



RGSQ Bulletin

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Patron: [H.E. Paul de Jersey AC, Governor of Queensland](#)

President: Dr Iraphne Childs

From the President

Dear Members, welcome to winter! In Brisbane we remain relatively warm compared with really cold parts of Australia, but westerly winds at this time of the year can make a big difference to how cold we feel in Southeast Queensland. In early June snow fell near Stanthorpe and the granite belt and wind gusts lowered temperatures across southern Queensland. A wind chill on June 4th caused the apparent temperature at Toowoomba to plummet to minus 5 degrees at 6.00am, and minus 4.4 in Applethorpe at 6:30am. Meanwhile, at the Brisbane Airport the apparent temperature was 1.9 degrees, while the actual temperature was 10.5 degrees due to 46 kilometres per hour wind gusts. Snowfall was also recorded in the Blue Mountains and Central Tablelands in New South Wales, with heavy snow in Alpine areas – good for an early start to the ski season.



Snow at Pyramids Road near Girraween National Park just after sunrise. ABC News, June 4, photo local resident Glenda Riley.

Representing RGSQ at Queensland's Government House: On Monday 10th June, Ralph and I attended a reception to celebrate the official birthday of Her Majesty Queen Elizabeth II. On Thursday 13th June, Councillors Neal O'Connor, John Tasker and I attended a reception to launch the Queensland Science Network (QSN), an initiative of the Royal Society of Queensland. RGSQ is a member of the QSN. On both occasions it was a great honour to represent RGSQ.

Special lecture on Thursday 27th June: "In the wake of the first Australians - Voyaging a Bamboo Raft from Timor to Australia". This event is presented jointly by the RGSQ and The Royal Society of Queensland. The presenter, Glenn Marshall, a member of the *First Mariners* organisation, will be part of the team in February 2020 which will construct and sail a bamboo raft from Timor to Darwin, aiming to re-enact the first ocean crossings by people to Australia 70,000 years ago. The presentation will outline details of the voyage plus discussion of archaeological, genetic, rock art and other evidence about the ancient maritime culture in the islands of Indonesia. There will be a charge for this lecture of \$5 for RGSQ and RSQ members, \$10 for non-members. If you would like to attend this event please register and pay via the RGSQ website.

Official opening of Gregory Place, Thursday July 18th: RGSQ members are invited to attend the official opening of 'Gregory Place', the Society's new home, by His Excellency the Hon. Paul de Jersey AC, Governor of Queensland and Patron of RGSQ. There will be a number of invited special guests as well as RGSQ members attending this event. Please note that as seating for this event is strictly limited, members are asked to register in advance via the RGSQ website. The Governor will arrive at 5pm and, because of the protocols involved with his visit, we ask that everyone attending **arrive at RGSQ premises no later than 4:30pm and be seated by 4.45pm. Arrivals after 4:30pm will not be admitted.**

See further details of both these events in this Bulletin and on the RGSQ website <https://rgsq.org.au/whatson>

References

Snow falls near Stanthorpe as wind gusts lower temperature; ABC News, 4 June, 2019
<https://www.abc.net.au/news/2019-06-04/snow-falling-in-stanthorpe-cold-weather-queensland/11174962>

Iraphne Childs, RGSQ President

CONTRIBUTORS

Mary Comer, IrAPHNE Childs, Audrey Johnston, Ian Francis, Ken Granger, Wayne Mackenzie, Glenn Marshall, Michael Milford, Chris Spriggs, Ian Stehbins & Coral Expeditions

PHOTOGRAPHY

Ken Granger, Michael Milford, Glenn Marshall, Ian Francis, Kay Rees, Chris Spriggs

JULY 2019 MONTHLY LECTURE

"How Brains, Robots and Autonomous Vehicles Map the World"

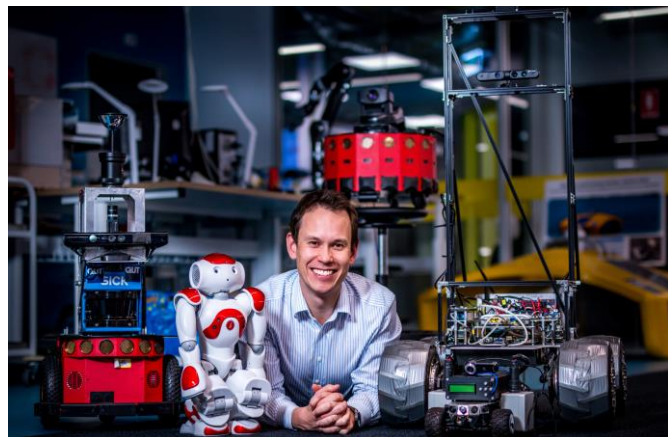
Presentation by Professor Michael Milford

Date: Tuesday, July 2

Time: 7.30pm-9pm

Venue: [Gregory Place, Level 1, 28 Fortescue St, Spring Hill](#)

RSVP: <https://rgsq.org.au/event-3319250>



Professor Milford conducts interdisciplinary research at the boundary between robotics, neuroscience and computer vision and is a multi-award winning educational entrepreneur. His research models the neural mechanisms in the brain underlying tasks like navigation and perception to develop new technologies in challenging application domains such as all-weather, anytime positioning for autonomous vehicles. He is also one of Australia's most in demand experts in technologies including self-driving cars, robotics and artificial intelligence, and is a passionate science communicator. He currently holds the position of Professor at QUT, as well as ARC Future Fellow, Microsoft Research Faculty Fellow and Chief Investigator at the Australian Centre for Robotic Vision.

Presentation: The goal of Michael's research is to understand the fundamental nature of intelligence, so that we can both shed light on how the brain functions, and create intelligent, autonomous systems that transform society. We draw inspiration from the amazing natural world including animal species like rats, insects, primates and humans, combined with robots, algorithms, innovative sensing modalities, computational neuroscience and artificial neural networks of all types. Michael will summarize a roboticist's perspective on the neuroscience underlying one of the most well understood aspects of intelligence – spatial intelligence and perception – and describe how we have adapted this knowledge to create landmark robotics advances including RatSLAM's mapping of an entire suburb using only webcam, persistent long term robot navigation autonomy trials and robust anytime localization. Finally, Michael will highlight how we are translating fundamental transdisciplinary science into industrial applications, working with major multinational companies in domains including autonomous vehicles and automated hazard detection. He will also provide a brief overview of the incredible trends in technologies around robotics, autonomous vehicles and artificial intelligence occurring globally.

Photo: Professor of Robotics Michael Milford

"IN THE WAKE OF THE FIRST AUSTRALIANS"



Voyaging a Bamboo Raft from Timor to Australia

Presentation by Glenn Marshall

Date: Thursdays, 27 June

Time: 7:30 pm – 9 pm

Venue: [Gregory Place, Level 1, 28 Fortescue St, Spring Hill](#)

Register and pay: www.rgsq.org.au

In Feb 2020, a group of re-enactment archaeologists will construct and sail a bamboo raft from Timor to Darwin. They aim to re-enact the first ocean crossings by people to Australia 70,000 years ago.

Glenn Marshall is part of the team. Hear Glenn describe this scientific and adventure expedition which aims to shed light on the types of watercraft people may have used and the conditions/risks they dealt with. The presentation will outline details of the voyage plus archaeological, genetic, rock art and other evidence about the world's first truly maritime culture in the islands of Indonesia.

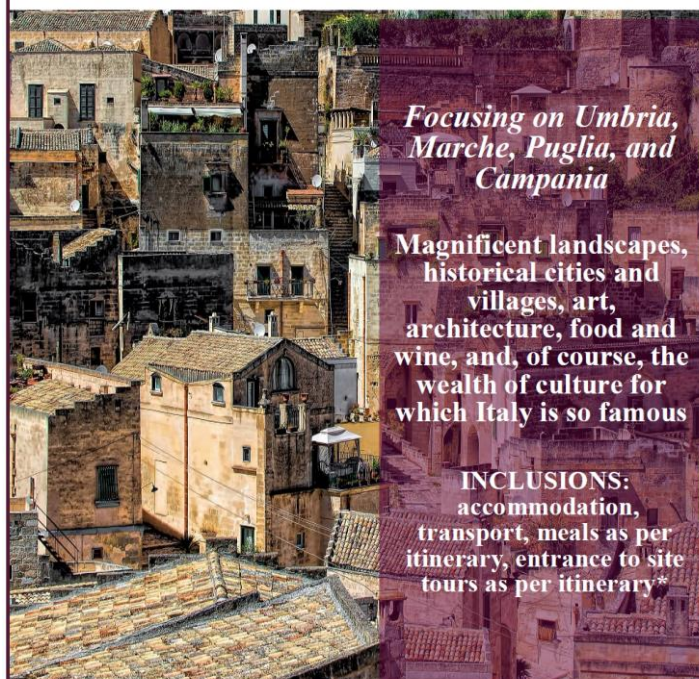


t: 07 3368 2066 | e: info@rgsq.org.au

Expression of Interest

BELLA ITALIA TOUR

16 days - depart 7 September 2020



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Magnificent landscapes, historical cities and villages, art, architecture, food and wine, and, of course, the wealth of culture for which Italy is so famous

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accommodation, transport, meals as per itinerary, entrance to site tours as per itinerary*

Price: approximately \$11,450 per person twin share, single supplement approximately \$2285 per person, to be confirmed. Tour departure subject to minimum numbers. RGSQ Traveller will inform you promptly as soon as we have sufficient numbers. Accommodation subject to change and availability. For further information, including a copy of the draft proposed itinerary* please contact RGSQ Traveller. If you are interested, it is paramount that you forward your expression of interest to RGSQ Traveller by July 10th as it is our intention to advertise in mainstream media.



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Society of Queensland**
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<https://www.coralexpeditions.com/au/special-offers/>

UPCOMING EVENTS



In the past month, we have had a very good bushwalk at O'Reilly's in the Lamington Plateau and an excellent visit to Cobb & Co, Toowoomba. Visit reports are in this Bulletin.

There are plenty of places left for the NAIDOC Week event at Redcliffe on Thursday July 11th where we will learn about and taste bush tucker with indigenous presenters. Also, please register asap for the weekend treks to Yabba Falls in July and August. A walk at Binna Burra has been organised for Saturday 14th September with a guest geologist attending. Some new events have been posted on the website for November. A weekend trip to Gympie and surrounds is planned for the first weekend in November and a one day trip to St Helena Island National Park in Moreton Bay will take place on 23rd November.

Advanced notice is given for a major trip to Alice Springs with the intention of visiting the Geographical Centre of Australia as well as many local attractions in the area (Uluru, King's Canyon, Coober Pedy, etc) and down to Adelaide. This trip should fill up very quickly so expressions of interest can be registered on the website with no charge at present. The first deposit is due in September 2019 with the trek taking place in September 2020. Full details of this trip and all the others are on the website under the Events List.

It is preferable to register and pay through the website <https://rgsq.org.au/eventscalendar> or alternatively with the office on 3368 2066.

JULY 11 NAIDOC Week at Redcliffe

Help celebrate NAIDOC week with a talk and demonstration about growing and using bush foods

WHERE: Redcliffe Library, corner Oxley Ave and Downs Street (street parking or under the building)

TIME: Arrive by 9.45am for a 10.00am start

COST: Members \$15.00, Non-members \$18

BOOK: Preferably online at <http://rgsq.org.au/whatson> or with the office at 3368 2066

Nowadays, NAIDOC WEEK is held not only by indigenous people, but by people from all walks of life. It celebrates the history, culture and achievements of Aboriginal and Torres Strait Islander People. Our guest speaker, Veronica Cougar, owns a bush foods nursery at Obi Obi. She is a very knowledgeable and enthusiastic speaker. We will learn how to propagate, grow and use bush foods. We will taste a variety of foods and even have the opportunity to buy some plants.

Bring or buy lunch to enjoy by the Bayside, then we can explore the Redcliffe Botanical Gardens only a short drive away. It contains a wide variety of plants, some of local origin. Look forward to your company and bring your friends.

Coordinator: Audrey Johnston

UPPER YABBA VALLEY WEEKEND TREKS

TREK A July 20-21, 2019: Baiyambora Gorge, Gates of Yabba & Yabba Falls

TREK B August 9-11, 2019: Two Gorges: Yabba Falls & Kingaham Gorge

These trek weekends are an activity of The Royal Geographical Society of Queensland.

Please register at <https://rgsq.org.au/whatson>.

TREK A July 20-21: YABBA FALLS Baiyambora Gorge, Gates of Yabba & Fishermans Spur (return Day Hike) & Yabba Falls (Field Day)

SATURDAY 20th - RETURN DAY HIKE: Good fitness required

To enter into the Baiyambora Gorge is to enter into majesty! It is a 9km day hike. The descent is 300m down a spur then following the creek and gorge upstream into Gates of Yabba with access to the foot of Yabba Falls and the Primaeval Forest.

SATURDAY 20th - ADVENTURE OPTION THROUGH HIKE including abseiling descents: the experience of standing beside Top Pool looking up at the plunging falls is unforgettable. To explore The Showerroom is a must. To do science down there measuring girth of towering hoop pines, or recording fungi, is important research. *Maximum for 5 people.*

Abseiling will be provided by qualified abseiling guides (Climbing Guides Australia). There will be two descents each between 40 and 60 metres. Those doing abseiling must be prepared to walk out from the base of the falls along a creek bed. This is about a 4km walk, ascending 300m, although alternative steeper ascents are possible.

Abseiling Cost: \$180 each (GST Incl), includes insurance for this activity.

Pre-booking and prior payment essential for this option.

The group of abseilers will meet up with the hikers and leave the gorge together.

SUNDAY 21st - YABBA FALLS: Described by the custodians of Conondale Conservation as "Booloomba on steroids!". It will be a gentler day than the previous one. The falls will be viewed from the plateau, looking down into the gorge from different vantage points above Top Plunge, through Eye of the Needle, from Superb Corner Lookout and Weaner Rock.

TREK B August 9-11, 2019: Two Gorges

SATURDAY 10th - BAIYAMBORA GORGE & YABBA FALLS

There is much to discover and wonderful landscapes to assess. The main hike is challenging, but safe. It is a 9km day hike. The descent is 300m down a spur then following the creek and gorge upstream into Gates of Yabba with access to the foot of Yabba Falls, and the Primaeval Forest.

SUNDAY 11th - KINGAHAM GORGE FIELD DAY

Today the bushwalking will take us into another environment with different geology and landforms including a series of waterfalls, pools and puzzles: Two Step Falls, The Ballroom Pool, Ochre Falls, Broken Mirror Falls, Masons Quarry, Broken Femur Falls, The Greenstone Crater. Only moderate fitness required for this day, which can be tailored for your level of agility.

FITNESS: The weekend is appropriate for people with good bushwalking fitness and endurance, though a range of fitness levels can be catered for by some tailoring of the program:

1. easy but rough walk to top of Yabba Falls and Weaner Rock;
2. moderate challenge due to length of slopes gives access into Upper Yabba country and into Gates of Yabba and Baiyambora Gorge;
3. challenging hike (9km return with 300m descent and return ascent) into Gates of Yabba with access to the foot of Yabba Falls, and the Primaeval Forest.

There is no current infrastructure (e.g. paths, safety fences), so caution must be exercised especially in rock locations and cliff areas. Comfortable and sturdy shoes should be worn while walking, a hat, sunscreen and water are imperative.

LOCATION: People need to assemble at Borumba Deer Park, Yabba Creek Road, Imbil by 7.30am on the Saturday morning and again on the Sunday morning. This trek will involve two days, returning to Imbil on both days. Access to the field site from Imbil requires a 4WD vehicle, so we will be carpooling for those who do not have a 4WD. Please advise if you have a 4WD and are prepared to help transport participants from Borumba Deer Park and back on each day.

ASSEMBLY POINT: Borumba Deer Park, 1133 Yabba Creek Road, Imbil

COST: *TREK A* or *TREK B*

Registration <https://rgsq.org.au/whatson>: \$25 per person includes a BBQ (food and non-alcoholic drinks) on Friday 'Meet and Greet', and Saturday evening. Paid registration by Wednesday 10 July 2019.

OPTIONAL ABSEILING COST: '*TREK A*' Only

Abseiling Cost: \$180 each (GST Incl), includes insurance for this activity. **Pre-booking and prior payment essential for abseiling.** If you are interested in abseiling with highly qualified guides, please call the RGSQ Office 3368 2066 or email info@rgsq.org.au by 1 July 2019.

Sept 14

Binna Burra Walk

Cost: Members \$10; Non-Members \$15

Limit 12 people

Register: <https://rgsq.org.au/whatson>

Daves Creek Circuit is a walk of 12km on graded tracks. There are areas of rainforest and heath land, a cave, views into the Numinbah Valley and even more distance views if you climb part or all of the way up Surprise Rock. We will also take a short side-track to a beautiful little waterfall. A retired geologist is coming along as a guest to give us information about the geology and formation of the area.

For more details and to register, please visit the RGSQ website <https://rgsq.org.au>.

2020 RGSQ Trek to Lambert Centre

DRAFT PROGRAMME FOR TREK TO LAMBERT CENTRE



This exciting 12 day trip includes air-fares from Brisbane to Alice Springs, a luxury 4WD Tour Coach with a driver/guide and camp cook.

Many included attractions as detailed below, as well as all breakfasts and dinners and most lunches. Some camping and some motels/cabins.

Tentative Cost not exceeding \$4500 per person twin share, with single supplement of \$575.

Maximum limit: 20 people. **Expressions of Interest at no cost to be registered as soon as possible, with first deposits of \$125 per person required by 9 September 2019, \$150 by 9 December 2019 and \$350 by 9 March 2020. Full non-refundable balance per person required by 9 July 2020.**

Full Draft Itinerary, Accommodation and Coach Details

Day 1: Wednesday 09/09/20 – Arrive Alice Springs. (Stay 2 nights at Desert Palms in twin share cabins)

Day 2: Thursday 10/09/20 – Alice Springs sightseeing

Day 3: Friday 11/09/20 – Western Macdonald Ranges (Stay: Kings Creek Station Safari Cabins)

Day 4: Saturday 12/09/20 – Kings Canyon & Uluru (Stay Yalara 2 nights camping in 2-person tents)

Day 5: Sunday 13/09/20 – Uluru & Kata-Tjuta National Parks (Ayers Rock and the Olgas)

Day 6: Monday 14/09/20 – Travel to Lambert Centre 2 nights (camping in 2-person tents)

Day 7: Tuesday 15/09/20 – RGSQ Lambert Centre activities

Day 8: Wednesday 16/09/20 – Travel to Coober Pedy (Stay: Coober Pedy: twin share cabins)

Day 9: Thursday 17/09/20 – Coober Pedy & William Creek (Stay: William Creek - Hotel accommodation)

Day 10: Friday 18/09/20 – Optional Lake Eyre Scenic flight & Roxby Downs (Stay: Roxby Downs - camping in 2-person tents)

Day 11: Saturday 19/09/20 – Woomera & Port Augusta (motel accommodation)

Day 12: Sunday 20/09/20 – depart Adelaide for home

Included Attractions

- ♦ Alice Springs Sightseeing Tour including guided tour of Alice Springs Telegraph Station
- ♦ Entry and self-guided tour of Alice Springs Desert Park
- ♦ Entry to National Transport Hall of Fame & Ghan Museum, Alice Springs
- ♦ Western MacDonal Ranges including Stanley Chasm and Simpsons Gap
- ♦ Guided Rim Walk at Kings Canyon or self-guided canyon walk
- ♦ Sunset viewing of Uluru with drinks and nibbles
- ♦ Uluru Sunrise tour
- ♦ Guided base tour of Uluru
- ♦ Visit Uluru -Kata-Tjuta Cultural Centre
- ♦ Guided walk at Walpa Gorge at the Olgas
- ♦ Guided tour of Coober Pedy including underground mine, underground house and underground church
- ♦ Guided tour of Andamooka Opal Fields & Sunset tour at Roxby Downs
- ♦ Entry to Woomera Heritage Centre
- ♦ Entry to Wadlata Outback Centre in Port Augusta

Meal Inclusions

Daily breakfast – a mix of continental and cooked breakfast/7 lunches/Daily 2-course dinners.

Dedicated 2-person coach crew including experience driver/guide and camp cook

The 4WD Coach:

- 22 reclining seats with lap-sash seat belts and plenty of leg room
- Arm rests & footrests to each set of seats (no footrests in front row)
- Road-cam – see what's happening up ahead via the TV monitor in passenger saloon
- Large windows with curtains
- Overhead luggage racks
- Overhead reading lights to each seat
- Reverse cycle – climate-controlled air-conditioning
- Air bag suspension for comfort
- Onboard fridge and freezer
- Onboard hot water urn
- Kitchen facilities
- Onboard rest room – rear of coach (not in passenger saloon)
- Luggage storage facilities
- Satellite phone for emergency contact in remote areas

Camping equipment

Two (2) person tents, equipped with camp stretcher, air mattress and/or bed roll.

All plates, cups, bowls and eating utensils for meals will be supplied by Stonestreets Travel.

Guests should bring their own sleeping bag, pillow, towel & 12-volt light / torch for tent and getting around at night.

SPECIAL INTEREST GROUPS



KEN SUTTON MEMORIAL LIBRARY GROUP

The group will meet on Monday, 22 July, from 9.30am to 12 noon.

Venue: 'Gregory Place', Level 1, 28 Fortescue St, Spring Hill, 4000



EVENTS CALENDAR

New and existing members welcome

For a full view of the Map Group year refer to the RGSQ website www.rgsq.org.au

Wed, 17 July 2019, 10:00am - 12:00 noon

Map Group visits RGSQ libraries

Details:

Map Group visits own library at RGSQ headquarters; exploration and explanations by Map Group Members: *Peter Nunan, Peter Lloyd and Jim Graham*. The presenters will delve into the unusual, rare and bazaar maps and books objects in our collection.

Website Link: <https://www.rgsq.org.au/event-3216759>

Location: RGSQ, 28 Fortescue Street Spring Hill Brisbane

Transport: Members to make own arrangements

Cost: \$2.00 donation for morning tea

Co-ordinator: Ian Francis brisfran@gmail.com; mobile 0457 628 066

Mon, 05 August 2019, 10:00am - 12:00pm

Neil Simson (Guest Speaker) Topic: Mapping and Town Planning

Details: Neil Simson is a Town Planner. He started his career as a consulting Town Planner to the mid-1990s, before working as the Town Planner for Beaudesert Shire until the late 2000s, then moving onto a far larger local government area (population and urbanisation wise), in Logan City and worked there until 2017. Neil was the chief drafter of Beaudesert Shire's planning scheme (2007) and he was heavily involved in the drafting of Logan City's planning scheme (2015).

Topic Overview: History of Town Planning in Logan City, Issues in Modern Mapping for Town Planners, What Mapping Tools are Displayed to the Public

Website Link: <https://www.rgsq.org.au/event-3216967>

Location: RGSQ, 28 Fortescue Street Spring Hill Brisbane

Transport: Members to make own arrangements

Cost: \$2.00 towards the cost of tea and coffee

Co-ordinator: Ian Francis (07) 3266-2285, 0457-628-033, brisfran@gmail.com

Wed, 04 September 2019, 9:30am - 1:30pm

Fryer Library Visit Event (including pre visit coffee and post visit lunch)

Details: The visit will give visitors an insight into the Fryer Memorial Library of Australian Literature which was founded in 1927 in honour of John Denis Fryer. It has a rich store of

books, manuscripts, photographs, architectural drawings, oral histories and much more. This will be the second visit with the aim to see more historic maps of Queensland and Australia.

Pre Event Coffee: Our group will meet at Merlo's Café, Duhig Building, UQ St Lucia Campus, Campbell Rd, St Lucia at 9:15-9:30am

Fryer Library Event: Tour from 10:00 to 12:00pm

Post Event Lunch: Approximately 12 noon at Wordsmiths Café Building 4, 2 Staff House Rd, St Lucia (dependent on completion of Fryer Library visit)

Website Link: <https://www.rgsq.org.au/event-3216479>

Location: Level 6, Duhig Tower The University of Queensland Brisbane QLD 4072

Transport: Members to make own arrangements

Cost: Fryer Library is free, coffee and lunch payment by member at venue

Co-ordinator: Kay Rees (07) 3356-7329, 0402-101-555, kayrees@gmail.com

REPORT: Map Group June Presentation

by Ian Francis

This month, the Map Group meeting saw us depart Earth for another world. The speaker, Keith Treschman, covered the topic Areography (from Ares, the Greek god of war whose Roman equivalent was Mars). This brought a new dimension to our Map Group lectures.

Back on Earth in 2019, we take geographical tools such as latitude, longitude and elevation for granted. It is rare that we think of their origins or the work done by our forebears in their establishment. Mars demands similar tools and datums and Keith's explanations had the audience musing over problems they had previously never considered. Suddenly, we were on our way to understanding the red planet's areographic features. This is in contrast to geographic for 'geo', the Greek for 'Earth'.



Keith Treschman delivering his presentation on Areography to RGSQ members, June 2019. Courtesy of Kay Rees.

Our speaker provided a short refresher on the founding of our Earth based geographic toolkit. We travelled back in time to the Babylonians and their numbering system which utilised a sexagesimal (base 60) numeral system rather than our familiar Arabic numeral system employing 10 as the base. Keith reminded us how this resulted in 360 degrees in a circle, the division of each degree into 60 arcminutes and a second division into 60 arcseconds. This was copied into our use of time. Also discussed was how

the metre unit was originally defined in 1793 as one ten-millionth of the distance from the North Pole to the equator through Paris. Now we were ready to relate and adapt our Earth systems to the Mars situation.

Many know of the lively national discussions over where the location of the Prime Meridian (0° longitude) on Earth should be, and how in 1884 Greenwich received that honour. Where should it be on Mars? I can guarantee that few in the audience had ever pondered that. Keith explained that the Prime Meridian on Mars passes through a small crater, Airy-0, relatively close to the equator. George Airy was the Astronomer Royal at Greenwich in 1884. Mars was accurately mapped to a resolution of 1 km by the Mariner 9 satellite in 1972. Airy-0 is a small crater located within the larger crater Airy.

On Earth, longitudinal locations are measured in degrees, eastward and westward to 180°. The scientific community decided Mars would be different. On Mars, the lines of longitude move in an easterly direction from the Prime Meridian 0° through to 360°.

The next challenge was choosing a datum for elevation measurements. On Earth, use is made of mean sea level. What do you do on a planet with no surface liquid? On Mars, what we refer to as sea level is symbolised as the 'topographic datum', defined by the mean Martian radius and the average atmospheric pressure.

Once the areographic tools were clarified, Keith proceeded to describe a variety of Mars' remarkable features, complemented with stunning photographs, maps and diagrams. We saw satellite images of Valles Marineris, a massive Grand Canyon like formation stretching 4000 km, or roughly the distance from Brisbane to Perth. We were astounded by Olympus Mons, the giant volcano with a base stretching the equivalent distance from Brisbane to Rockhampton and is 25 km high, compared with Everest at 8 km.

Keith concluded his talk with a chart showing the Greek derivation of planetary names and other derived words.

This was an outstanding talk with record attendance, and we will endeavour to have Keith repeat it as a Society Lecture soon. After the talk a relaxed morning tea was enjoyed.

Lamington National Park Bushwalk

by Mary Comer

Despite the poor weather forecast a group of 9 society members and one guest had a very pleasant day walking in the Lamington National Park with perfect weather.

We met at Canungra at 8am and carpooled along Lamington National Park Road to Green Mountains (O'Reilly's). In 2017 ex tropical cyclone Debbie caused much damage to the area. As the remnant low moved south, over 602 mm of rainfall in 24 hours was recorded in the Gold Coast hinterland on 31 March. A huge amount of work and money has been spent on the road to address the over 70 landslips that occurred. The work has recently finished with only one set of traffic lights on a narrow section remaining.

After assembling outside the cafe, we walked behind the guest house on the Wishing Tree Track, which was quite slippery after recent rain. We passed a variety of rainforest trees including one rather sad specimen of an Antarctic Beach which is a remnant of the ancient continent of Gondwana. We then moved to an open area which was

cleared many years ago. When the O'Reilly family first arrived on the mountain, they had to clear a certain amount of their selections and also build a house on each. Some of the O'Reilly brothers and cousins chose to build a house (slab hut) on the boundary of two sections. Here we saw the Slaughter House which has been restored and used for other purposes.



RGSQ members, Lamington National Park, May 2019.

After following the 4WD tracks we had morning tea in a picnic area above Morans Falls with distant views to Mt Lindesay, Barney, Maroon and others. Then we walked up Morans Falls Track with a view back to the falls. After this we went on the Python Rock Track to the lookout. Here the drop to Morans Creek is huge and we had our first sight of the power lines crossing the creek to the guest house and national park facilities. After returning we followed a trail to Pat's Bluff on West Cliff with great views again making it a good lunch spot. We returned from here following the same route and the bitumen wheelchair friendly Centenary Track back to the car park and cafe.

It was an excellent day with a great group. Thanks to all, especially Bob who gave us some geological background of the formation of the area.

Visit to Cobb and Co Museum Trip Report

by Chris Spriggs

We had 19 members and one guest meet at the Café for morning tea in the Courtyard at the Cobb and Co Museum in Toowoomba on a cold but sunny day. Our member, Kev Tey, was there as a current volunteer guide as well.

We were very lucky to have the curator of the Museum, Jeff Powell, join us. He gave us a personal private two hour tour of the Museum. It is a branch of the Queensland Museum and also home to the National Carriage Collection. There is a working Carriage Factory within the complex that uses artisans familiar with the old crafts. They produce items for sale based on the old coach works as well as restoring old carriages and parts.

The Museum was completely refurbished and extended in 2010 and is a very interesting and quite remarkable place. Jeff is incredibly knowledgeable about all aspects of the Cobb and Co history and has detailed knowledge of the construction and operation of all the coaches and carriages on display. His presentation was quite riveting and all members appreciated his incredible memory recall on all aspects of the Museum.

Kay Rees has found this link to Cobb & Co's early history which was part of their 150th Anniversary of the founding in 1865:

<http://blogs.slg.qld.gov.au/jol/2016/01/01/150th-anniversary-of-cobb-and-co-in-queensland/>



After lunch provided by their on-site café, we were able to look at other parts of the Museum, before joining the monthly curator's talk which was well attended by members of the Museum. We were incredibly lucky to hear a very good paper by the USQ Emeritus Professor Maurice French on the Early Squatters at the time of Queensland Separation from New South Wales in 1859. It was interesting to learn that the separation was done by Letters Patent by Queen Victoria, as was the founding of our own Society 26 years later!

Photo: courtesy of Chris Spriggs

WHERE DID TC MAHINA GO?

by Ken Granger



Ken Granger has been a member of RGSQ since 1991 when he moved to Queensland. He received the RGSQ Thomson Medal in 2004, served on Council from 2006 to 2012, including as President from 2008 to 2010 and Vice President 2010 to 2012. Currently Ken is a member of the RGSQ Sunshine Coast Group. He

has had a personal and professional interest in the impact of significant disasters in Australia for many years.

The impact of extreme Tropical Cyclone (TC) *Mahina* sits at the top of the list of major weather-related disasters. It struck the pearling fleet sheltering in and around Bathurst Bay on the east coast of Cape York in the early hours of 5 March 1899 with the loss of at least 307 lives. The impact of TC *Trevor* in March this year, which brought massive falls of rain across the Gulf country, got me to thinking about where *Mahina* had tracked after wreaking havoc on the east coast. Did it cross the Cape and reform in the Gulf (like *Trevor*) or did it turn south and impact communities along the coast (like TC *Ita* in 2013)?

There have been several "estimates" of TC *Mahina*'s track going back as far as that produced shortly after the event by Clement Wragg, the eccentrically brilliant Queensland Government Meteorologist¹. His estimate had *Mahina* turning south and entering the Coral Sea again around Townsville. Another published track was

that by meteorologist H.E. Whittingham in 1958². He used rainfall and barometer readings for 20 stations across the area together with contemporary accounts. His analysis included a map that indicated the system moved very slowly across the Cape reaching the Gulf six days after hitting the east coast (his Figure 5 reproduced below). He then had the track turning 180° back towards the Cape.

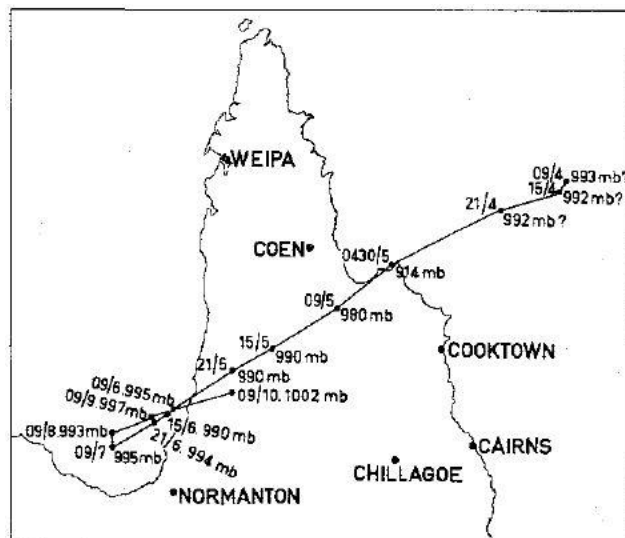


Figure 1. "Track of the Bathurst Bay hurricane of 4th to 10th March 1899" Source H.E. Whittingham, 1958, Fig. 5.

For such a powerful system (top of Category 5), I wondered why it took so long to cross the Cape and whether it dumped massive amounts of rain along the way. To check this out I interrogated the historic rainfall data on the BoM website to obtain daily rainfall figures for 40 stations operating in 1899 ranging from Cape York Post Office in the north to Bowen in the south and Low Isles Lighthouse in the east to Georgetown in the west. I plotted these stations in my GIS and analysed the rainfall data over the period 2nd to 16th March 1899. The results strongly indicate that the track suggested by Clement Wragg was fairly close to that of my analysis. The contemporary press reports of massive floods in the Barron, Mulgrave and Johnstone Rivers, as well as landslides cutting the Cairns to Kuranda railway line, certainly add weight to the coastal track theory.

For example, the Brisbane *Telegraph* reported on 7 March: "Cairns, March 7. There has been exceptionally heavy rain during the last 15 hours in all parts of the district. The Baron Falls are a magnificent sight. A large number of carriers and residents attempted to get there yesterday but were blocked by Fresh Water Creek. The Mulgrave River is 25 feet over the Mulgrave tramway bridge, and the Barron River is a banker. All communication with the outside districts being blocked. Several land slips are reported on the Cairns-Mareeba line. Nine inches of rain have fallen in Cairns since Saturday. No loss of life is so far reported³."

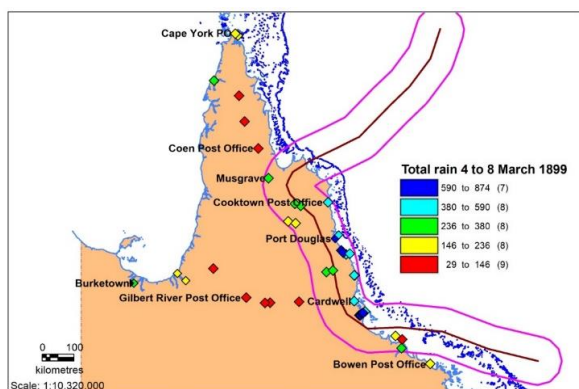


Figure 2. Rainfall totals at 40 stations between 4 and 8 March 1899 and the inferred track of TC *Mahina*. Source: K. Granger

In Fig.2, I have buffered the inferred track of the cyclone by 75 km either side to indicate the area that appears to have experienced the greatest impact. A rather disturbing fact that I discovered in the process of compiling this analysis is that TC *Mahina* is not included in the BoM list of significant Queensland cyclones, nor are the floods in the various coastal rivers listed in the table of significant floods. This oversight does need to be corrected.

I acknowledge the assistance of Ian Townsend in this analysis. Members will recall that Ian presented a lecture to the Society a few years' ago on his historical novel *The Devil's Eye* which was based on his research into TC *Mahina*. He is currently completing a PhD in history on this event.

REFERENCES

1. Quoted in Outridge (1899) *The pearling disaster 1899: A memorial* Outridge Publishing Co., Brisbane.
2. Whittingham H.E. (1958) "The Bathurst Bay hurricane and associated storm surge", *Australian Meteorological Magazine*, 23, 14-36.
3. Brisbane *Telegraph*, 7 March, 1899, accessed from Trove reproduction

Member recollections

Why Geography?

by Myrl Allison, RGSQ Member

I joined the RGSQ in 1986 as a member and have continued that association uninterrupted to the present.

My journey to seek information on Geography started at High School. I had been exposed to some geographical content in the study of Social Studies in Primary School. How important was that introduction ! Moving onto High School in Ayr, North Queensland, Geography was a stand-alone subject which I studied for Sub Junior and Junior for 2 years and really became aware of the breadth of the subject. Anchored in the concept of 'place', it covered both Social and Scientific disciplines.

I was fortunate to enter the University of Queensland as a mature-aged student, enrolling in an Arts Degree and again took Geography as a discipline. I combined this with Economics and found that these two disciplines worked well for me. Resource Management, Economic Geography, Urban Geography, Statistics, Human

Geography, Physical Geography all gave me such an appetite to follow. I threw in some subjects in Maths and Psychology to broaden my interest base.

Afterwards graduating I completed a post-graduate librarianship course at the Queensland Institute of Technology. I worked part time for a few years while our children were finishing High School. My first position was 2 days a week at Pan Australian Mining, a gold mining company extracting ore in the Charters Towers area. I was then approached by the RGSQ to sort and catalogue the Society's library collection on a part time basis. It was clear to me that this was a most interesting and important collection. I completely enjoyed the experience - again focused on Geography - working 2 days a week with staff and wonderful volunteers. In 1986 I took up a full time position with the State Library of Queensland and subsequently in the Department of Education. While at (then called) Education Queensland, I completed an online post-graduate degree in Archives and Records Management from Edith Cowan WA. My first exposure to the RGSQ's wealth of records/archives was in the 1980s when I was involved with sorting the library collection. My then tutor at University, Dr Peter Griggs (now RGSQ Vice-President) was influential in my enrolling and completing the degree in Archives and Records Management.

I retired from Education Queensland in 2002 and with Keith moved to the Sunshine Coast. The University of the Third Age is very active here on the Coast, and we quickly became engaged. The attraction of Geography again caught our attention and we attended lectures each Monday morning for many years covering topics so expertly researched and delivered by Mr Ian Wilson, a Geologist and Geographer whose geological knowledge brought physical geography alive.

RGSQ has a strong knowledge base, its major resource being the people, both past and present. The wealth of talents, experience and vision they display continues to make the Society relevant in the present day. What foresight the foundation members had back in the 1880s. Keeping Geography in the learning space of our Education systems in both schools and universities for children and adults is, in my opinion, one important aspect of the current relevance of the RGSQ. Geography is a discipline across all aspects of life and place. I have only touched the surface, so much more to explore, but suffice to say it still fascinates me.

CALL FOR VOLUNTEERS

Are there any members who could volunteer their time to do some reception/clerical work for the RGSQ – flexible days and hours?

If you have a few hours to spare, please contact the Office at 07 3368 2066 or info@rgsq.org.au.

RGSQ members are cordially invited to attend the official opening of 'Gregory Place', the Society's new home, by His Excellency the Honourable Paul de Jersey AC, Governor of Queensland and Patron of RGSQ. Please note that members attending this event must be seated before 04:30pm. **Arrivals after 04:30pm will not be admitted.**

To register for the event, please visit the RGSQ website

<https://rgsq.org.au/whatson> or contact the Office at 07 3368 2066.



Thursday, 18 of July 2019 Official Opening of 'Gregory Place', the Society's new home

by His Excellency the Honourable Paul de Jersey AC,
Governor of Queensland and Patron of the Society

Level 1, 28 Fortescue Street, Spring Hill QLD 4000

RGSQ Bulletin

July 2019

Lecture/Meeting: Thursday 27 June Special lecture
'In the Wake of the First Australians' presentation by
Glenn Marshall

**Monthly lecture: Tuesday 2 July "How Brains,
Robots and Autonomous Vehicles Map the World"**
presentation by Professor Michael Milford

**Activity: Thursday 11 July NAIDOC Week at
Redcliffe**

**Thursday 18 July Official Open Day of Gregory
House**

Map Group: Wednesday 17 July 10:00am - 12:00pm
Map Group visits RGSQ libraries

Ken Sutton Memorial Library: Monday 22 July
9:30am – 12:00 noon, 'Gregory Place', Level 1, 28
Fortescue St, QLD 4000.

The July Council will meet on the third Tuesday of the
month

The Royal Geographical Society of Queensland Inc
PO Box 625, Spring Hill QLD 4004

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