



RGSQ Bulletin

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Patron: [Her Excellency the Honourable Dr Jeannette Young AC PSM, Governor of Queensland](#)

President: Mr John Tasker

What's happening on Council?

The Society's 'old' Council met on Tuesday 18 October prior to the AGM. Items of interest include:

- The meeting to review the strategic plan, including input from the member survey, would be held in November.
- The Society would take advantage of a CBA rollover offer, in order to maximise income.
- The November lecture on the 2021 Census results had been delayed a week (to 8 November) to suit the availability of the lecturer.
- Work had started on the 2023 programme of activities, coordinating the Society's various committees and groups.
- The Australian Geography Competition has a new advertising banner. It was part of the Competition's display at the Australian Geography Teachers' Association Conference.
- The University of NSW and Monash University have agreed to sponsor the 2023 Competition. Other sponsorship proposals are still in abeyance.
- Kerry Raymond has joined the Collections Committee.
- The Collections Committee is preparing three policies: Collections Development; Acquisitions and Accessioning; Deaccessioning, Transfer Out and Disposal.
- Most of the glass slide collection is ready to be transferred to the State Library of Qld with the Society having access to digital copies.
- Entries were coming in for the photo competition "Waterways or Wetlands of Qld".
- Digital copies of all the Society's Scientific Study Reports were now publicly available via the University of Queensland website.
- Mapping of the Binna Burra trails was almost complete.
- Information on the climate forum had been widely circulated to increase participation.

The Society's 'new' Council met immediately after AGM. Annie Lau was appointed Treasurer and Kath Berg Secretary. The position of Vice-President is vacant.

For further information on any item, please talk to a Society Councillor at a trip or lecture or send an email to info@rgsq.org.au.

2022-23 Council

Membership of the Society's 2022-23 Council is:

John Tasker *President*
Kath Berg *Secretary*
Annie Lau *Treasurer*
Iraphne Childs *Immediate Past President*
Duncan Cook
Rob Cook
Patrick Moss
Giselle Pickering
Kerry Raymond
Stephen Schwer
Pamela Tonkin

Council appreciates the service of Jonathan Corcoran and Steve Turton, who did not stand for re-election, and welcomes new Councillors, Duncan Cook, Kerry Raymond and Stephen Schwer.

WHAT'S ON

For all upcoming RGSQ events, please visit the Society's website www.rgsq.org.au under 'What's On'.



2022 Christmas Party Tuesday 6 December

The Treks and Activities Committee welcomes you to the 2022 Christmas party to be held at Society's premises, level 1/28 Fortescue St, Spring Hill, on Tuesday 6th December starting 7.30pm.

Christmas cake, tea and coffee and wine/beer/soft drinks will be provided. *Please consider bringing a plate to share.*

Short presentations (shorter than last year, so there is a good time to socialise!) will be given covering the Society's events during 2022.

This is a free event for members and \$10 for non-members and guests.

Register: <https://rgsq.org.au/event-5010484>

Monthly Lecture

Results from the Pandemic Census: Migration, Housing and Work

by **Dr Elin Charles-Edwards**

Tuesday 8 November @7:30pm
on premises and via Zoom

Register: <https://rgsq.org.au/event-5003846>



The 18th Australian Census of Population and Housing, conducted on the 10th of August 2021, was undertaken when large segments of the Australian population were under COVID-19 lockdown restrictions. As a consequence, the 2021 Census provides a unique snapshot of the impacts of COVID-19 on Australians: how we live and how we work. In this presentation, we explore the impacts of COVID-19 on migration, housing, and the journey to work and discuss whether these represent a permanent or ephemeral change in Australia's population geography.



Dr Elin Charles-Edwards is a population geographer and demographer. Her research is focused on understanding patterns, processes and determinants of human migration and mobility and its impacts on local and regional populations. Dr Charles-Edwards has provided expert advice to a

range of government bodies on issues relating to migration and population dynamics. Highlights include the provision of advice to the **Australian Commonwealth Treasury** on the impact of COVID-19 on internal migration within Australia, and her appointment to the **NSW COVID-19 Populations Advisory Group** to help set assumptions for their 2020-21 population projections.

She is a member of the **Southeast Queensland Housing Supply Expert Panel** which provides advice to the Queensland Government on measuring, reporting and addressing land supply, development and housing affordability issues in South-East Queensland

Please note: If you have registered to attend the lecture via Zoom, the lecture link will be emailed to all registrants closer to the lecture date. This lecture may be recorded. If you have any questions, please email us at info@rgsq.org.au.

Map Group Presentation

Mapping for Recreation and Travel

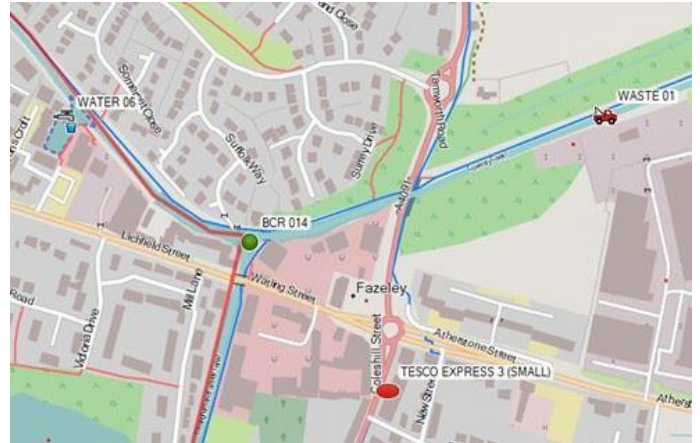
presentation by **Bob Reid**, RGSQ member

15 November, 10:00am – 12:00pm

Gregory Place, 1/28 Fortescue St, Spring Hill

Register: <https://rgsq.org.au/event-4938071>

Plan where to go and stay on your next holiday on your desktop computer.



Overview: Bob Reid started work as a soil scientist looking at soil types and their distribution in the landscape. He worked with aerial photographs and topographic maps to locate the sites where he was digging and describing the soil and used observed contours, tonal differences, and vegetation patterns in air photos, often viewed stereoscopically, to delineate soil types. Cartographers would then prepare soil maps for printing on a cadastral or topographic base.

In retirement, Bob uses PC-based and online interactive mapping resources to plan and record bushwalks and travel, both in Australia and overseas. Planning is done on-screen to produce material that can be downloaded to a hand-held GPS or printed. Printed maps are taken into the field to give the bigger picture along with a compass as a navigation backup. On the holiday, GPS traces and waypoints marked in the field to provide a record of the trip.

Bob will talk about:

- base mapping for different purposes
- the type of information included in planning maps
- how to find pre-trip information
- what post-trip information is included in maps
- how maps are developed

Cost: \$2.00 towards morning tea

Limit: 30; registration on the website required at: <https://rgsq.org.au/event-4938071>

Coordinator: Len Lowry

Geography in Conversation

The Bribie Island Breakthrough

29 November, 5:30pm – 8:00pm

Gregory Place, Level 1/28 Fortescue St, Spring Hill

Register: <https://rgsq.org.au/event-5006642>



Photo supplied by Coast Guard Caloundra

The Bribie Island Breakthrough, with guest speakers, **Dr Javier Leon**, Geologist and coastal erosion expert, University of the Sunshine Coast, **Mr Roger Pearce**, Flotilla Commander, Coast Guard Caloundra, **Mr Michael Ogden**, Bribie Island Environmental Protection Association and **Mr Ken Mewburn AM**, Take Action for Pumicestone Passage Inc.

In late 2021 Cyclone Seth waves carved a channel through the northern end of fragile Bribie Island. The new channel approximately 400 metres wide and growing has broken Woorim Beach into two parts. Waves are now surging into the Pumicestone Passage and endangering the Golden Beach foreshore. All expert eyes are on the developing dynamic situation, with it hard to predict what will happen in the future.

The Q & A forum will enable you to ask questions of Javier on the coastal geomorphology, wave actions and effects of east coast lows on the dynamic erosion taking place. The real issues on the water for the Coast Guard will be addressed by Roger and Michael and Ken will enlighten us on the environmental impact the breakthrough is having on Bribie Island, the Pumicestone Passage and Golden Beach. How will this end?

Come along for light refreshments before settling in for an informed conversation on a topic which will be changing as we speak.

This will be the last Geography in Conversation for 2022 so we hope to see you there to help wind-up the year.

Members and registrants please post your questions on notice to the GIC forum:

<https://rgsq.org.au/geographyinconversation/>

OR non-members

Email: questionsonnotice@gmail.com

Time: 5:30 light refreshments – doors open at 5:15

Q&A Forum 6:00 – 7:30

Cost: \$5.00 for refreshments, included in registration

Cost: \$5:00 Members

\$10:00 Non-members



Treks and Activities

Report: Central Queensland trek

On 5th September, 16 members of the Society left Monto on a seven-day tagalong trek (nine vehicles with four caravans) focussing on the geographical aspects of Landscapes and Industry in eastern Central Queensland staying overnight at Mount Morgan, Rockhampton and Gladstone.

From Monto, we went to Cania Gorge – the most easterly expression of the Central Queensland sandstone province of which Carnarvon Gorge is the most well-known example.

The Callide Lookout introduced us to the Callide power generation plants and adjacent coal mines.

On the road north from Biloela, we passed many fields with crops such as wheat and Leucaena (a legume grown for cattle forage). Nonetheless, beef cattle grazing was the predominant agricultural activity



The RGSQ group in Gladstone with the tour bus.

In Mount Morgan, we observed the former gold mine from lookouts and learnt about the former rack railway and the town's history.

The group visited three Tropic of Capricorn markers in Gracemere and Rockhampton and discovered that they are all at slightly different latitudes! (See footnote)

At Mt Archer, we had magnificent views of the country around Rockhampton, including a great meander in the Fitzroy River and, in the distance, Stanwell Power Station.

For most of its length, the trek passed through the Fitzroy River Basin. The group visited the Flow Centre of the Fitzroy Basin Association for a very informative talk about the basin, accompanied by maps presented on an electronic screen.

At the Queensland Parks and Wildlife Service in North Rockhampton, we learnt about threatened species research (bats, wallabies, wombats) from a Senior Conservation Officer and the story of the Mount Etna caves campaign – a very valuable introduction to environmental issues for the region.

At the Capricorn Caves, we toured the Cathedral Cave, part of the limestone province which Mt Etna is part of.

By contrast, as we travelled towards Yeppoon, we observed the dozen or so volcanic plugs of the Mount Hedlow trachyte. They were reminiscent of the Glasshouse Mountains, only 40-50 million years older!! At Wreck Point near Yeppoon, we viewed islands (such as Great Keppel) which are the tips of peaks now largely

submerged by sea-level rise since the last glacial maximum.

On the way to Gladstone, we were made aware of the complex Fitzroy estuary, saltworks, the Bajool explosives reserve, natural gas pipelines, the extensive rail network (think coal exports), and the seismic activity of the region. The East Shores development in Gladstone is an impressive public space. At the Gladstone Maritime Museum, we learnt of the importance of sea transport in addressing the economic geography of Queensland.

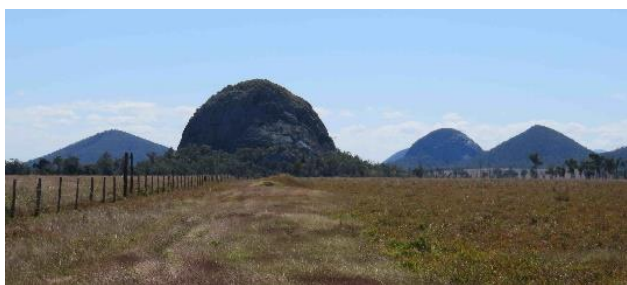
The enormous extent of heavy industry in Gladstone – both current and planned – was brought home to the group by a bus tour and a harbour cruise – both with expert local commentary. After passing the Gladstone Power Station, the bus tour passed through the State Development Area to the north (Yarwun and Aldoga) where a green hydrogen plant ('Twiggy' Forrest) and a major solar farm are planned for the near future. To the south, we passed older alumina and aluminium industries. The harbour cruise passed the three liquid natural gas plants on Curtis Island as well as the two coal-loading terminals on the mainland.

The influence of geography in determining relationships affecting the industrial development of the region was clear. Overall, the participants enjoyed a wide variety of geographical sights and experiences – landscapes, agriculture, mining, transport, and heavy industry. And the camaraderie was great!

Contributed by: *Ralph Carlisle, Trek Leader*

Footnote: Because of a wobble in Earth's axis, the Tropic moves over a range of about 2.4 degrees over 41,000 years. It is currently moving north at about half an arcsecond per year – about 15 metres per year. So, no marker can be totally accurate for very long. The 'old' marker in Rockhampton appears to be the most accurate at present being at 23° 26'17" S – the Tropic being currently at 23°26'10.8".

https://en.wikipedia.org/wiki/Tropic_of_Capricorn
https://en.wikipedia.org/wiki/Circle_of_latitude#Movement_of_the_Tropical_and_Polar_circles



Some of the Mt Hedlow trachyte plugs near Yeppoon



Gladstone Harbour from Round Hill

Photos were taken by Iraphne Childs, Ralph Carlisle and Darryl Branthwaite.

Report: Map Group Presentation



L-R: Keith Treschman and Neville McManimm (RGSQ Map Group), courtesy of Kay Rees

This was a well-attended presentation and Keith indicated that before he prepared this presentation, he knew very little about the world's seabed.

The most surprising statistic was that only about 20-24% of the seabed has been mapped as of 2022. Many of us have seen the National Geographic magazine's presentation of the seabed (some research done between the 1960s and the 1980s), but it is really an "artist's impression" versus actually mapped.

The Nippon Foundation was formed in 1952 and the Japanese have undertaken a lot of various initiatives since then. The GEBCO (General Bathymetric Charts of the Oceans organization) was founded in 1903 in Monaco and by 1905 it had produced its first chart. In 2018, it teamed up with the Nippon Foundation to participate in mapping the seabed.

Mapping the seabed is quite important as the world's scientists know more about the solar system and the universe than the actual seabed of the world. COVID slowed down the mapping process over the past 3 years, but now it has resumed and if the 'deadline of 2030' is not met, it will likely be met a few years later.

Keith explained that measuring ocean depth has been going on for centuries and the techniques used have become far more accurate. They started with weighted ropes; then onto the following: piano wire; the single-beam echo sounding; the multi-beam echo sounding; LIDAR (early 21st century), and, currently, satellite imaging (Satellite Altimetry Radar – accurate up to 2-4 mm, but on a 10 km by 10 km grid).

As part of the mapping process, the world's oceans have been divided into four regions, with various centers across the world undertaking the detailed work (e.g. Wellington, New Zealand - South and West Pacific Ocean region, as Wellington is a major volcanic research center at world level).

Keith's presentation had a lot more information in it – this summary only covers some key points. It was a most enjoyable presentation and shows that Map Group can deal with various topics.

Contributed by: *Bob Abnett, member of Map Group*

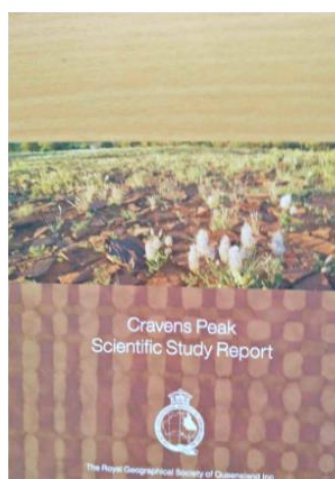
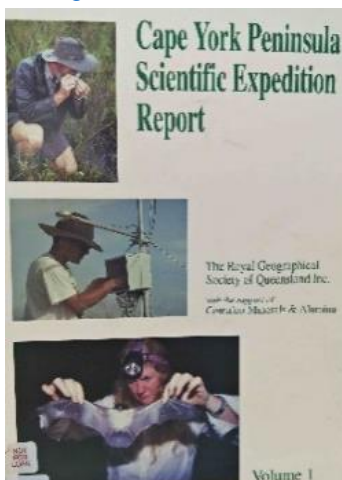
RGSQ SCIENTIFIC STUDIES REPORTS NOW PUBLICLY AVAILABLE ONLINE

The RGSQ is proud of its ability to help scientists access isolated areas and also to facilitate valuable, cross-disciplinary exchange of information. Enduring thanks to all RGSQ members who have participated, volunteering time and expertise, to make the expeditions possible. The reports are held in hard copy in the RGSQ library, at the State Library of Qld and some at the University of Qld library. There are a few spare hard copies and CDs of some reports available free of charge for members. If you are interested in any, please contact Iraphne at i.childs@uq.edu.au.

The RGSQ Publications Committee has been working towards making electronic versions of the RGSQ Scientific Expedition Reports publicly available online. This will help showcase to a wider public the Society's support for scientific research over the past 20 years in remote locations. We have negotiated with the University of Queensland library to upload the reports to the library's **eSpace** – an open access repository of research materials. Thanks to **UQ librarians Kellie Ashley**, liaison librarian with the School of Earth and Environmental Sciences, **Tracey Powell** eSpace librarian and **Dulcie Stewart**, Metadata Creation Officer for their help in digitising and making these reports available via eSpace.

The reports can now be found in eSpace via the following links:

- **Cape York Peninsula Heathlands** (in the wet season) Vols.1 & 2, 1992; [Cape York Peninsula Scientific Expedition](#)
- **Musselbrook Reserve, Lawn Hill National Park**, 1995; [Musselbrook Reserve report](#)
- **Herald Cay**, Coral Sea Islands Territory, 1997 [Herald Cays report](#)
- **White Mountains National Park**, near Hughenden, 2000; [White Mountain Scientific study](#)
- **Gulf of Carpentaria, Sweers Island and Pennefather River**, 2002; [Gulf of Carpentaria Scientific report](#)
- **Cravens Peak**, south-west Queensland, 2007; [Cravens Peak Scientific report](#)
- **Pungalina Seven-Emu, Northern Territory**, 2012; [Pungalina Wetlands Scientific study](#)



Report: Geography in Conversation Brisbane Population Growth to 2030



Greater Brisbane's ability to absorb an additional one million people by 2030 was examined during the latest Geography in Conversation event held on 28 September. Moderated by Graeme and Stella Rush, the three-member panel consisted of Dr Heather Shearer (Griffith University Cities Research Institute), Dr John Cowie (Manager, City Planning and Economic Development, Brisbane City Council) and Dr Amy MacMahon MP (State Member for South Brisbane).

The audience were keen for answers on how planners and governments intend to manage this significant increase in population. Topics raised included housing affordability, noise pollution and house design, infrastructure charges, the 2032 Olympics and flood risk.

The need to promote higher density living was a common theme in the discussion. Brisbane's current pattern of low density detached housing is an inefficient use of available land and disconnected from where people work and spend their leisure time. A transition to higher density living in middle ring suburbs is required to accommodate more people in the existing urban footprint and offer a more sustainable lifestyle. Post-pandemic trends towards more working from home could stimulate the decentralisation of businesses and public services away from the CBD, however Dr Cowie noted that Council's data indicates that such a trend is not yet permanent.

Dr Shearer summarised the necessary combination to trigger a change in population density as one of "public luxury and private sufficiency" and an attractive vision emerged from the contributions of panellists and the audience of what this could look like in Brisbane.

Geography in Conversation participants will be monitoring developments closely as the bigger, busier Brisbane of the future takes shape to see if their preferred city of taller, mixed use buildings clustered around public green space and reliable public and active transport infrastructure emerges.

Photo courtesy of John Tasker.

Contributed by: Riley Kernaghan, Co-convenor
Geography in Conversation

WELCOME NEW MEMBERS

We have much pleasure in welcoming *Matthew Burke, Franz Pinz, Madison Bland, and Hexia Zhang*, as new members. We hope your association with your new Society is long and mutually enjoyable.

Contributors

Bob Abnett, Kath Berg, Ralph Carlisle, Iraphne Childs, Elin-Charles Edwards, Riley Kernaghan, Len Lowry, Bob Reid, Chris Spriggs, Pamela Tonkin

A recording of the October lecture **Reclaiming lost ground: Transitions of mobility and parking** presented by Professor Jonathan Corcoran and Dr Iraphne Childs can be found on the Society's YouTube channel: <https://youtu.be/9flmPgwE38M> and our website: <https://rgsq.org.au/Past-lectures-2022>

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Meeting/Lecture: Tue 8 November

Results from the Pandemic Census: Migration, Housing and Work, by Dr Elin Charles-Edwards

Map Group: Tue 15 November

Mapping for Recreation and Travel
by Bob Reid, RGSQ member

Geography in Conversation: Tue 29 November

The Bribe Island Breakthrough

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The November Council will meet on the third Tuesday of the month.

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