

**ANNUAL GENERAL MEETING
and
RSWA Medal Lecture**

**7:00 pm, Monday July 19th 2010
Webb Lecture Theatre (Geography LT 1, Room 21)
The University of Western Australia**

**Emeritus Professor Don Bradshaw
The University of Western Australia
2010 Recipient of the Medal of The Royal Society of Western Australia**

**ECOPHYSIOLOGY AND CONSERVATION OF WILDLIFE
IN WESTERN AUSTRALIA**

Professor Bradshaw will deliver a presentation on ecophysiology, the study of physiological processes in both plants and animals in relation to ecological constraints imposed by their environment. His research has focused on Australian animals, specifically reptiles, amphibians, birds and marsupials, but lately, plants have become important in working with the nectarivorous Honey possum. The challenges brought by climate change are ones that Australia's unique plants and animals must face if they are to persist and it is through targeted ecophysiological studies that we will best be able to assist them in that process.

AGM AGENDA

7:00- 7:25 pm Drinks

7:30 Apologies

Minutes of RSWA 2009 AGM

Council's Annual Report and Treasurer's Annual Report

7:50 Presentation of RSWA University Student Medals by Professor Lyn Beazley (AO)

8:00 Presentation of RSWA Medal to Emeritus Professor Don Bradshaw
by RSWA Vice Patron Professor Lyn Beazley (AO)

8:10 RSWA Medal Lecture by Emeritus Professor Don Bradshaw

8:55 Summary and thank-you by Lynne Milne, President RSWA

9:00 Supper

Members, guests and visitors welcome

<http://www.rswa.org.au>

This issue of the RSWA Proceedings was edited by Margaret Brocx rswa@inet.net.au



**RSWA June 2010 Ordinary Meeting:
Launching the Leeuwin Current Symposium
Special Issue of the Journal of the Royal
Society of Western Australia, and promoting
the joint RSWA/WAMSI Symposium on
Kimberley Coast Marine and Coastal Science**

Some 23 members, guests, and the general public attended the Ordinary Meeting of RSWA on Monday 21st June 2010 at Kings Park to hear Dr Steve Blake, Western Australian Marine Science Institution (WAMSI), present a short address about Marine Science in WA and the importance of the up-and-coming joint RSWA/WAMSI Kimberley Region Marine and Coastal Symposium, and his views on the importance of the Special Issue on the Leeuwin Current Symposium; and Dr Karen Hillman, President of the Australian Marine Science Association, Western Australia (AMSA), present her perspectives on Marine Science in WA, and the importance of the JRSWA Special Issue on the Leeuwin Current Symposium.

In his presentation, Steve covered the strategic marine and coastal research undertaken in WA; the importance of Kimberley coast and offshore region; the proposed joint RSWA and WAMSI Kimberley Marine and Coastal Science Symposium to be held in May 2011, and outlined his views on both Leeuwin Current Symposia, that took place in 1991 and in 2007, respectively.

Steve illustrated the amazing extent and diversity of the Western Australian coast and the amount of research required to understand it. The sectors of the coast are geologically based, and there is also a regional biotic zonation with a northern tropical province and a southern temperate province, with a west coast zone of overlap where both tropical and temperate fauna co-exist, best illustrated at places like the Abrolhos Islands offshore from Geraldton. Steve discussed the currents offshore in the Indian Ocean, Timor Sea, and Southern Ocean out from the Western Australia coast, with a focus on the Leeuwin Current in terms of annual and decadal variability, and

touched on the historical sea surface temperature data, warm core and cold core eddies, ENSO and the Indian Ocean Dipole.

Steve noted that there were three main hubs for Marine Science emerging in Australia, namely., in Hobart, Townsville, and Perth, with Hobart and Townsville being the largest at the present time. That then led on to discussing the Kimberley Coast and WAMSI's intention, funding permitting, to provide public-good independent research outcomes in the Kimberley Region and it's offshore area as part of its next phase commencing in late 2011.

Steve then took the audience on a tour of the incredible Kimberley coastal region, showing its geological framework, and the variety of coastal scenery, structure and ecology: from the red coastal pindan and rocks of Cape Leveque, across the northern island archipelagos, the mangroves, corals, seagrasses, sponge gardens, Montgomery Reef from the air, it's cusped rhodolith banks, fringing reef corals adapted to turbidity, very high summer water temperatures and long subaerial exposure at low tide, and the general effects of the megatides, up to 11m, in the region.



Mangrove-lined rocky coast of the Kimberley.

Interest in the Kimberley Region stems from the fact that this area, and specifically the adjoining Browse Basin, has 50 trillion cubic feet of natural gas, with an anticipated export of LNG of 27 million tonnes per year by 2014, and yet it is still the most undiscovered and under-researched part of Australia. WAMSI has recently undertaken some very preliminary expeditionary style research in the Kimberley region, with the objective of obtaining some preliminary baseline data, *e.g.*, coral cores,

aerial surveys using hyperspectral scanners, water sampling, underwater photography, as well as satellite remote sensing to obtain some basic images of the sea bottom and overlying water masses.

Steve emphasised WAMSI's involvement with Aboriginal Traditional Owners and Indigenous People in the Kimberley Region, *e.g.*, they were involved in whale monitoring surveys both at Pender Bay and also in Camden Sound. Steve then thanked all people involved thus far in the study of the Kimberley Region, *i.e.*, the Aboriginal Traditional Owners and Corporations, the scientists who have laid the platform, the local people and tourism operators of the Kimberley, all of whom have offered their support, facilities and knowledge in a shared bid and belief to establish a truly independent Regional Marine Science Program for the Kimberley.

Steve then discussed the importance of the Leeuwin Current Symposium and the Special Issue from that symposium. The publication in 2009 by the Royal Society of Western Australia of the 2007 Leeuwin Current Symposium was the platform for the idea of the 2011 Kimberley Coast Symposium, and WAMSI had wanted to help produce a seminal proceedings published as a Royal Society Special Issue for the Kimberley Coast as had been produced for the Leeuwin Current Symposium. "Our knowledge of the marine environment in Kimberley coastal region today is probably about where we were at with our Leeuwin Current knowledge in 1990, the year before that landmark RSWA symposium proceedings, but probably even less" he said. Steve then introduced Karen Hillman to talk about AMSA and the Special Issue on the Leeuwin Current Symposium.

In her presentation, Karen outlined the function of AMSA, as the peak national body for Marine Science in Australia, with about 1000 members, encompassing universities, State and Federal government agencies, CSIRO, private companies, and consultancies, involving disciplines of biology, geology, chemistry,

oceanography, with a focus on promoting Marine Science and encouraging students. Karen also outlined the State branch activities that AMSA is involved in such as input into Marine Park Management Plans, supporting students and young professionals, and supporting marine scientists and advancing Marine Science via social functions and symposia. Karen outlined the status of Marine Science in Western Australia, *i.e.*, where it has come from and its achievements, where it is now, and where it is going in the future. Marine Science in Western Australia in the past has been involved in the Cockburn Sound Study and the Albany Harbours Study in the 1970s, the Peel-Harvey Estuary Study of the 1980s, the Southern/Perth Metropolitan Coastal Waters Studies in the early 1990s, amongst many others, and more recently in mid-west and south-west marine regions, the Leeuwin Current, coastal systems and biodiversity of Jurien, Perth, and Geographe Bay, and large collaborative projects in deep waters, and the Indian Ocean. Today, it is still involved in the study of the Leeuwin Current, and in Kimberley biological oceanography, and rock lobster larvae, and in the future, it will be involved in the Ningaloo region, the north-west shelf, and the Kimberley, with more collaboration. Karen ended her launch of the Leeuwin Current Symposium Special Issue on the note that the value of collaborative and interdisciplinary research increases 10-fold when available as a published Special Issue, emphasising that the paper volumes of symposia produced by the Journal of the Royal Society of Western Australia .to be major contributions to Science.

Margaret Brocx. Sub-editor of JRSWA thanked the authors and organisers of the Leeuwin Current Symposium, and Steve Blake for the work he was undertaking in organising and promoting the joint RSWA/WAMSI Symposium on Kimberley Coast Marine and Coastal Science, and the mammoth task he had undertaken in obtaining sponsorship for the Kimberley Coast Symposium. Margaret also especially thanked Alan Pearce in convening the Leeuwin Current Symposium.

**The Royal Society of Western Australia
welcomes the following New Members**

Morten Allendoft	Ms Chang Lee
Mr Jesus Aranguren	Ms Rachel Loh
Dr Anita Adhitya	Dr Kate Loynes
Ms Julie Ardley	Ms Jelena May
Mr Benjamin Bass	Dr Adrienne Markey
Dr Michael Batley	Miss Kristy Martin
Dr Lynnath Beckley	Miss Annliese Mason
Hibaut De Bettignies	Dr Vanessa Melino
Dr Bernhard Bischoff	Mr Laurton McGurk
Ms Kristine Brimmell	Mr Hermes Medina
Mr Matthew Blampey	Miss Margaret Mohring
Mr Quentin Burnham	Pauline Morrison
Mr Edward Cannella	Dr Geoff Pain
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Robert Chandler	Mrs Barbara Pelly
Dr Nick D'Adamo	Mr Robert Pezzarini
Miss Sarah Dalgleish	Mrs Janina Pezzarini
Dr James Dahlberg	Mr Michael Prince
Dr Magdalena Davis	Miss Laura Quinn
Mr Nicholas Dight	Mr Victor Quinlan
A/Prof Ian Edwards	Miss Malarvili
Ms Heather Evans	Ramalingham
Dr Chris Florides	Miss Marie Lourdes
Miss Claire Foster	Raphael
Dr Jane Fromont	Mr Viv Read
Dr Desmond Fitzgerald-	Ms Rachel Richards
Lascelles	Dr Eleanor Rowley
Mr David Galeotti	Dr Lazaro Roque-Albelo
Ms Maureen Gardner	Miss Sandra Santich
Mr Paul Guagliardo	Miss Nicole Sabatino
Ms Nadine Guthrie	Dr Cecily Scutt
Dr Wayne Greene	Mr Rajesh Sharma
Mr Stewart Godden	Charu Lata Singh
Miss Katherine	Dr Edward Steele
Goldsmith	Miss Caitlin Syme
Miss Xue Gong	Dr Christopher Surman
Dr Christine Hanson	Miss Catherine Taylor
Dr Richard Harris	Miss Nicki Thompson
Ms Lynette Howearth	Mr Per Thomsen
Ms Danielle Hudson	Rada Tomanovic
Mr Shaun Hughes	Ms Sandra Toby
Dr John Huisman	Mr Jonathan Toby
Robert Hunter	Miss Felicity Trend
Dr Brett Human	Miss Renee Tuckett
Ms Penny Hussey	Mr Matteo Vinci
Miss Karina Inostroza	Dr Dianne Watson
Michael Klunzinger	Dr Mark Westera
Mr Algis Kuliukas	Professor John Wetherall
Dr Carol Lacroix	Mr J Florian Wellman
Mr Patrick Lambert	Mr Sean White
Mr Zhongwu Lan	Miss Candace Willison
Mr Jason Ledger	Mr Lyndsay Wolrige

RSWA Council 2010-2011

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Council member: Dr Juliet Wege
Council member: Dr Kate Wright



EDITOR'S REPORT

June 2010

K Meney

Email address: <rswa_ed@iinet.net.au>

Manuscript Accepted:

Implications of terminal velocity and wing loading on *Hakea* (Proteaceae) seed dispersal:
P K Groom

**Biodiversity in July: serpents, dolphins
and Mr Blobby**

This Bulletin includes:

Mr Blobby campaigns for biodiversity

Biodiversity conferences

Biodiversity events coming up

The July Biodiversity Bulletin is available
online at www.biodiversity2010.org.au

First Call for Abstracts and Posters Royal Society of WA 12th Annual Postgraduate Symposium

Postgraduate students in agriculture, natural sciences, earth and environmental sciences, physical sciences, biology and environmental engineering are invited to present the findings of their research at the RSWA 12th Annual Postgraduate Student Symposium. Finishing Masters or PhD students or those who have submitted within one year of the symposium date normally present their work orally. Poster presentations are invited from Honours, Masters or PhD students.

When:

9:30 am to 5:00 pm
18th September 2010

Where:

Robertson LT, Murdoch University

Information for presenters:

An abstract and brief curriculum vitae should be emailed to rswa@iinet.net.au by Friday 12 August, 2010. Please limit abstracts to one half-page, and indicate when you expect to submit your thesis. PowerPoint facilities will be available and presenters will be given 15 minutes with 5 minutes for questions.

Free RSWA membership (first year) is provided to all presenters. Half price Membership is offered, (first year) to all attendees who wish to join on the day.

Who should attend?

This is a cross-campus multidisciplinary symposium with FREE Registration that includes a BBQ lunch. Fellow students, scientists and interested members of the public are WELCOME to attend. Non-presenters, to assist with catering, please RSVP to symposium organizers by the 1st September, rswa@iinet.net.au. For further details contact:

Dr Lynne Milne l.milne@curtin.edu.au
Mobile 0414 400 219

Dr Philip O'Brien, p.obrien@murdoch.edu.au
Dept Biotechnology, Murdoch University



Nominations open for prestigious science awards

The awards honour the outstanding and groundbreaking achievements of Western Australia's science and innovation community and recognise the important role of science in Western Australia. The 2010 Western Australian Science Awards categories are:

- **Scientist of the Year \$50,000**

This award acknowledges an individual scientist who has demonstrated excellence in a field of science, science research or technological advancement in Western Australia over the past 10 years.

- **Early Career Scientist of the Year \$10,000**

This award acknowledges an individual scientist who within the first 10 years of completing their highest degree has demonstrated excellence in a field of science, science research or technological advancement in Western Australia.

- **Science Educator of the Year Primary \$10,000**

This award acknowledges an individual primary school science teacher across the government or non-government sector, who has demonstrated excellence in improving science teaching and learning outcomes for their students over the past five years in a Western Australian school.

- **Science Educator of the Year Secondary \$10,000**

This award acknowledges an individual secondary school science teacher across the government or non-government sector, who has demonstrated excellence in improving science teaching and learning outcomes for their students over the past five years in a Western Australian school.

- **Science Outreach Initiative of the Year \$10,000**

This award recognises an individual, group or organisation that has delivered an outstanding, innovative and ongoing science outreach initiative within the past year. The initiative must promote and encourage community understanding of science within Western Australia.

Nominations close Friday 30 July 2010 at 5.00 pm. For more information visit www.commerce.wa.gov.au/scienceawards or call 9263 8227.

Physics around the country - July 2010

This bulletin includes:

1. AIP events across the country
2. Other activities: for the general public, students and teachers
3. AIP 2010 Congress - call for papers closing 9 July
4. Optical measurement wins Ken Baldwin recognition on World Metrology Day

5. Monash University Physics positions vacant
6. Dates for Physics Consultation Forums on the Draft Curriculum
7. Science Prizes
8. Seminars
9. Conferences
10. Submission deadlines for the bulletin and journal.

The July AIP Bulletin is available online at www.aip.org.au



Geological Society of Australia
WA Division, talk

5:30 pm Wednesday, 7th July

The Irish Club, 61 Townshend Rd, Subiaco
<http://www.wa.gsa.org.au/>

RSWA Events Calendar

This space will be updated each month in order to provide RSWA members and guests with a calendar of up-coming events which will include ordinary monthly meeting, and special events such as Public Forums, Symposia, and excursions. *Watch this space!*

Date	Time	Venue	Event
July 19th	7 pm	Webb LT, Dept Geography EWA	RSWA AGM and presentation by the 2010 RSWA Medallist Emeritus Professor Don Bradshaw
August 16th	6 pm	Bunbury Rowing Club	Science Week Event: Biodiversity of Leschenault Peninsula and Inlet
August 18th	7 pm	Scitech	Science Week Event: Biodiversity and Climate Change- Past Present and Future
August 20th	7 pm	DEC Karratha	Science Week Event: Biodiversity in the Pilbara Region
August 21st	7 pm	Port Hedland	Science Week Event: Mangroves of Port Hedland
September 18th	9:30 am to 5:00 pm	Robertson LT, Murdoch University	12 th Annual Post-graduate Symposium
October 18th	7 pm	Kings Park	Alec Coles the new CEO of the WA Museum: A vision for the Western Australian Museum
November 15th	7 pm	Kings Park	Dr Phil Playford: The Devonian Reef Complexes
December TBA	TBA	Herdsmen Lake	Joint RSWA/Naturalists Club Xmas Function

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