



The Tasmanian Geologist

September 2022



NEXT MEETING:

**Wednesday 21st
September
6:00 PM**

**EARTH FUTURES FILM
FESTIVAL NIGHT**

Geology Lecture Theatre
University of Tasmania

Join us for drinks and nibbles
before the screening from 5:30 PM

Meetings in 2022: put them in your diary

*October 11th: GSA Neo Earth Science week
panel: Connection to Country (see GSA Website)*

*October 29th: Andrew Tyson and Clint Scott
Paradise Gorge - Rock Removal in Columnar
Dolerite*

*November: Martin Jutzeler Investigator Voyage
to the Kermadec Arc*

November 15-16th Virtual GESSS 12-2PM

*November 22-24th STGSG King Island Field
Conference*

*December 1st Tasmanian Geoscience Forum,
Lakeside Lodge, Tullah*

NEXT MEETING:

Earth Futures Film Festival

An evening of Earth Science themed films:

The Earth Futures Film Festival is an international video and film event that highlights the importance of Earth Sciences in achieving a sustainable future. The festival highlights the critical role of geoscience in helping to understand the interconnection of the physical and biological systems on our planet and the impact of humanity.

“The festival is a global collaboration to showcase how geoscience is addressing current sustainability challenges through media, with a key focus on education, diversity and inclusion.

The festival aims to educate and inspire others, create diverse role models, motivate positive global change and attract a diverse range of people towards both study and careers in the field of geoscience.”

From the Earth Futures website

<https://www.earthfuturesfestival.com/>

Popcorn will be available!



Bring your family and friends



Meandering Wadis, SE Jordan Credit: USGS

There are many entries in the festival – too many for us to show them all at our meeting so we need your help.

Please go to the film festival website and look at the titles and descriptions. Then vote for what you would like to see on our film night via this link. Feel free to vote for more than one entry.

[Vote for our film viewing here](#)

Before the 15th of September you can also vote in the film festival for your favorite video for the people’s choice award on the film festival website.

PREVIOUS MEETINGS

SUNDAY 14th of August Launceston QMAG Inveresk in a joint meeting with the Royal Society of Tasmania Northern Branch

Peter McGoldrick presented a talk titled ‘Tasmania’s oldest fossil’

There was some debate on who was Tasmania’s oldest fossil, but Peter demonstrated that it was indeed *Horodyskia williamsii* discovered in the Rocky Cape Group in north western Tasmania around 2010 by Martin Laan and identified by Clive Calver and Kath Grey.

The presentation outlined the original discovery of *Horodyskia* in mountains of Montana and some controversies surrounding its origins. The presence of these early fossils in both the Belt-Purcell Basin of the USA and in Tasmania were a clue to the early paleogeographic proximity of these regions. Later work on zircons geochronology by Jacob Mulder, Jacqui Halpin and co-workers confirmed that NW Tasmania was close to parts of North America in the mid-Proterozoic.

Horodyskia lived in the so called ‘Boring Billion’ but emerging discoveries of fossils worldwide and advances in genetic modelling are making paleontologist reconsider this time period as critical in the role for the evolution of eukaryotic life.

Peter rounded out his talk with that other historical connection between Tasmania and Montana through the Irish rebel Thomas Francis Meagher who was transported to Van Diemen’s Land, escaped and later became governor of Montana.

Peter displayed excellent examples of the fossils on slabs at the front of the room which were admired by many of the attendees after the talk.

The well received talk entertained 60 participants in the room with 22 online and was reported on in the Examiner (see below).

Tasmania's oldest fossils



We will let you know when the recording of this talk is posted by the Royal Society of Tasmania. In the meantime, you might be interested in this video of Indrani Mukherjee’s talk on a related topic ‘Understanding Early Earth Environments’:

<https://rst.org.au/view-the-recording-of-the-lecture-by-dr-indrani-mukherjee-march2022/>

July Meeting: Talk on the rocks
Student meet industry get together was held in conjunction with AIG at Shambles Brewery in North Hobart

On the 21st of July the GSA Tasmania Division and Australia Institute of Geoscientists (AIG) hosted a student and industry mixer at Shambles Brewery. There was a great turn out of ~40 attendees consisting of members from industry, students and staff from UTAS, and GSA members. It was great to hear the many interesting pathways geology offers in Tasmania from the industry professionals and to see students engage with the industry professionals in discussions about future career pathways. The great atmosphere of the night was well supported by a delicious spread of food provided by Shambles Brewery.

Jeremy Asimus

Other Events

Winter in Tasmania closed with several events allowing our members to showcase Earth Sciences to the public.

The Festival of Bright Ideas was held over two days near the end of August as part of Science Week across Australia. Friday 19th was a schools only day followed by an open day on Saturday the 20th of August. PhD student and budding Earth Science communicator Hannah Moore from CODES/Earth Sciences joined some other young scientists in a stage production that included her take on volcanism and tectonism. Plates collided dramatic (as played by other participants) creating a bit of visual fun for the public.



All things Antarctic were celebrated at the **Antarctic Festival** held on the 24-28th of August in Hobart. The biennial festival is organised by the Mawson’s Hut Foundation

and includes many public events and exhibitions across multiple venues. This year Jacqui Halpin created an Antarctic Rock Exhibition which was enthusiastically run by IMAS/CODES PhD students Jeremy Asimus and Sibebe do Nascimento. Here is Jeremy's take on the display and activities:

The exhibit included a range of sedimentary, igneous and metamorphic hand specimens and thin sections collected from onshore Antarctic and dredged rocks from the Kerguelen Plateau in the Southern Ocean. It was many attendees first time looking at thin section using a petrographic microscope, and most were surprised at how different and artful the microstructural world of rocks can be.

The exhibit also contained a sapphire and zircon panning activity, which was a hit with children once they learned they could take home any gems they uncovered.

A plate tectonic reconstruction video was provided by Sheree Armistead showing the plate motions from 0 to 1000 Ma relative to Tasmania. Earth Sciences kindly loaned their microscopes for the activities. Thanks to all for a fantastic (and messy) exhibit!

Jeremy Asimus



Kids enjoy panning for sapphires and zircons at the Antarctic Festival (Photo provided by J. Asimus)

FREE Training in communications

Take advantage of the offer to GSA members-only to Geologize's critically acclaimed course Practical Geocommunication for 2022 for free! Geologize is a global leader in providing training to geoscientists who wish to communicate more effectively with their audience.

Geologize teaches geoscientists to bring the public to a greater understanding and appreciation of our planet through effective and powerful communication.

When you complete **Practical Geocommunication**, you will receive an accredited CPD-valid certificate.

"Passion. Education. Sustainability. We believe that if people understand how the planet works, they will appreciate and care about it more. Geologize seeks to create and facilitate the creation of tangible and emotional connections between the general public and the world in which they live." Haydon Mort, Geologize.

Contact the GSA: info@gsa.org.au to get your code to this GSA-funded initiative (see flyer at the end of the Newsletter)

STUDENTS

Hello students. Undergraduates will be working hard in the final part of the semester for 2022. We hope you are progressing well in your studies and have enough time up your sleeve to come and join in on the Film Festival Evening next week.



Congratulations ACACIA CLARK who has been awarded the one Endowment Fund prize for a PhD students from across Australia worth **\$5000**.

Student Membership Benefits

Olivia Wilson won the Honours Endowment Scholarship for Tasmania in her honours year in 2020. Despite the lockdowns of that year, she eventually managed to get into the field to spend her money. Olivia is now employed by Entura in Hobart. She was an undergraduate member of the GSA and here is her testament to how it can be helpful for your future.

‘Being a student member of the Geological Society of Australia enriched my experience of studying geology. Especially important to me were the opportunities to make connections and learn about the research of other society members. As a student, it is also invaluable to have an environment in which you can interact with geoscientists from all career stages – hearing their experiences allows you to develop your own career aspirations. GSA membership also demonstrates that you have a level of passion and commitment to your field beyond the compulsory courses in your degree, helping your resume stand out as you transition to professional life.’



Olivia Wilson (supplied by O. Wilson)

You can become a member here <https://www.gsa.org.au/>

Any queries about your membership contact our membership officer Rebecca Carey (Rebecca.Carey@utas.edu.au).

Undergraduate Student Members
Special price on the
Geological Evolution of Tasmania!

Become a GSA Member and you can
obtain ‘The Geological Evolution of
Tasmania’ for \$75 including GST.

[Students Join Here](#)

Once you are complete your membership please contact Caroline Mordant for your special price book. See details below



The flagship publication of the Tasmanian Division of the GSA, ‘The Geological Evolution of Tasmania’ (Special Publication 24 of the GSA) is available for ordering. All details are available on a specific part of the Utas CODES web site: http://www.utas.edu.au/_data/assets/pdf_file/0003/55313/Flyer_Order.pdf

Copies of the book can be obtained personally from Caroline Mordant (publications@CODES.utas.edu.au or phone on +61 3 6226 7537).

Members Price is A\$90 + GST + postage where appropriate. Undergraduate student price is \$75.

Postage can be avoided by buying in person from Caroline Mordant in Earth Sciences (University of Tasmania). The book is also available at Fullers Bookshop and at TMAG in Hobart, and in the Devonport Bookshop, Devonport. Prices at these sites may vary from GSA prices, and the member price is not available at these sites either.

Other Meetings

Other CODES Shortcourse dates available at <https://www.utas.edu.au/codes>

16th September AusIMM Student Meets Industry Night Royal Yacht Club. For more information [Tasmania Student Chapter – c \(ausimm.com\)](http://Tasmania_Student_Chapter_-_c(ausimm.com))

22-24 November 2022 SGTSG Field meeting King Island Postponed from February 2022. Biennial meeting at King Island to discuss the latest research and developments in tectonics and structural geology with 3 half day field trips. Limited to 60 people. For more details: <http://www.sgtsg.org>

November 30th

One day online AIG Workshop ‘The Project Geologists Toolkit’ For more information check out this website <https://www.aig.org.au/events/project-geologists-toolkit-30-november-2022/>

Final Words

From Noel Kemp

*Could this be the answer to the oldest fossil?
Has Irish connections too!*



GSA Tasmania Division Committee 2022-2023

Chair: Karin Orth

Secretary: Sebastien Meffre

Sebastien.Meffre@utas.edu.au

Treasurer: Claire Kain

Committee Members:

Sheree Armistead
Jeremy Asimus
Rebecca Carey (Membership)
Acacia Clark (Student Rep)
Jacqueline Halpin
Wei Xuen Heng
Claire Kain (Geotourism)
Peter McGoldrick
Sebastien Meffre
Phil Sansom (Education)
Olivia Wilson

Geological Society of Australia website:

www.gsa.org

and our own website

<http://www.gsatasmania.org>

Any news, announcements or interesting photographs of Tasmanian Geology you would like to include in the next Newsletter, please send it through via email to karin.orth@utas.edu.au prior to the 8th of August 2022

GEOLOGIZE

NOW FREE FOR GSA MEMBERS

Do you want to strengthen your geoscience communication skills? Maybe you want to educate a non-specialist audience about why geoscience is important.

*If you do, take advantage of the GSA members-only license to Geologize's critically acclaimed course **Practical Geocommunication** for 2022 for **FREE!***

Geologize is a global leader in providing training to geoscientists who wish to communicate more effectively with their audience.

Geologize teaches geoscientists to bring the public to a greater understanding and appreciation of our planet through effective and powerful communication.

*When you complete **Practical Geocommunication**, you will receive an accredited CPD-valid certificate.*

What do you need to do next?

Contact the GSA: info@gsa.org.au to get your code to this GSA-funded initiative.

"Passion. Education. Sustainability. We believe that if people understand how the planet works, they will appreciate and care about it more. Geologize seeks to create and facilitate the creation of tangible and emotional connections between the general public and the world in which they live." Haydon Mort, Geologize.



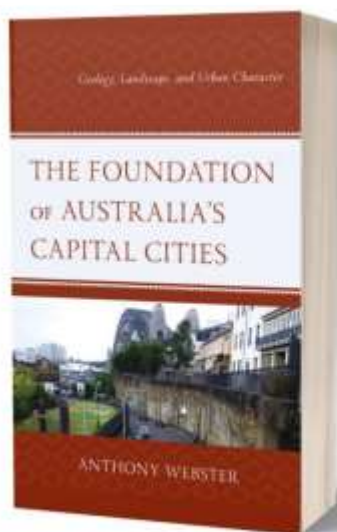
NEW FROM
LEXINGTON BOOKS



GET 30% OFF

THE FOUNDATION OF AUSTRALIA'S CAPITAL CITIES: GEOLOGY, LANDSCAPE, AND URBAN CHARACTER

By **Anthony Webster**



“Webster has adopted a novel and extremely interesting approach in this book, which discusses the siting of the major cities of Australia. Tony has blended a plethora of rich historical accounts with a detailed discussion of the controlling local features of water supply, physiography, landscape and geology to provide a comprehensive and thought provoking account of the establishment and growth of our capital cities. I can highly recommend this book to all who are interested in Australian settlement history and the factors that affected the establishment of our major urban centres.”

— Ross Large, University of Tasmania

ABOUT THIS BOOK

The Foundation of Australia's Capital Cities is the story of how the places chosen for Australia's seven colonial capitals came to shape their unique urban character and built environments. Tony Webster traces the effects of each city's geologically diverse coastal or riverine landform and the local natural materials that were available for construction, highlighting how the geology and original landforms resulted in development patterns that have persisted today.

ABOUT THE AUTHOR

Anthony (Tony) Webster is adjunct senior lecturer of geology at the Centre for Ore Deposits and Earth Sciences (CODES), University of Tasmania and honorary senior research fellow at the Sustainable Minerals Institute (SMI), University of Queensland.

TABLE OF CONTENTS

- Chapter 1. Sandstone Harbor: Sydney, New South Wales, 1788
- Chapter 2. On the Edge of the Graben: Hobart, Van Diemen's Land 1803-04
- Chapter 3. Ridgelines and Waterways: Brisbane, Queensland, 1825
- Chapter 4. Limestone and Lakes: Perth, Western Australia, 1829
- Chapter 5. On the Edge of the Delta: Melbourne, Victoria, 1835
- Chapter 6. The Woodland Plain: Adelaide, South Australia, 1836
- Chapter 7. The Northern Outpost: Darwin, Northern Territory, 1869
- Chapter 8. Geology, Landscape and Australian Cities

Hardback:	ISBN 978-1-4985-9795-1	March 2022	Regular price: \$120.00, £92.00	After discount: \$84.00, £64.40
ebook:	ISBN 978-1-4985-9796-8	March 2022	Regular price: \$45.00, £35.00	After discount: \$31.50, £24.50

*eBooks can only be ordered online.

Website: <https://Rowman.com/Lexington>

For hardcopy orders to Australia and New Zealand, orders need to be placed through calling or email our customer service department at orders@rowman.com or by phone at 1-800-462-6420.

For 30% discount on hardcopies: Contact the UK distributor by email and then quote the discount code **LXFANDF30. You can order the eBook from the US web site: www.rowman.com/ebooks**

Tasmanian Geoscience Forum 2022



GSA Tasmania Division, AusIMM and AIG are proud to bring you the

12th Tasmanian Geoscience Forum

WHEN

**Thursday 1st of December 2022
9AM – 5 PM**

VENUE

**Tullah Lakeside Lodge
Cnr Meredith Street &, Farrell Street Tullah TAS 7321**

Field Trip options on the Friday 2nd Dec TBA

Registrations are open

Please visit the website below for more information

<https://www.ausimm.com/conferences-and-events/community-events-details/12th-annual-tasmanian-geoscience-forum-geobash/>