

THE VICTORIAN GEOLOGIST



March 2010

THE GEOLOGICAL SOCIETY OF AUSTRALIA
Victoria Division

Next General Meeting for 2010
Thursday 25th March at 6:15 p.m.

**Tectonic and palaeobiogeographic significance of Late
Cretaceous-earliest Paleogene biotas of the Takatika
Grit, Chatham Islands, SW Pacific**

Dr Jeff Stilwell

School of Geosciences
Monash University

Fritz Loewe Theatre, Earth Sciences Building, University of Melbourne

Preceded at 5.30pm by drinks and nibbles in the tea-room, 4th floor. Cost \$2

The outline of this talk has been kept secret so as to invoke mystery and intrigue! You have to come along and find out all about the biotas of the Chatham Islands on the 25th.

Instead, here is a small biography of Jeff: Jeffrey Stilwell's specialty is the Phylum Mollusca – bivalves, snails, and their kin. Stilwell has either led or participated in a number of remote area expeditions – to such places as Antarctica and India and most recently led a National Geographic Expedition to the Chatham Islands where another “crisis assemblage” is being studied by him and his colleagues and students, in detail – a Cretaceous/Tertiary shallow marine assemblage of vertebrates, invertebrates, and associated flora – in an attempt to understand the climatic and palaeoenvironmental conditions across this boundary in the SW Pacific Basin at a time when the eastern part of Gondwana was still intact and movement of fauna between New Zealand, Australia and Antarctica was still possible. Stilwell is also interested in the history of geology and in public outreach, his editing and reproduction of the first shell book ever published, John Mawe's *The Shell Collector's Pilot*, is just one example.

MEMBER CONTRIBUTIONS

Feedback from February seminar:

“One of the best presentations at the GSAV I have heard and seen (with excellent Keynote slides), well-timed to allow discussion, and impressive responses to questions and comments, including a considered comment on the value of scientific whaling.

I give it 4 1/2 stars!”

Bernie Joyce.

Thursday 25th February 2010

Dr Erich Fitzgerald

“Sea Change in Deep Time: The Origin of Whales”

Free to Good Home ***AJES Journals***

A retired GSA member has volumes (1976 to 2003) of the Australian Journal of Earth Sciences surplus to his requirements. Any one who would like to augment their library can contact Adrian Power on 03 9598 7169 or email adrian_s_power@hotmail.com to arrange to collect journals.

Geological Society of Australia (Victoria Division) at STAVCON

La Trobe University, 27-28 November, 2009

Noel Schleiger

Noel reports that the GSAV made contact with many science teachers, and the factite sheets were very popular. On behalf of the GSAV committee, Noel wishes to thank the GSA head office for production of these factite sheets, and Stephen Gallagher for making these available. The GSAV committee also wishes to thank the two volunteers who helped out on the GSAV table, Marilyn Powell and Dorothy Mahler. Your help was greatly appreciated!

 FORTHCOMING EVENTS

**Earth Systems:**

change
sustainability
vulnerability

4-8 July 2010

**National Convention Centre
Canberra**

In July 2010, an outstanding selection of national and international speakers, industry leaders, and key decision makers will meet in Canberra in the scenic Eastern Highlands, just a few hours drive from Australia's major ski fields.

Canberra is not only the nation's capital and heart of policy development, but it is also home of two of Australia's premier geoscience organisations Geoscience Australia and the Australian National University's Research School of Earth Sciences (birthplace of the famous SHRIMP mass spectrometer that has revolutionised Earth Science research over the past two decades).

Early Registration is still available until April 2, 2010

visit: <http://www.aesc2010.gsa.org.au/registration.html>

Nominations for 2010 Annual General Meeting

The AGM will be held on the 29th of April. Nominations are open for executive positions in the committee, along with general committee member positions (see back page). We encourage you to consider nominating yourself or someone else. If you have any questions about what the committee does and what the positions entail, please feel free to contact any of the committee members listed on the last page of this newsletter, or emailing our secretary Adele at adele.seymon@dpi.vic.gov.au

2010-2011 GSAV Committee Nomination Form

I nominate: _____ For the position of: _____

Nominator: _____ Seconded by: _____

All nominations will be presented and voted upon at the GSAV AGM on 29th April, 2010, commencing at 6:15 pm.

Please detach and mail this completed form specifying your 2010-2011 GSAV Committee nomination no later than 23rd April to:

The Geological Society of Australia Inc. (Victoria Division)
GPO Box 2355
Melbourne VIC 3001

Why did mammals survive the 'K/T Extinction'?

Science Daily

ScienceDaily (Jan. 31, 2010) — Picture a dinosaur. Huge, menacing creatures, they ruled the Earth for nearly 200 million years, striking fear with every ground-shaking stride. Yet these great beasts were no match for a 6-mile wide meteor that struck near modern-day Mexico 65 million years ago, incinerating everything in its path. This catastrophic impact -- called the Cretaceous-Tertiary or K/T extinction event -- spelled doom for the dinosaurs and many other species. Some animals, however, including many small mammals, managed to survive.



How did they do it?

"They were better at escaping the heat," said Russ Graham, senior research associate in geosciences at Penn State. "It was the huge amount of thermal heat released by the meteor strike that was the main cause of the K/T extinction." He said underground burrows and aquatic environments protected small mammals from the brief but drastic rise in temperature. In contrast, the larger dinosaurs would have been completely exposed, and vast numbers would have been instantly burned to death.

"Even if large herbivorous dinosaurs had managed to survive the initial meteor strike, they would have had nothing to eat," he said, "because most of the earth's above-ground plant material had been destroyed." Mammals, in contrast, could eat insects and aquatic plants, which were relatively abundant after the meteor strike. As the remaining dinosaurs died off, mammals began to flourish.

from <http://www.sciencedaily.com/releases/2010/01/100131221348.htm>



**GIANT
ORE DEPOSITS
DOWN-UNDER**

13th Quadrennial IAGOD Symposium 2010
Adelaide Convention Centre
Adelaide, South Australia
6 - 9 April 2010




Government
of South Australia
Primary Industries
and Resources SA

ADELAIDE | SOUTH AUSTRALIA | 6 - 9 APRIL

The objective of the International Association on the Genesis of Ore Deposits (I.A.G.O.D.) is to promote international co-operation in the study of the genesis of ore deposits and to further the growth of knowledge in this field. These tasks are achieved in several ways. International symposia are organized by IAGOD, and a variety of meetings and symposia are held in conjunction with other organizations interested in the genesis of mineral deposits.

Registrations for the 2010 symposium is available now.

Visit: <http://www.alloccasionsgroup.com/IAGOD2010>

FORTHCOMING SEMINARS AND EVENTS

to be presented at
GSA (Victoria Division) meetings

Note: unless otherwise indicated, all 2010 talks will be held in the
Fritz Loewe Theatre, Earth Sciences Building, University of Melbourne.

March 25 **Dr. Jeff Stilwell**, School of Geosciences, Monash University
Tectonic and palaeobiogeographic significance of Late Cretaceous-
earliest Paleogene biotas of the Takatika Grit, Chatham Islands, SW
Pacific

April 29 **Annual General Meeting**

Dr. Mark Kendrick, School of Earth Sciences, The University of Melbourne

Something interesting to share? Want to see your name in print?

Don't be bashful, contribute to the GSA(V) monthly newsletter!

If there are any events, happenings, news, or views that would be of interest to the membership,
please send your details and information to Peter Hoiles at p.hoiles@pgrad.unimelb.edu.au

We'd be glad to hear from you

Visit the GSAV on www.vic.gsa.org.au or the GSA on www.gsa.org.au

• Renewing your GSA membership is easy - it can now be done online. •

CONSIDER CONTRIBUTING TO TAG!

It is member contributions which make TAG a member magazine—please keep the contributions coming and assist with informing all of the membership (not just your Division) about your activities.

Please send your news to: tag@gsa.org.au



GSA (VICTORIA DIVISION) COMMITTEE

Please address all correspondence to the GSA Victoria Division
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Internet address: www.vic.gsa.org.au

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