



The  
**Waterhouse**  
Club

The Waterhouse Club Inc.  
Founded 1987  
An Association of the  
South Australian Museum

South Australian Museum  
North Terrace, Adelaide SA 5000  
Telephone +61 8 8203 9802  
waterhouseclub@samuseum.sa.gov.au  
www.waterhouseclub.com

---

## **Expedition to the Islands that Darwin missed – 15 day cruise through the sub-Antarctic Islands of New Zealand and Macquarie Island**

### **A once in a generation opportunity!**

26th December 2020 to January 10th 2021

**Go boldly where few humans have been able to venture — to a geological 'Atlantis'; a biological and botanical 'Galapagos'.**

Dear Club Member

Zealandia is the name given to a submerged micro-continent that holds New Zealand and its sub-antarctic Islands, which constitute less than 10% of its full area. It is a large piece of continental crust that broke off from Australia some 80 million years ago, and then sank like its mythical counterpart Atlantis.

On this expedition we will travel through Zealandia's geological time, seeing the 100 million year old granites of the Snares and Auckland Islands, the ten million year old volcanics of the Auckland and Campbell Islands, and the younger basalts of the Antipodes at less than one million years old. The experience would not be complete without also visiting oceanic crust, helpfully raised up for us in the form of Macquarie Island, a biodiversity wonder of the world.

These islands have been designated UNESCO World Heritage sites because of their extraordinary and unique biodiversity.

This expedition will feature opportunities to explore, photograph and understand these wonderful places in the company of scientists Professor Phillip Weinstein from University of Adelaide and South Australian Museum, and Professor Steve Donnellan, the Museum's Chief Research Scientist and polymath extraordinaire

There will be many opportunities to leave the ship and land on the islands, as open sea passage-making will be limited to about three days. Every day of the program will involve wondrous attractions and experiences, as well as the shipboard camaraderie that Waterhouse Club Expeditions are famous for.

### **See marine mammals on land and sea**

Pinnipeds are in abundance on Enderby Island (Hookers Sea Lion), Macquarie Island (100,000 Elephant Seals and large Fur Seal colonies), Campbell Island (Sea Lions). We will see Hookers Sea Lion family life at close quarters as they play,

nurture pups and settle territorial disputes. On Macquarie we will walk through dense colonies of enormous Elephant Seals as they wallow contentedly between their deep-diving foraging expeditions.

Whale spotting is a good natured competitive sport on Waterhouse Club expeditions. The seas between the islands are home to all the great whale species and Orcas, and many dolphins including the exquisite Hour Glass Dolphin likes to play around the bows of passing vessels.

### **Up close and personal with giant birds!**

On Enderby Island the Southern Royal Albatross prepares a 30 metre landing strip for take offs and then after a gallop soars without a single flap. With their nesting sites a few metres from the boardwalk, you'll get a sense of just how big these birds are –like geese with wings that would do justice to a small glider.

The islands and oceans are a bird watcher's paradise. We will see Wandering, Royal, Black-browed, Light-Mantled Sooty Albatross species, as well as having close encounters with Southern Royal Albatross on Enderby and the Shy Mollyhawk colony at South West Cape, Auckland Island. In between the islands photographers will find the ship is a perfect platform for capturing stunning seabird images as they follow in our wake.

Penguins are another feature of this expedition including Snares Crested and Yellow-eyed on the NZ islands. On Macquarie Island we will visit the vast colonies of Royal and King Penguins and become objects of curiosity ourselves as they waddle right up to us.

### **Walk through unique megaherbs!**

Sir Joseph Dalton Hooker, a great friend of Darwin, was overwhelmed by the experience of seeing these amazing plants when he visited the Auckland and Campbell Islands as botanist on the Ross Expedition to Antarctica (1839-43). He wrote that their bursting blooms were "second to none outside the tropics", and was the first to collect and describe several of the species scientifically. These herbaceous plants have evolved in extremely harsh environmental conditions, but in the absence of herbivores – thus, when rabbits, goats, and other herbivores were released onto the islands to provide food for shipwrecked sailors, megaherbs were eaten almost to extinction. Thanks to the New Zealand Department of Conservation these introduced animals were recently eradicated from the islands, resulting in a rapid and impressive restoration of the megaherb ground cover to its former glory.

A similar program of pest eradication is now complete on Macquarie Island, and previous visitors to the island will be able to see the positive impacts of the program on the birds and plant species.

### **Help collect wingless insects – how did they get there?**

A special focus of the expedition will be non-flying insects. Led by Professor Phil Weinstein, we will collect insects for the Museum and test evolutionary questions with molecular techniques.

The Subantarctic Islands are home to a number of wingless insects; some have winged ancestors, like flies and wasps, but have lost their wings during millions of years of evolution in isolation on these islands. Others have always been unflighted, like springtails and fleas. We can guess that the ancestors of the former would have flown or blown in, but how the latter got there is less clear. By collecting specimens from different populations on different islands, we will be able to test hypotheses

about dispersal, based on genetic studies that could show patterns consistent with windborne migration, rafting, or attachment to hosts like seabirds.

Expeditioners will be able to assist in the collection and classification of the insects, something that was a very popular part of the recent Nuyts Archipelago Insect Survey Expedition. Help us at the cutting edge of this relatively new science – phylogeography!

### **Shipboard life**

The family operated *Spirit of Enderby* is a complete expedition vessel, renowned for its strength, manoeuvrability and small passenger numbers. Private facilities are available in most cabins and all cabins have windows or portholes. Australasian chefs provide international quality cuisine. The crew and officers are highly experienced and they are complemented by a passionate and knowledgeable expedition team. New Year's Eve celebrations will be on board in the sheltered and beautiful Carnley Harbour, Auckland Islands.

### **Getting there**

Expeditioners will be able to enjoy Christmas Day in Australia, as it is possible to fly from Adelaide to Invercargill in one day, departing Bluff on December 27th 2020.

While this expedition is a while in the future, please express interest without obligation if you think you might be interested. Numbers will be limited to 50 guests, with Waterhouse Club members having priority.

Express interest by contacting Natalie at the Office  
email: [WaterhouseClub@samuseum.sa.gov.au](mailto:WaterhouseClub@samuseum.sa.gov.au)

If you have already expressed interest there is no need to do so again.

You may direct any questions about the expedition to expedition leader Alastair Dow on [adow@ozemail.com.au](mailto:adow@ozemail.com.au)

V1 27/08/18