

THE WATERHOUSE CLUB

“Fossils, Fur and Feathers Expedition”

**A three day exploration of the flora and fauna, past, present and future
on Kangaroo Island.**

Friday 11th October – Monday 14th October 2019.

Expedition Overview

Kangaroo Island (KI) is home to many of South Australia’s most important natural wonders. The Club’s 2019 expedition features privileged access to some of KI’s greatest natural treasures interpreted by two outstanding and engaging scientists.

Over hundreds of millions of years, atmospheric and climatic changes, and tectonic plate movements shaped the future course of animal and plant development, separated Australia from Gondwanaland and ultimately excised KI from the mainland. Today a range of challenges, both natural and man-made, continue to impact flora and fauna, from the seashore to dense scrub. We will investigate some of these pressures and consider efforts to mitigate and combat their adverse effects.

We will visit the globally significant fossil site at Emu Bay, with Associate Professor Diego Garcia-Bellido, where ground-breaking discoveries have been made by South Australian Museum scientists, particularly relating to the rapid evolution of marine life in the Early Cambrian period. We will be able to fossick for our own fossils in the existing rock heaps.

In addition to visiting Emu Bay, other highlights will include the following.

- Visits to a Little (Fairy) Penguin colony at Emu Bay and fur seals at Seal Bay will provide insights to the resilience and inter-relationship of colonies which have fluctuated over the past 200 years. Dr Diane Colombelli-Negrel, Lecturer in Animal Behaviour at Flinders University, will share her extensive research into Little Penguin colonies across South Australia.
- A tour of Cygnet Park will introduce expeditioners to an extensive rehabilitation program, which over 15 years, has successfully returned cleared farm land to dense scrub, providing habitat for birds and animals including the iconic Glossy Black Cockatoo. A visit to the nursery area, where over 120 plant species have been raised, will include an opportunity to test native seed germination techniques.
- To get a closer view of the elusive KI birdlife we will visit Raptor Domain for a private presentation, up close with Tawny Frogmouths and Glossy Black Cockatoos, and for those with a good nerve and a strong wrist there will be an opportunity to hold a Wedge-tailed Eagle.

We also visit the world renowned Pelican Lagoon Research and Wildlife Centre. Mike McKelvey will be our host. Mike is a biologist, artist and photographer who bought the



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property on KI in the 1970's and has worked closely with Dr Peggy Rismiller for several decades. He will take us for a fascinating tour of the shore line and scrub area, drawing on decades of research and observation into diverse areas such as echidna behaviour, ant populations, tiger snakes and wallabies, and the growth of mosses and fungi, to conjure a picture of the health and future of the site. Mike will also join us for an evening talk and discussion over dinner.

Our Scientists

Associate Professor Diego Garcia-Bellido took up his appointment in Adelaide in 2013 from Madrid. Diego is now the holder of a prestigious Australian Research Council Future Fellow with the University of Adelaide and is an Honorary Researcher at the South Australian Museum - an immensely knowledgeable scientist of great personal charm. Diego's principal field of study is the creatures of the Cambrian Period some 524-500 million years ago questioning how they might have evolved from the soft bodied creatures of the earlier Ediacaran era some 570-550 million years ago. This question is known as 'Darwin's Dilemma' – Darwin's theory had no explanation of what came before the hard bodied creatures of the Cambrian. Diego's field work has been world-wide and includes three seasons on the Burgess Shale at Emu Bay that we will visit. He has made major discoveries reported in 'Nature' at the Emu Bay fossil beds as well as being deeply knowledgeable on the Ediacaran fossil beds in the Flinders Ranges.

Dr Diane Colombelli-Negrel has over 15 years of experience working with birds in South Australia with a particular focus on animal behaviour, communication and conservation with a dual focus on songbirds and seabirds. A dynamic and engaging presenter, Diane is a co-discoverer of embryonic learning in birds, a critical, yet poorly researched stage in language and song acquisition. In 2013, Diane was invited to lead the little penguin's conservation research program across the Gulf St Vincent and, to date, is the only penguin researcher in South Australia. Diane's research in seabirds explores the mechanisms underlying bird population declines and the processes limiting species distribution, with a focus on little penguins. This project uses a multidisciplinary approach mixing behavioural responses to environmental changes, population genetics and ecological modelling. Diane also uncovered evidence of blood parasite infections in SA little penguins. Very little is known about the impact of such parasites on penguins and even less on how they impact population trends.

Our Expedition Leader

We are pleased to have Mark Mackintosh join the Club's Expedition Leaders Team. Mark co-lead an expedition to the Coorong two years ago, arranged the visit to the Tonsley Park Drill Core Library in 2016 and supported the scientific activities on the Nuyts Archipelago expedition in 2017.

The Program

The expedition begins at 6 pm Friday 11th October 2019 at the KI Lodge Mercure Hotel, American River, and ends after breakfast, Monday 14th October. On this self-drive tour a 4WD or SUV vehicle will be required for short sections. To reduce the number of vehicles in the convoy we will ask expeditioners to share transport



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arrangements once on the island. When bookings are finalised we can provide a list of expeditioners to assist you to team up with others for the expedition.

What to Expect

Both Saturday and Sunday will be fairly long days, involving two or three transfers of up to 45 minutes each between sites and some walking on uneven ground, beaches and rocky areas (see provisional program on page 4). Facilities will be limited at some sites and the program does not include morning or afternoon refreshments. You are encouraged to bring your own thermos if you would like the option to make tea or coffee. A detailed list of what to bring will be provided three weeks before the expedition.

The Cost of the Expedition

- The cost of the expedition is \$1,100 per person and \$1,250 for non-members.
- Places on this expedition are limited to a maximum of 22 expeditioners.
- Club members will receive booking priority.

Please contact the Club Office by return email or telephone to confirm that you would like to register a booking request. Please do not leave a message if the office is unattended but call Margie Heylen, Club Secretary on 0419 818166.

If your request is accepted you will be asked to complete a booking form and pay a \$300.00 non-refundable deposit to confirm your booking within one week. Booking Terms and Conditions are attached for your information.

Further Information

Expeditioners will be provided with a reference list of relevant books, documents and research articles which they may find of interest after bookings have been accepted. Closer to the date of the expedition, a list of suggested items to bring will be distributed and for catering purposes expeditioners will be asked to select choices from the menu in advance.

If you would like further information or have any queries regarding the expedition please contact the Club Office or the Expedition Leader, Mark Mackintosh at mfmack8@bigpond.com or on mobile: 0417900675.

Kangaroo Island OCTOBER 2019.

FRIDAY 11		NOTES
	Expeditioners travel to KI Arrive by 6pm	KI Lodge, Mercure Hotel, American River
6.15pm	Welcome reception	Orientation, Mark Mackintosh, and talk from Diego Garcia-Bellido.
7.30pm	Dinner	3 course dinner.
SATURDAY 12		
7-7.45am	Breakfast	
8am	Departure	Convoy - to Bucks Farm - 45 minutes
9am - Midday	Emu Bay dig site	Bring: thermos; boxes and paper for packing fossils. Gloves.
12-12.15	Drive to Emu Bay Lavender Farm	10 minutes
12.15-1/1.15.	Emu Bay Lavender farm	Lunch
1.15	Transfer to Emu Bay	5 minutes
1.30-3.00	Emu Bay Little Penguins	Diane Colombelli-Negrel. Inspect nest sites. Counting breeding pairs, eggs and chicks.
3.00-3.30	Transfer to Cygnet Park	
3.30 - 6.15	Tour Cygnet Park + nursery	Infrastructure, history and comparison of revegetation approach over different years. Glossy Black cockatoo nesting sites and feeding. Visit nursery. Craig Wickham and Michelle Haby
6.15-7pm	Transfer back to Mercure	Change, freshen up.
7.15 - 8pm	Drinks and canapes	Diane Colombelli-Negrel - pre-dinner presentation. Little Penguin research in SA.
8pm	Dinner	2 course dinner.
SUNDAY 13		
7-7.45am	Breakfast	
8am	Depart	45 minutes to Seal Bay
9-11am	Seal Bay	Alana Binns. Head guide at Seal Bay
11-12	Bales Bay	Short walk, possible hooded plover nesting sites
12.00	Lunch at Raptor Domain	Lucy's KI Kitchen - picnic lunch.
1.00-2.00	Raptor Domain.	Private showing birds of prey.
2.15-3.00pm	Transfer to Pelican Lagoon	35km drive
3-6 pm	Pelican Lagoon	Tour with Mike McKelvey.
6-6.45pm	Return to Mercure	
7.00pm	Private Dinner at KI Tru Thai	Presentation by Mike McKelvey. Wrap up presentation.
MONDAY 14		
	Breakfast and departure	



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