NEWS and VIEWS

Grass Roots – ABC’s Landline

In outback Australia Spinifex grass is everywhere, but not always welcome. The grass is tough, spiky and not much use to farmers. However for thousands of years Indigenous Australians have used this ubiquitous plant for medicine and glues. As Megan Woodward reports researchers in Queensland's far west believe resin from the grass could be used to make new building materials.


INDIGENOUS ASTRONOMY

Aboriginal Astronomy Notes
John Morieson, 16 Oct 2010

I received several responses to Equinox article (ISNB Oct10): I was reminded that this year’s spring equinox fell on the 23rd not 22nd this year; that a standing stone in Tugarong country coincided with sunrise at the winter solstice; that one lineal well near Kooyoora on private property had both the rising sun and the rising moon lying along the split in the rock well at the equinox; and the Lingua Franca program on Radio National featured the Kuuk Thaayorre language where a gesture to the east accompanies a spoken reference to something that is in the past and a gesture to the west accompanies a spoken reference to something that is in the future. This gestural language is clearly associated with the movement of bodies across the sky and may suggest that the Victorian examples in stone that I write about are culturally embedded. But we still don’t know why.

Lois Peeler, the new CEO of Worawa College, has placed Aboriginal astronomy on the school curriculum via an initial astronomy camp in November.

Lake Tyrrell Star Party. The way the stars are reflected in the lake have been superbly captured by a maestro in astrophotography, Alex Cherney, whose time-sequence of stars in the sky and stars in the lake must not
be missed. His website is www.terrastro.com where we can understand better why the Boorong word for night sky or space (direl or Tyrrell) is used to name the lake.

30 November 2010
The Worara astronomy camp was very well organised but the weather was crook and the cloud cover quite dense. So we went inside for the powerpoint presentation. Next year it may be earlier in the year, further north, and associated with the earthly cultural heritage. Congratulations to Worawa for their initiative.

Cheers, John.

Exploding star recorded in Aboriginal Dreamtime

Australian researchers Duane Hamacher and David Frew have recently discovered that the eruption of a huge star 150 years ago was recorded and incorporated into the traditions of an Australian Aboriginal community living near Lake Tyrell in north-western Victoria.

For the story visit http://www.australiangeographic.com.au/journal/aborigines-recorded-major-star-explosion.htm


Selected Documents in Aboriginal Astronomy

Dr Ragbir Bhathal, Director of the National Project on Aboriginal Astronomy at the University of Western Sydney, has just published “Selected Documents in Aboriginal Astronomy”. This is a compilation of some of the major papers and notes that were published on Aboriginal Astronomy before the 1940s. Further work is being carried out to publish a comprehensive book on papers and notes published before the 1940s.

RESOURCES

Mparntwe Project

“We are year 6 Aboriginal students from Larapinta Primary School. We are gathering and researching information about the creation of Mparntwe (Alice Springs). There are stories about the sacred places of Alice Springs which happened a long time ago. We are learning about the caterpillars and wild dog dreamings, which are the two main stories. There are lots of other different stories about different places. But these are the most important ones in Alice Springs.”

Visit the Mparntwe Project website at http://www.mjhall.org/mparntwe/index.htm

IHPST Newsletter

The October IHPST Newsletter is now available on the web at: http://ihpst.net/newsletters/
1. President’s Column: Formal Membership of IHPST now Available
2. Science & Education Current Issue Volume 19 Number 10
4. Assistant Journal Editors Appointed
5. Journal Special Issue: Philosophical Considerations in the Teaching of Biology
International Journal of Environmental and Science Education (IJESE)

The new issue of the International Journal of Environmental and Science Education (IJESE) is available web at: http://www.ijese.com/currentissue.htm

Mehmet Bahar (Editor)

Science Education International

The last issue of ICASE Official Journal, Science Education International is published online and available on the web: http://www.icaseonline.net/seiweb

I take this opportunity to invite you to submit your manuscripts to SEI.

Bulent Cavas (Editor)

Australia: The Land where Time Began

“This is a 'hobby website' developed by a retired gentleman which covers the science of Australian flora, fauna, climate, geology, Aboriginal culture etc...etc... (for reference: www.austhrutime.com). It includes a great deal of in-depth information, and a lot of time and effort has gone into it. It could be a very helpful site for student assignments and the such.”
Study on the Contribution of Multilingualism to Creativity

“This study indirectly addresses such questions by looking at the possible connections between knowledge of languages and creativity. It offers insights from international science and public opinion from across the European Union. First, it summarises existing scientific evidence. Secondly, it fuses this with anecdotal opinions of people with ‘hands on’ experience. Finally, it presents case studies where multilingualism brings added value to everyday life.

The result is a description of what science reveals about the contribution of multilingualism to creativity, what people think about any possible connection, and how multilingualism can be found to support creativity in social and working life.”

The report is available at:

Sharing Culture Online

“Sharing Culture Online is an innovative new teaching and learning system that gives all students, regardless of their ethnic background or age, the opportunity to learn about and engage in the rich diversity of Australian cultures.

“Sharing Cultures Online also supports Indigenous students to learn, appreciate, celebrate and engage with their culture and schooling.”

For a free 14 day trial, visit www.sharingculture.com.au.

Recent papers


ABSTRACT: This paper reports on a research study conducted with 44 Torres Strait Islander Year 9 students in a wholly Indigenous school in Far North Queensland. Using a socio-cultural lens, the study investigated how students employed their vernacular and formal science language to engage with the concepts of energy and force and documented the cultural resources students drew on to learn and (re)produce knowledge. The large majority of students struggled to understand and represent concepts of force and energy as taught in Standard Australian English (SAE), but when Torres Strait Creole descriptors used for everyday ways of knowing were employed in the classroom, the students were better able to demonstrate their understanding of physical science concepts. Classroom experiences conducted only in SAE do not adequately facilitate all Indigenous students’ negotiations from their everyday ways of knowing to demonstrating conceptual understanding of formal curriculum or science concepts. Teaching and learning frameworks that accommodate the multiple language and cultural dimensions of older and emerging Indigenous cultures was shown to enhance conceptual learning. However, the practice of standardised assessment conducted wholly in SAE remains a significant obstacle to measuring student achievement levels in science.

If you would like a copy of this paper, contact Philemon at philemon.chigeza@myjcu.edu.au
CONFERENCES

42nd Annual Australasian Science Education Research Association Conference
PROMOTING SCIENCE EDUCATION AND SCIENCE EDUCATION RESEARCH IN ALL CONTEXTS AND AT ALL LEVELS OF EDUCATION

June 29th - July 2nd 2011
University of South Australia
Adelaide SA

The 42nd Annual ASERA conference will be held at the City West Campus of the University of South Australia in the heart of Adelaide. Just 15 minutes from the airport, 20 minutes from the nearest beaches and 5 minutes from some of Adelaide’s best restaurants.


European Science Education Research Association 2011 Conference
5-9 September 2011
Lyon, Centre de Congrès, FRANCE
ESERA 2011 has an overall conference theme: Science learning and Citizenship. There will be 4 plenary conferences; one on each of the following themes:

• Science learning & Citizenship
• Teacher development
• Socio-scientific issues
• Analysing classroom activities

There is a current call for proposals and the closing date is 10 January 2011. The program is available at http://www.esera2011.fr/.

CALENDAR OF EVENTS

This is mostly a summary of upcoming conferences. More details may have been given in this or previous bulletins as shown. A web-based contact is usually included. Inclusion of conferences in this list is not to be read as an endorsement of the conference.

2010

December
http://www.bris.ac.uk/spine/symposium/ (Aug10)

2011

January 2011
5-9 January: epiSTEME-4: Fourth international conference to review research on Science, TEchnology and Mathematics Education, Homi Bhabha Centre for Science Education (TIFR), Mumbai, India, (http://www.hbce.tifr.res.in/episteme). (Feb10)
5-7 January: Seventh International Conference on Environmental, Cultural, Economic and Social Sustainability, University of Waikato, Hamilton, New Zealand [www.SustainabilityConference.com](http://www.SustainabilityConference.com) (April10)

**April 2011**


**June 2011**


**July 2011**


**September 2011**


**2012**

**March 2012**


**Thank you and best wishes**

Thank you for your support during 2010. All the best for Christmas, New Year and any other cultural events between now and the next issue on 1 February 2011.

Michael Michie