Mark Walker, Billy Ó Foghlú, Ben and myself trundled back to an old class site on Boboyan Swamp, in the southern ACT upper Naas River valley. No gazebo, but on the positive side a gorgeous day and a dry swamp surface so we set up our new small table (thanks CAP for not having adequate air support when a machine is around for their programs). Why this effort? Well our idea is that well dated relatively close sequences will establish whether there is a regional pattern of landscape response to climate and human occupation. At present there are plenty of suppositions based on low resolution work and our present effort will bring this preliminary work to a much more reliable footing. ACT Parks has been very welcoming to our research and in turn there are useful management lessons for them in the project. It goes without saying that an exact correlation between sites is not expected nor a direct relationship to rock shelter occupation.

New PhD Candidate: Elena Piotto

Some of you may already know me as I have been working as Research Assistant since July last year. Sadly all good things must come to an end but with that new doors open. So while I am no longer an RA I am continuing on in the department, albeit in a reincarnated form that of a PhD student. I expect the next 3 years will be similar to the triple-looper at Dreamworld -that is thrilling and terrifying (sometimes at the same time). My research topic will be focusing on shell tool technology in the Pleistocene so I expect to be in the labs soon and often for long periods of time. So if you can’t find me in my office (top floor, just outside the labs) you will probably find me in the lab.
Research in Archaeology and Natural History at the ANU School of Culture, History and Language aims to understand prehistoric human societies, the environments in which they developed and the environmental consequences of human presence. Departmental research ranges from southeast Asia and the Pacific, through the tropical forests of New Guinea and the savannahs of Australia, to the islands of Oceania.

Field research in ANH is supported by well-equipped laboratories that were fully updated and refurbished during 2009. Our laboratories support research into prehistoric textiles, archaeobotanical remains, rock art, prehistoric environments, zoological material and ceramics. ANH houses the largest pollen reference collection in Australia, as well as plant, bone, shell and ceramic collections. We also have access to world-class ANU facilities for archaeological dating, stable isotope analysis, and electron microscopy.