



RV Falkor ocean expedition to Bremer Canyon

National Science Week in the Great Southern 2020 will kick off with the Great Southern Great Science Symposium. A

Photo Schmidt Ocean Institute

highlight of this showcase of Great Southern science will be the keynote by Professor Malcolm McCulloch, UWA marine geochemist, on the *The Great Australian Deep-Sea Coral and Canyon Adventure* aboard the Research Vessel *Falkor* in February 2020. Check out the expedition science and more here <https://schmidtocean.org/cruise/coralandcanyonadventure/>

Overview: In January - February 2020 Dr. Julie Trotter, University of Western Australia, and her research team joined RV *Falkor* to look deeper (literally and in sample analysis) into the physical effects of marine shell and coral-building in conditions with ocean acidification from rising water temperatures with increasing carbon dioxide.

The expedition achieved the first Remotely Operated Vehicle-based deep sea exploration of submarine canyons offshore in south western Australia, with some dives deeper than 3000m to document, photograph and video, and strategically sample using ROV *SuBastian*.

The research team collected samples to identify undiscovered species, and performed comprehensive, high-resolution geochemical analyses of collected material such as coral skeletons post-cruise. Deep-sea ROV technology is unavailable to Australian researchers, making this expedition a true voyage of discovery.

10 minute Catch Up: WA Museum also supported the expedition, and local radio personality Gianfranco Di Giovanni spoke with Andrew Hosie, Curator Aquatic Zoology: *Beneath Bremer Bay: WA Museum's Andrew Hosie on the underwater discoveries of the R/V Falkor*, ABC Great Southern Radio Mornings with Gianfranco Di Giovanni, broadcast 3 March 2020

<https://www.abc.net.au/radio/greatsouthern/programs/mornings/beneath-bremer-waves-mv-falkor-andrew-hosie/12021784>

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Graphic Design by Strike Point, Graphic Design and Printing



AUGUST 2020 in the Great Southern

Geology student Robert Thomson sciencing on the majestic Cape Riche coastline. Photo credit Ellie Sansom.



An Australian Government Initiative



Welcome to National Science Week in the Great Southern

Major partners Great Southern Science Council and Museum of the Great Southern combine forces with supporters, presenters, science professionals and our community to curate, collate and celebrate everything sciencey in our vibrant community. We're proud to present more than 17 science events this August!

#scienceweek | www.scienceweek.net.au
www.greatsouthernsciencecouncil.org.au

SPECIAL WELCOME TO

Professor Malcolm McCulloch, BAppSc MAppSc Curtin, PhD Calif.Tech.

Professor, Faculty of Engineering and Mathematical Sciences, Oceans Graduate School
University of Western Australia

Each year throughout August, National Science Week in the Great Southern highlights new technologies, research and innovation in south west Western Australia. Regional public events, and school visits with Museum of the Great Southern, are supported by competitive grant funding under Australian Government Inspiring Australia. The annual regional flagship event also draws essential in-kind and cash contributions from Great Southern Science Council, Museum of the Great Southern, UWA Wave Energy Research Centre, Albany Public Library, FathomCo, Southern Ports Albany, Kurrah Mia and regional suppliers and supporters.

Professor Malcolm McCulloch



Photo UWA

Professor Malcolm McCulloch is an expert in coral reef geochemistry at The University of Western Australia's Ocean Graduate School, and a Deputy Director of the ARC Centre of Excellence for Coral Reef Studies. His research focuses on the important societal issue of how global climate and environmental changes are

impacting marine systems, in particular the magnitude and impacts of anthropogenic CO₂ driven ocean acidification and warming on both shallow-water and deep-sea coral reef environments. This research provides insights into the response of coral calcification to climate change as well as the longer-term changes in seawater pH that are now occurring in the oceans due to uptake of CO₂ from increasing fossil fuel emissions.

<https://research-repository.uwa.edu.au/en/persons/malcolm-mcculloch>

Professor Malcolm McCulloch's keynote will anchor the unmissable dynamic presentations at the **Great Southern Great Science Symposium**. He will present insights from the February 2020 ocean expedition discoveries by *The Great Australian Deep-Sea Coral and Canyon Adventure* aboard the Research Vessel *Falkor*. Malcolm will also meet UWA students and staff to inspire collegiate exchange on all things oceanic, university research life, and STEM futures.

You choose! STEM resources online

Science Rocks Career Expo Online 2020

Short videos with science professionals and PDF study guides. Online resource pack greatsouthernsciencecouncil.org.au includes a livestream interview and resource launch event, video interviews and downloadable Study Guides.

These feature Western Australian science professionals discussing their careers, projects and successes across a range of scientific endeavours.

greatsouthernsciencecouncil.org.au

FREE RESOURCES | CONTACT
greatsouthernscience@gmail.com

Throughout August

DARWIN SIGNS

Seven signs along picturesque Middleton Beach Boardwalk commemorate 1836 Albany visit by naturalist Charles Darwin. Enjoy a self-guided stroll to read; watch for whales. For compelling insights to Darwin's state of mind during his stay, contact Prof Steve Hopper, UWA.

WHERE Middleton Beach Boardwalk, Albany
FREE EVENT Wheelchair friendly
CONTACT Prof Steve Hopper, UWA, steve.hopper@uwa.edu.au

Scinema International Science Film Festival 2020

Scinema International Science Film Festival 2020 free digital delivery. Live stream to your own venue - details online scinema.australiascience.tv

MORE INFO Pop up livestream Scinema events greatsouthernsciencecouncil.org.au or museum.wa.gov.au/museums/museum-of-the-great-southern

August Citizen Science

Australian Citizen Science Project Finder, connect with citizen science projects in Australia.

MORE INFO citizenscience.org.au/ala-project-finder

Sun 23 August

Sunsmart Kite Fiesta 2020

Kitemaking and flying with Michael and Jan Alvares

WHERE ANZAC Peace Park Albany
TIME 10:00am - 4:00pm
CONTACT Greenskills 9848 3310

17-23 October 2020

CBCA Children's Book Week 2020

Curious Creatures Wild Minds. The Children's Book Council of Australia cbca.org.au

Sep - Oct 2020

Great Southern Treasures Bloom Festival

Cancelled In 2020. Flowers are still bloomin' in 2020 - design your self-drive tour of the Great Southern with ideas from previous Bloom Festival events from Great Southern Treasures.

greatsouthern-treasures.com.au
Facebook @ [greatsouthern-treasures](https://www.facebook.com/greatsouthern-treasures)

8-15 November 2020

National NAIDOC Week 2020

Always Was, Always Will Be naidoc.org.au #naidoc2020

Sep- Oct 2021

Southern Art and Craft Trail

Cancelled in 2020, with the vision to run the 2021 Art Trail as normal.

ArtSouthWA presents Southern Art and Craft Trail 2021, 25 September to 10 October 2021

Check Art South WA website and Facebook for self-drive, online and workshop options for this year.

artsouthwa.com.au
Facebook
[trail@artsouthwa.com.au](https://www.facebook.com/trail@artsouthwa.com.au)

How will you science this National Science Week?

scienceweek.net.au
#scienceweek



July 22 & 29, August 5 & 12

Mount Barker CRC Science Fair

Explore an exciting range of science topics through interactive projects that demonstrate STEM concepts in a fun and creative maker space. Children age 7+, all materials and healthy snack included, bookings essential.

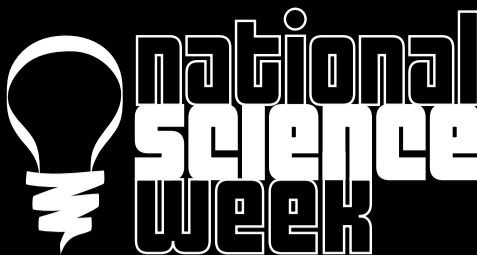
WHERE Mount Barker Community Resource Centre, 1 Lowood Rd, Mount Barker

TIME Wednesdays July 22&29 and August 5&12, 3:00pm to 4:30pm

FREE EVENT Bookings essential
Wheelchair friendly | Physical distancing

CONTACT 08 9851 2674
or admin@mtbarkercrc.com

Facebook: [Mount Barker Community Resource Centre](https://www.facebook.com/MountBarkerCommunityResourceCentre)



AUGUST 2020

August 14th

Great Southern Great Science Symposium

A day of short talks about science of the Great Southern region. Explore research and innovations in RV *Falkor* scientific investigations of the Bremer Canyon, Gondwana Link project, Noongar food plants, threatened fauna, geology of the Great Southern, regenerative agriculture, and more!

WHERE Kalyenup Studio, Albany Entertainment Centre
TIME August 14th, 9:30am - 3:00pm

COST Booking pre-pay essential \$50 full fee; \$25 concessions - Includes registration, lunch, refreshments

CONTACT [eventbrite.com.au/e/great-southern-great-science-symposium-2020-tickets-110598938402](https://www.eventbrite.com.au/e/great-southern-great-science-symposium-2020-tickets-110598938402)

Facebook [facebook.com/events/2740707909549430](https://www.facebook.com/events/2740707909549430)

Katy Evans k.evans@curtin.edu.au

Film Harvest at Orana Cinemas

Film Harvest Great Southern brings the world's best alternative films to regional WA. COMING BACK SOON! As at July 2020, new film releases are postponed due to worldwide COVID19 physical distancing needed to protect film goers and everyone working in the film industry. Film Harvest will recommence showing great films in regional WA as soon as possible. Meanwhile, follow us on Facebook for updates and viewing suggestions during the break.

WHERE Orana Cinema, 451 Albany Hwy, Albany

TIME Check your local theatre for films & start times

COST From \$13. Booking essential by ticket purchase. [oranacinemas.com.au](https://www.oranacinemas.com.au) or at Orana cinema box office

CONTACT www.facebook.com/filmharvestgreatsouthern

August 11th

Museum of the Great Southern Tuesday Curatorials

Tuesday Curatorials explore various subjects with lecture style presentations throughout August.

Breathing Life into Boodja

Gondwana Link's Keith Bradbury explores the social and ecological restoration in an ancient land. At the heart of Gondwana Link is a bold but simple plan: protect what bushland remains, restore the critical gaps, and maintain the extraordinary nature of south-western Australia.

WHERE Co-op Building - Museum of the Great Southern, Residency Road, Albany

TIME August 11th, 10:30 - 11:30am

COST \$2 donation | Bookings essential

CONTACT Museum of the Great Southern, In person or 08 9841 4844

August 13th

On Country Oyster Harbour Boodja

Visit Menang Boodja with local Noongar guides and discover the technologies of the Oyster Harbour Fish traps and the Djildjit (fish) harvest of long ago. Enjoy a morning on the tranquil Oyster Harbour foreshore exploring the rich culture of an ancient peoples. Bring sturdy shoes, jacket, own water.

WHERE Oyster Harbour Fish Traps, yarning shelter - End of Barameda Road, Lower King

TIME August 13th, 10:00am - 12:30pm

COST \$10 Bookings and pre-pay essential.

CONTACT Museum of the Great Southern, In person or Catherine Salmaggi 08 9841 4844

August 15th

Science Café

UPDATING THE RIME OF THE ANCIENT MARINER - PAST AND FUTURE OF FRESH WATER ON THE SOUTH COAST

Lively panel discussion with Q&A about fresh water in the Great Southern; cake and coffee, all welcome.

WHERE View Restaurant in Albany Entertainment Centre, 2 Toll Place, Albany WA 6330

TIME August 15th, 2:00pm - 3:30pm

COST \$10 Bookings essential
Includes afternoon tea of coffee/tea & cake

CONTACT Museum of the Great Southern, In person or Andrew Storrie 0428 423 577 or Scott Neil 08 9841 4844

August 13th

UWA Albany Info Day 2020

On campus info day - find out how UWA can help you reach your study and career goals.

WHERE UWA Albany, 35 Stirling Terrace, Albany

TIME August 13th, 3 - 4:30pm | **FREE** albany.uwa.edu.au

Albany Public Library Online Lego Challenge

Use LEGO to build a structure that floats on water. Great Southern residents in age groups may demonstrate success & answer STEM questions during National Science Week for prize draw entry.

CONTACT library.albany.wa.gov.au/programs-collections/online.aspx

TIME August 15-23, online | **COST** Free
Entry requirements for prize draw

CONTACT Dora Adeline
dora.adeline@albany.wa.gov.au

August 26th

Town by the Sea - Albany

An Early Years STEM program looking at the needs that are required by communities when planning, designing and building towns. Children will explore and discover their local community through interactive play, using building materials and found objects to create a large-scale townscape.

WHERE Co-op Building - Museum of the Great Southern, Residency Road, Albany

TIME August 26th, 10:30am - 12 noon

FREE EVENT Bookings essential.

CONTACT Museum of the Great Southern, In person or Catherine Salmaggi 08 9841 4844

August Science Surfing

Meet the Marine Machines from The Great Australian Deep-Sea Coral and Canyon Adventure

Take a tour of R/V *Falkor* and her 4500m Remotely Operated Vehicle ROV *SuBastian* schmidtocean.org/rv-falkor/operations-and-science-systems

Essential Items for Deep-Sea Science - SOI's Thom Hoffman talks essential kit with expeditioners schmidtocean.org/cruise-log-post/essential-items-for-deep-sea-science

We just can't get enough! SOI cruise logs from March 2020 ROV Dives - illuminating biodiversity of the Ningaloo Canyons with WA Museum's Nerida Wilson and her research team

schmidtocean.org/technology/live-from-rv-falkor/rov-dives-illuminating-biodiversity-of-the-ningaloo-canyons/

Meet the Marine Machines

Explore the technology and gadgets used in the Great Southern to survey our underwater world. Venture behind-the-scenes with UWA, State Government, Southern Ports Albany and marine science professionals to see how they survey ocean conditions, coastal processes, port infrastructure and marine wildlife.

WHERE Check website for details of this public lunch break series in August. bit.do/nswk-marinemachines

TIME Check website for details, 12 noon - 1:00pm

FREE EVENT No booking required

CONTACT Wiebke Ebeling

UWA Albany - Wave Energy Research Centre
wiebke.ebeling@uwa.edu.au or 08 9842 0874

Suitable for accompanied 12 yrs and over

Astrofest 2020 - Exhibit August 1-31

Astrofest 2020 features a stunning range of skylines and celestial photos from WA's talented astrophotography community.

WHERE Museum of the Great Southern, Residency Rd

TIME Daily 10am - 4pm | **FREE EXHIBIT** Walk in

CONTACT Catherine Salmaggi, 08 9841 4844

Brain Break with GSSC, August 28

Join Great Southern Science Council and supporters at Earl of Spencer Historic Inn for an informal Brain Break to keep the science conversations going. Science trivia, nibbles, door prizes.

WHERE Earl of Spencer courtyard

TIME August 28th, 5:00pm - 6:30pm

FREE Walk in | Prizes on offer

CONTACT greatsouthernscience@gmail.com

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