PUBLICATION OF THE NEW ZEALAND ANTARCTIC SOCIETY

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NEW ZEALAND ANTARCTIC SOCIETY LIFE MEMBERS

The Society recognises with life membership, those people who excel in furthering the aims and objectives of the Society or who have given outstanding service in Antarctica. They are elected by vote at the Annual General Meeting and are restricted to 15 life members at any time.

Current Life Members by the year elected:

- 1. Jim Lowery (Wellington), 1982
- 2. Robin Ormerod (Wellington), 1996
- 3. Baden Norris (Canterbury), 2003
- 4. Bill Cranfield (Canterbury), 2003
- 5. Randal Heke (Wellington), 2003
- 6. Bill Hopper (Wellington), 2004
- 7. Malcolm Laird (Canterbury), 2006
- 8. Arnold Heine (Wellington), 2006
- 9. Margaret Bradshaw (Canterbury), 2006
- 10. Ray Dibble (Wellington), 2008
- 11. Norman Hardie (Canterbury), 2008
- 12. Colin Monteath (Canterbury), 2014
- 13. John Parsloe (Canterbury), 2014

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Cover photo: ©Antarctica New Zealand Pictorial Collection, Photographer Natalie Fowlie, K230-1415-A **Photo top:** Mawson. Photo ©Chris Wilson/Australian Antarctic Division

Photo above: Neumeyer Channel, Antarctic Peninsula. Photo courtesy of Colin Monteath/ Hedgehoghouse.com

Back cover: Allardyce Range summits, entrance to Cumberland Bay, Grytviken, South Georgia, Antarctica. Photo courtesy of Colin Monteath/Hedgehoghouse.com

Vacancy:

Editor – Antarctic

Antarctic is the flagship publication of The New Zealand Antarctic Society, and is currently published four times a year, to a worldwide readership.

Our publication is looking for a new editor.

An ability to develop the magazine's "online presence" is important. Knowledge of Antarctica and wide contacts/ networks within the Antarctic community both in New Zealand and Overseas would be useful. Some writing is required, and as Editor you would be responsible for gathering or commissioning articles from contributors, preparing them for publication and liaising with the magazine's designers.

This is an unpaid position.

Expressions of interest are requested to the Society's President president@antarctic.org.nz.

In previous issues in 2001–2006, *Antarctic* ran a series of articles on **National Antarctic Bases**. A new regular article for *Antarctic* re-commences in this issue, and will feature, in random order, one of the national Antarctic programmes from the 29 Consultative State countries. National Antarctic programmes are the government organisations which are responsible for delivering their countries' Antarctic research programmes.

As well, this issue has articles about Exceptional Science, Three Icy Incidents, a Book Review of Guyon, and an Obituary noting the passing of the Society's longestserving Life Member, Bernard Stonehouse, appointed a Life Member of the Society in 1966. On the recommendation of Council, and agreement of members at an annual general meeting, life membership to the Society can be awarded to any member in recognition of outstanding service in Antarctica or in furthering the aims and objects of the Society. The number of Life Members is limited to 15 at any one time. A list of the current Life Members and the dates they were appointed is inside the front cover. An obituary for another Life Member, John Claydon, will appear in the next issue.

The Editor of Antarctic welcomes articles from any person on any subject related to the Antarctic, the Southern Ocean or Sub-Antarctic regions. Articles may be submitted at any time to the Editor at editor@antarctic.org.nz. The Editor reserves the right to decline to publish an article for any reason whatsoever. Note that all articles will be subject to editorial review before publishing. Please see our advice to contributors and guidelines for authors at www.antarctic.org.nz/pages/ journal.html. The deadlines for submissions to future issues is 1 May, 1 August, 1 November and 1 February.

Advertising, including inserts, is also welcome. Please contact the Editor for rates and bookings. \clubsuit



The Society's website has recently added Antarctic News Bulletins from August 1950 to December 1955. These were issued prior to the commencement of Antarctic, which started with Volume 1, Number 1 in March 1956, edited by Mr L B Quartermain. These and other back issues of Antarctic are available at www.antarctic.org. nz/pastissues.html, or from the home page. These articles are fully searchable, and have been indexed to 2011, with the remaining issues, and the earlier Bulletins currently being indexed.



Exceptional Science and Relationships in Antarctica

By Jeanine Begg



ew Zealand is a leader in Antarctic science and operations. We know that 'making sense' of our changing environment and the impacts of human interaction are vital to New Zealand and Antarctica's future. These changes will likely affect fish stocks, hydrolake capacity, sea levels and weather patterns.

As a nation we have a direct interest in peace and stability in the Antarctic region including the seas that surround it. Antarctica New Zealand is proud to partner with incredibly talented people and organisations to support these efforts on ice -a presence which spans 60 years.

In the last edition of *Antarctic* Magazine, Antarctica New Zealand covered off what it takes to deliver high quality logistics support to world-class science events in Antarctica. This edition looks at the same planning process, but through the eyes of one of New Zealand's top scientists, Dr Regina Eisert. We also look at our very important partnership with the New Zealand Defence Force, and how their support has enabled another successful ship offload.

A word from a Scientist, Dr Regina Eisert

Dr Regina Eisert has been working with charismatic megafauna in Antarctica for six seasons. During 2013/14 Regina and her team caught 13 adult toothfish weighing on average, more than 30kg, and recorded never-seenbefore footage of toothfish in their natural habitat. They recaptured six out of eight Weddell seals from a previous seasons study, collected 33 dart biopsies from killer and minke whales as well as thousands of images for photo identification. They even filmed a Weddell seal dismembering a toothfish right outside Scott Base, and managed to get the first ever skin swab samples from Ross Sea Killer whales using a pot scrubber on a pole. Wow! This research directly informs our management plan for the protection of Antarctic marine living resources.

Regina explains how she achieves this: Getting to Antarctica to complete scientific research involves plenty of planning. I need four things: funding, people, permits, and logistics support. While the first three can be achieved with a little effort and patience, the fourth is priceless – no science happens in Antarctica without programme and logistics support. Access to Antarctica is one of the few privileges money can't buy, and I feel very fortunate to work there. Having Antarctica on your doorstep is something scientists elsewhere in the world can only dream of.

Before going to Antarctica, we put together an experimental design: What science will we do and how? A logistics plan, a great team, specialist science equipment, and the ability to ship all the gear to Scott Base.

The central component of every expedition or 'event' is the logistics plan, developed in close consultation with Antarctica New Zealand. This event was one of many



©Photo by NZDF, CPL Hanson, AC Joel Goodman pictured, 2014–15

supported through Scott Base, and resources must be juggled to ensure that all funded science projects are adequately supported.

Antarctica New Zealand salutes NZDF

The New Zealand Defence Force (NZDF) has been supporting Antarctica New Zealand in safeguarding Antarctica's pristine environment for more than 50 years. With around 220 Defence personnel directly supporting Antarctic missions each year, 'Operation Antarctica' is currently NZDF's largest offshore deployment.

A core team of eight personnel plus one Senior National Officer form the Scott Base Support Team, providing communications, liaison and administrative support. They are the link to the outside world by answering calls, providing news and weather updates, and monitoring scientists in the field.

Royal New Zealand Air Force (RNZAF) 40 Squadron pilots and crew fly supplies and passengers between Christchurch and Antarctica, while their maintenance technicians supply technical skills and labour to the United States Air Force (USAF) Ski Hercules fleet as part of New Zealand's contribution to the joint logistics pool.

The NZDF mission peaks during January with the annual supply ship offload. This year, NZDF contributed 53 personnel in support of the ship offload – the biggest surge of military personnel in the NZDF calendar. The contingent contains stevedores, riggers, general assistants and drivers who work around the clock shifts to ensure the timely success of the ship offload and reload.

Scott Base took ownership of 31 crates, which included a much anticipated excavator, Land Cruiser and two Hagglünds. Stores of food and supplies were replenished with two crates dedicated to tools and construction supplies for the Hillary Field Centre (HFC) upgrade.

The HFC project will see the centre transformed into a modern research and scientific facility. NZDF have contributed four members of their light engineering team to support the upgrade before the end of the summer season. Antarctica New Zealand staff will take on the remainder of the project during the winter for completion by the next summer season. €

Exploring the work of Antarctic Treaty national Antarctic programmes: The National Antarctic Programme of Australia

The National Antarctic Programme of Australia

The Australian Antarctic Division (AAD) is the government organisation responsible for leading and delivering Australia's Antarctic programme. Australia has established and maintains three year-round Antarctic stations on the coast of Wilkes Land, East Antarctica, and one sub-Antarctic station on Macquarie Island. Australia's first station was established in 1954, and is named Mawson Station, after Sir Douglas Mawson. This was followed by Davis Station in 1957 and Casey Station in 1969. The AAD also administers the Territory of Heard Island and McDonald Islands and manages Mawson's Huts in Commonwealth Bay. Other seasonal facilities on the continent that Australia manages are Cape Denison, Edgeworth David Base, Wilkins Aerodrome, Beaver Lake and other huts and refuges. Along with Romania, Australia also jointly manages the Law Racovita Negoita Base in the Larsemann Hills area of Antarctica. The Australian icebreaker RSV Aurora Australis resupplies the stations and conducts research in the Southern Ocean. Since 2004, flights have also run between Hobart, Tasmania and Antarctica. Smaller aircraft and helicopters are used for intracontinental shuttling to other stations and field camps.

The organisational structure of the Australian Antarctic Division

The Australian Antarctic Division is located in Kingston, Tasmania. Almost 300 permanent staff are employed, including support staff, summer and wintering expeditioners, and scientists. The AAD is an agency under the Department of the Environment of the Australian Government. This Department is responsible for implementing the Australian Government's policies to protect our environment and heritage, and to promote a sustainable way of life. The AAD is run by the Director, who oversees the various branches and liaises with parliamentary and ministerial bodies. The AAD advances Australia's strategic, scientific, environmental and economic interests in Antarctica and the Southern Ocean by protecting, administering and researching the region. Australia actively participates in the Antarctic Treaty System to promote Australia's Antarctic interests and to manage and protect the Antarctic environment. The current Chair of the Antarctic Treaty's Committee for Environmental Protection (CEP) is from the AAD.

The Australian Antarctic research programme

The Australian Antarctic science programme is directed by the Australian Antarctic Science Strategic Plan 2011–12 to 2020–21, approved by the Australian Government in 2010. This plan focusses on four major themes: Climate Processes and Change; Terrestrial and Nearshore Ecosystems – Environmental Change and Conservation; Southern Ocean Ecosystems – Environmental Change and Conservation; and Frontier Science. The Australian Antarctic Division works closely with other national Antarctic programmes in logistics and science. Scientists from 22 countries and 97 institutions are currently taking part in the Australian Antarctic Science programme, along with around 150 higher degree students.

The Australian Antarctic research programme addresses critical issues such as climate change, the human footprint on Antarctica and the increasing demands for food, energy and security caused by human population growth. The diverse programme covers physical and life sciences in the atmospheric, terrestrial and marine domains, as well as human biology and medical research. It is also responsible for a broad suite of ongoing observational activities, including a network of meteorological facilities; ionospheric activity monitoring; seismic, magnetic and GPS networks; and hydrographic and bathymetric mapping.

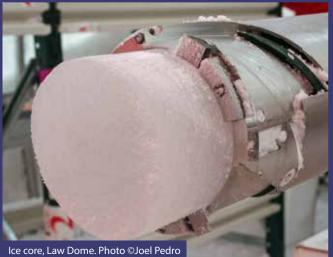
More information on Australia's national Antarctic programme can be found at www.antarctica.gov.au or www.comnap.aq/Members.

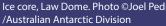






Iolovski/Australian Antarctic Division



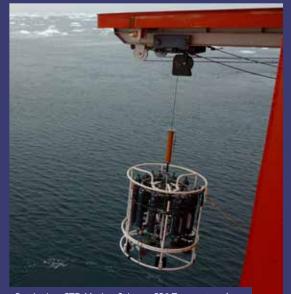




SAR training. Photo ©Todor Iolovski/Australian Antarctic Division



Mawson. Photo ©Chris Wilson/Australian Antarctic Division



Retrieving CTD Marine Science SR3 Transect and Mertz Glacier voyage, Southern Ocean. Photo ©Rose Croasdale/Australian Antarctic Division

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Re: "Changing Face of Non-State Actors in Antarctica" (*Antarctic* Vol.32, Issue 229, Sept 2014)

"New Zealand and the Antarctic Treaty System" (*Antarctic* Vol.32, Issue 230, Dec 2014)

Andrew Leachman writes:

The articles "Changing Face of Non-State Actors in Antarctica" in issue 229, by Neil Gilbert, and the follow up article "New Zealand and the Antarctic Treaty System" in issue 230 by Alan D. Hemmings has generated wide ranging discussions amongst those of us who work in the maritime environment of the Antarctic.

Dr Hemmings has extensive experience and legal knowledge of the governance of Antarctica. I am interested to know what he can recommend to the Government, to combat illegal tooth fishing within the CCAMLR zone.

New Zealand is the envy of most maritime (fishing) nations, for we operate a successful ITQ (Individual Transferable Quota) system. We manage and conserve our fish stocks. As a member of CCAMLR, New Zealand provides scientific advice to fisheries managers in Hobart. We should be providing leadership within that forum to protect and conserve the stocks of Antarctic Toothfish by combatting toothfish poaching. As a new member of the United Nations Security Council other nations look to us for leadership.

A recent Royal New Zealand Navy patrol under the auspices of CCAMLR, located and then observed three IUU vessels fishing for toothfish in the CCAMLR area 58.4.1 directly south of Tasmania. The IUU vessels claimed to be registered in Equatorial Guinea however this proved not to be the case. The United Nations Fish Stocks Agreement extends CCAMLR regulative responsibility for the waters which surround Antarctica but unless the fishing vessels are registered to a CCAMLR member state, they are free to fish in what they believe to be international waters.

There appears to be a loop hole in the Maritime law. Would the declaration of a Marine Protected Area as envisaged for the Ross Sea region, work for the coastal area off King George V land? Would it be feasible for the CCAMLR nations to declare a unilateral 200 mile limit around the entire coast of the Antarctic?

If IUU fishing activity is allowed to continue then CCAMLR is in danger of becoming a failure, just like the International Whaling Commission.

Dr Alan D. Hammings replies:

A ndrew Leachman asks what the New Zealand Government can do to combat IUU fishing within the CCAMLR area. My sense is that New Zealand is already one of the more engaged Antarctic states on this matter, and thus the answer to the question is "more of the same". The elements of the approach taken by New Zealand and other states include:

(1) Denial of the use of our own ports to known IUU vessels;

(2) Inspection of vessels planning to leave our ports under duties and rights known as port state jurisdiction;

(3) Monitoring of actual activity in Antarctic waters (through intelligence, use of military platforms such as the RNZAF's Orions and RNZN ships, and reporting from other vessels that may encounter IUU vessels);

(4) Interdiction of IUU vessels where a clear breach of international law is discovered;

(5) Direct contact with the flag-state (the state where the vessel is presently registered), including if necessary diplomatic protest about a failure to ensure compliance;

(6) Looking for financial, commercial or legal linkages between the beneficial owners of the vessel or operation in a state or states where legal remedies may be possible;

(7) Ensuring adverse publicity around the actions of the particular vessel and owners so that any fish they seek to sell are in a sense 'tainted'.

There is no guarantee that particular activities will be penalised by these acts, singly or in combination, but they often are effective. Realistically, as with any other case of breaches of law or social norms, there is rarely a silver bullet sure to solve the problem. And, of course, doing any of this costs time and money.

As Andrew notes, where a vessel's master or owners say the vessel is registered may not be reliable. It is now possible to change registrations very easily and this is precisely what has happened with a number of rogue ships. But the ship's shape and operating characteristics are less easily disguised, and modern near instantaneous communication means that vessels find it harder to 'disappear' than in the past.

Andrew asks whether either a CCAMLR states' assertion of a 200 mile limit around Antarctica – a collective Exclusive Economic Zone (EEZ) in effect, or the designation of the Ross Sea Marine Protected Area (MPA), would give us new tools to combat IUU activities. These are interesting proposals, but they present their own challenges in turn.

The collective EEZ approach, whilst conceivable as a realisation of the de facto condominium under which the Antarctic is managed, cuts across the claims to territorial sovereignty, and thus coastal state rights, asserted by the seven claimants (including New Zealand), and they are unlikely to be very keen on this approach. It would as a formal step likely raise concerns not only outside the Antarctic Treaty System about Antarctic states further appropriating Antarctica, but internally even for non-claimants in relation to its consistency with Article IV of the Antarctic Treaty. A discussion around such an approach would itself likely take some years, without certain outcome.

A Ross Sea MPA (like any others elsewhere) would certainly raise

the profile of the conservation and resource protection values of the area, but we are getting nowhere very fast with this proposed designation, and accordingly one would be optimistic to build any hopes on it as a tool any time soon.

Both options suffer from the same problem that we currently face, namely non-compliance. If existing legal obligations are ignored even when they manifestly apply to the activities of particular vessels, then we might fear that further obligations will also be ignored. Which takes us back to the measures we already have. \pounds



Re: "First-Women's Club of Antarctica" (*Antarctic* Vol.32, Issue 230, Dec 2014)

David Burke OAM writes:

To the list should be added the names of the first women scientists to winter-over in Antarctica in 1974 at McMurdo. They were Dr Alice McWhinnie and Sister Mary Odile Cahoon from DePaul University, Chicago. They were engaged in krill research.

Also Nel Law, the first Australian artist, and woman, to visit Antarctica – to Mawson Base in 1961. [Nel later

A question for readers: Hussey's Banjo

Hussey's Banjo is held by the National Maritime Museum,

founded the Antarctic Wives Association of Australia. Ed.]

Sylvia Strang-Parsloe writes:

Virginia Fiennes received a Polar Medal personally from the Queen with its unique bars for both the Antarctic and the Arctic. Ginny became the first woman to become a member of the Antarctic Club, which had previously been all male.

Greenwich, England. The banjo was signed by many members of the party, and a couple of others....

All of the officers except Hudson and Crean signed it, but none of the 'men' (the catalogue suggests McIlroy is also missing.) Plus, there are two Ranulph Fiennes gave her the credit she really deserved in his book *"To The Ends Of The Earth"* which told the story of the Transglobe Expedition (1979–1982). She held that expedition together and kept them on track wintering over in both the Antarctic and Arctic maintaining daily radio communication with the crossing party, the London office, et al.

Any list is somewhat objective and limited in scope, but these are important additions to a list of members of the First-Women's Club of Antarctica. We are glad that the story has stimulated discussion about early women in Antarctica, and *Antarctic* would welcome the submission of articles on other worthy members of "the club." Ed. **£**

others who signed it – F W Edwards and Ruby Page Le Brawn. Who were these last two, and is it possible that Ruby was an alias of Hudson or Crean?

The catalogue entry for the banjo can be found at: http://collections.rmg. co.uk/collections/objects/6273.html &



Three Icy Incidents

by John Parsloe

We all know accidents are preventable. But will the International Maritime Organisation's new Polar Code adequately allow for human frailties and cultural issues on even well-managed and well-run multinational-crewed polar vessels? Retired polar seafarer John Parsloe reflects on experiences he has witnessed.

1. Too Close for Comfort!

We were in deep trouble (or, perhaps, "shallows" trouble): the ship should have gone the other way round in the caldera.

We were cruising the islands of the Antarctic Peninsula and I had been employed as Ice Master to assist with the safe navigation through these icy waters. Entering the gap into the Deception Island caldera is always dramatic, especially for a large vessel of our size (20,000 tons). This narrow entrance, known as Neptune's Bellows, has sheer cliffs on your starboard side and a shoal patch to port that contains nasty Ravn Rock at its outer edge near the centre of the channel. There is little room for error - a vessel must be lined up correctly to get through this entranceway safely.

Once inside the caldera there are two options: either turn round in the small bay immediately inside to your right, known as Whaler's Bay, or continue on into the larger Port Foster. Our vessel always turned round in Whaler's Bay and then sailed straight out again.

In a larger vessel, to make the turn safely in Whaler's Bay, you need to go in an anticlockwise direction round the bay. This means you will be facing seawards through Neptune's Bellows when you complete the turn. Ice Masters, because of their knowledge and experience, discuss these issues with the Master of a vessel when planning such a call. But my role on these sidetrips is always a little unclear. Am I required or wanted on the bridge? Am I there as an advisor, or as something else: Ice Pilot or Ice Master?

On this occasion, for some unknown reason, the Master decided to go the other way round: clockwise. It can be done this way in a large vessel, but it is always challenging – especially if a wrong helm order is also given.

When a vessel goes clockwise round the bay, a very sharp "left" has to be made at the end of the turn so that the vessel will be facing out through Neptune's Bellows. This means putting the helm hard to port and using the two variable pitch propellers and bow thrusters to assist with the turn. However, on this occasion the order "Hard to starboard" was given, which meant we would continue on round towards Port Foster but would be put on a path to rocks on the far shore opposite Whaler's Bay rather than head back to Neptune's Bellows: a fraught situation.

Despite the obvious danger the helmsman did not challenge the Master and did as he was ordered. The ship started to swing to starboard. I shouted out, urgently, from the back of the wheelhouse where I was observing, "*Captain*, hard to PORT!" "What? Jesus! Hard to port!" he responded, putting both propellers to full astern positions. The Company's Vice-President was on the bridge, with other VIPs, and knew something was amiss but wasn't sure what it was.

I had come forward to be closer to the Master. "We're going to touch, we're going to hit," he whispered to me as he changed pitches on the propellers to help swing the vessel to port and seawards. The bow now seemed to have arrived in the right position and to be pointing down the middle of Neptune's Bellows.

But not the stern: it was seriously close to the rocks on the far shore. The Beach Master rushed in to the Wheelhouse from the stern, where he had been mingling with passengers watching proceedings: "Hey John, what's happening? I could see the rocks on the sea bottom from down aft. The stern's awfully close to the shore."

The vessel slowly straightened and lined itself up with the channel seawards, taking the stern away from the rocks and the shallow water near the shore.

Photo above: Looking through Neptune's Bellows into Port Foster and Whaler's Bay, Deception Island. Photo: LPhot HMS Endurance Crown Copyright 2006.

We proceeded seawards, back out through Neptune's Bellows and on to our next place of interest. For the Master, this was to be his last visit to Whaler's Bay – on future voyages to Deception Island, the weather was never ever quite right, or we were too short of time for us to enter.

2. A Turn Too Far

We were turning out of the Gerlache Strait into Croker Passage on our way from Paradise Harbour to Half Moon Island. The afternoon 4-to-8 watch were in charge, driving the ship. It was the perfect afternoon of a great day in Paradise.

The vessel was surrounded by spectacular snow-capped island peaks, while overhead was a beautiful blue sky. Around us was a slight sea full of life. Here a humpback whale would blow, and dive showing its tail. There a pod of killer whales was on the prowl. Schools of penguins were porpoising. Yes, idyllic conditions for a late afternoon at sea among the islands of the Antarctic Peninsula. What better place for a photo of the scenery than from the bridge?

I was off duty – I'd be coming back on watch again at 1800 for my all-night shift on the bridge as Ice Master. So, with my camera, I made my way to the bridge. The 4-to-8 watch's Second Officer was in charge. As I arrived, he had just altered course using the automatic pilot but had not switched on to its auto position; he wandered off to discuss cock fighting back home with one of his seamen. Although such fighting was by then illegal, he was a breeder of such birds in his village.

He didn't return to see how his alteration of course was proceeding. The ship continued to turn to port, slowly – towards an icy beach on one of the nearby islands! I shouted out to him to check the ship's turn. He and the seaman quickly returned from their banter at the far side of the wheelhouse and I suggested he went into hand-steering to check the turn and bring the ship back onto her correct new course. They did so. A close shave, or worse, was averted.

This Second Officer was relieved of his watch-keeping duties and was the first down the gangway on arrival at Ushuaia, Argentina – his replacement, the former Second Officer from the recently sunken MV *Explorer*! This fellow-countryman of the original Second Officer proved an intelligent and able officer.

3. An Icy Challenge

Neumayer Channel is an impressive stretch of water. When you fail to get through the shorter and better-known Lemaire Channel, as had just happened to us on our vessel, it can be a very useful and beautiful alternative passage to sail through.

It is a narrow spectacular fjord, with glaciers tumbling directly into it from the surrounding steep high mountains. Half way along its 26 kilometre length there is an interesting 'S' bend. This is a spot where there is frequently a boundary between two different water masses. Ice from the surrounding glaciers gets stuck there, or moves in different directions on opposite sides of the water boundary face.

This was the case today as we approached this sharp and interesting corner: there were a lot of small bergy bits and other rubble from glaciers floating around us. The Captain and I were both there on the bridge during this passage. The Captain was in command doing the conning, while I was there as his advisor. He was finding it challenging to see a safe way through all the icy bits in the water and frequently referred to me for advice. From a passenger's point of view, it was all very exciting.

I was focused – very focused. I could see a safe way through in the middle of the channel, even with the moving ice along the far face of the water boundary. At the boundary, we were going to have to nudge some of the ice out of the way with our bulbous bow as we passed through it. The speed of the ship therefore had to be kept down below six knots.

The Captain wanted to go closer to the coast on our starboard side, where there was less ice and more open water. But I was concerned if we took that track we could easily get ourselves moving even closer to the shore while trying to avoid bigger ice bits, and end up running out of deepenough water or manoeuvring space!

This issue was resolved for us. We heard a toot on a ship's horn and a small Russian ice-strengthened passenger vessel came past inshore of us at great speed, in the less icy water the Captain had been considering! We had seen the vessel a little earlier near Port Lockroy at anchor, so were surprised by its sudden reappearance. At this point, the Captain lost the plot and wanted to hand over command to me as he could not see my route through, although I had tried to show and explain it to him - the moving ice along both sides of the boundary face, going in opposite directions, was causing too much confusion. You had to concentrate. I remained calm and declined his suggestion - there were too many guests and senior staff watching on the bridge - and gave him quiet advice on where to go and what engine movements to make.

We nudged slowly through the pieces of ice at the boundary and into the clearer water on the other side, before making the crucial turn to port around the bend. The Russian vessel, frisking like a pup, was now well ahead of us at its faster speed in these iced waters. We, the older seadog, followed comfortably, enjoying the wonderful scenery surrounding us.

However, there was one verymuch-relieved Captain when we finally left the Channel and sailed out into the wider Gerlache Strait.

Obituary

Dr Bernard Stonehouse

By Myra Walton

Dr Bernard Stonehouse was a remarkable man and truly a unique Ambassador of all things Antarctica, and today is generally credited as the true father of penguin biology.

e died in November 2014 after a distinguished career as a Polar scientist, which spanned almost 70 years. His generosity held no boundaries. His life was an inspiration. His energy and humour were a magnetic influence to many scientists, ornithologists and friends from all walks of life.

Bernard was a life member of the Society and was closely connected with our Canterbury Branch during the 1960s and in 1979 he was awarded the NZAS Conservation Trophy. Many of our members also benefited from Bernard's expertise as the decade-long editor of Polar Record, the journal of the Scott Polar Research Institute, Cambridge.

He is famously known for his study of King Penguins and other Polar seabirds on South Georgia, Ascension Island and was one of the very few to have spent three consecutive winters in the Antarctic.

Bernard was born in Hull on May 1 1926. Joining the Fleet Air Arm in 1944, he trained as a pilot, and at

the age of 20, he was seconded as a Naval Pilot to the Falkland Islands Dependency Survey (FIDS), travelling to Stonington Island in the sealing ship *Trepassey*. He served as a meteorologist, dog sledger and ultimately a biologist.

In his second year he took part in two long dog-sledge journeys, under the direction of Vivian (later Sir Vivian) Fuchs, who had taken over command of the base. On the second of these journeys, to survey the coast of Adelaide Island to the north-west, the party covered a total distance of 500 miles. Stonehouse had a few unpleasant moments when he and another companion broke through thin sea ice with their sledge and were plunged into the icy water.

In 1949 Stonehouse was one of the so-called "lost 11", the name given by the press to the men who had an enforced winter at the Stonington base after a relief ship was prevented from reaching them by thick sea ice. For Stonehouse and four others, it was their third consecutive winter in the Antarctic.

On a sledging trip across the sea ice in 1948, the expedition made the exciting discovery of an emperor penguin "rookery" on the Dion Islands. The following winter, Stonehouse and two companions camped at the colony living in tents in temperatures as low as -40°C to study the penguins during the winter breeding season, about which very little was known at the time. He gained valuable data on the breeding behaviour and embryology of the animals, observing their instinctive desire to hold an egg, or indeed any object of similar size. At that time, only two other such rookeries were known.

Professor Euan Young recalls that in Bernard's acknowledgements to his 1953 FIDS report, he recorded "his indebtedness to his two companions, who shared with him uncomfortable, but enjoyable winter months under canvas". Camping under canvas, mid-winter? No one these days would even suggest such an event, or get approval for it. Nor would anyone ever suggest that it might be "enjoyable."

On one occasion when a Leica camera was found to be missing, the thief was spotted waddling away with a leather strap trailing between its feet. Stonehouse's famous quote "I have often had the impression that to penguins, man is just another penguin – different, less predictable, occasionally violent, but tolerable company when he sits still and minds his own business".

In 1960 Bernard moved to New Zealand as a senior lecturer at the University of Canterbury Zoology Department where he remained in until 1968. During this time he led students on expeditions over five summers working out of New Zealand's Scott Base, Ross Dependency, continuing his work on Adelie penguins, Weddell seals, McCormick skuas, Marine fish and invertebrates and fresh water fauna in the McMurdo sound area, not to mention visiting the classic breeding area of the emperor penguin at Cape Crozier.

Professor Young was with Bernard in the 1960s and remembers Bernard as an amazingly good writer. His desk was invariably filled with hand written notes on bits of paper that was somehow incorporated into fluent text. He had an enviable ability. The University and New Zealand suffered a great loss when he returned to England.

After retiring as editor of the Polar Record in 1992, he retained his connection with the Institute as a senior associate, forming its Polar Ecology and Management Group and heading a long-term study on the ecological impact of polar tourism, during which he took advanced students for five summer expeditions – to Cuverville and Hannah Point.

Antarctic tourism, he concluded, was broadly positive if properly managed, in that it encourages a public interest in polar conservation. "On the whole," he observed, "the tourists have done far less damage than some of the scientists who have had the run of the place since the 1950s." He published the first travel book to the area, *Antarctica: The Traveller's Guide* (1996); co-edited *Prospects for Polar Tourism* (2007); and worked as a popular lecturer on board tourist ships for more than 20 years.

His many publications include Wideawake Island: The story of the BOU centenary expedition to Ascension (1960); Animals of the Antarctic (1972), Penguins and Sea Mammals of the World (1985); and Antarctica and Global Climate Change (1991), edited with Colin Harris.

In 1953 Stonehouse received the Polar Medal. He is also commemorated in Stonehouse Bay on the east coast of Adelaide Island (first surveyed in 1909 by a French expedition and to which he led an FIDS sledge party to resurvey in 1948) and by Mount Stonehouse, a peak in the Transantarctic range.

Professor Lloyd Davis from the University of Otago quotes: "Bernard was a great scientist and communicator and an inspiration to me personally: he generously assisted my own journey into the area of science communication and I am reminded of his advice each and every day. He has left this world a better place for penguins and people".

Bernard Stonehouse: Born 1 May 1926, died 12 November 2014. Survived by his wife Sally and their son and two daughters. \pounds

The Daily Journal of an Antarctic Explorer 1956–1958

By Guyon Warren. Edited by Karen Warren Reviewed by Malcolm Laird

This book records the daily routine of a geologist who, for his work in the Antarctic over a period of 15 months, was awarded the Polar Medal by the Queen. He was also awarded the Trans-Antarctic Expedition medal by the Royal Geographic Society.

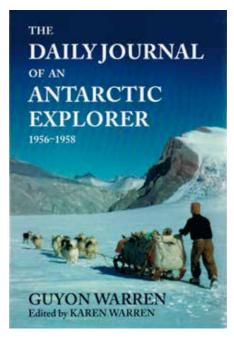
In 1956 the 23 year-old Guyon Warren was one of the two geologists picked to join Sir Edmund Hilary's Ross Sea Party, formed to assist the British Trans-Antarctic Expedition in attempting the first Antarctic crossing. Guyon set out in December for his great adventure in Antarctica. During the 15 months he spent there (two summers and the intervening winter), Guyon kept a detailed diary record of his day-to-day experiences.

The first two chapters of the diary deal with the long and frustrating business of landing all the supplies from the ships onto the shifting ice, the hunting of seals to provide meat for the dogs, and then transporting all the supplies to Pram Point on Ross Island, where the base was finally erected before the beginning of winter. The geologists also joined a short survey and geological man-hauling trip up the Skelton Glacier, collecting numerous rock samples, and climbing the virgin 10,320 ft. (3,100 m) peak of Mt Harmsworth. This was the first significant mountain to be climbed on the mainland of Antarctica.

Their fieldwork began in early October under the leadership of the surveyor Richard Brooke, with Bernie Gunn and Guyon Warren, geologists, and Murray Douglas, mountain guide, ice and dog expert. Their expedition would take four months of dog sledging in the largely unexplored mountains of Victoria Land to the west and NW of Scott Base. They crossed McMurdo Sound, and then explored north up the coast, enjoying fresh seal meat on occasion, much preferred to the disliked pemmican.

Their geological achievements were many, but their greatest discoveries involved the Beacon Sandstone Formation. Guyon found and recorded the base of the Beacon Sandstone Formation resting on older granite, after a very difficult climb up at times nearly vertical cliffs. However, the most rewarding results came later, when Guyon found a boulder yielding four species of fossil plants, along with multitudes of the first mollusc to be found in the Beacon sequence. On 4 December the geologists hit another jackpot glacial tillite in the Beacon succession. The tillite succession, which was underlain by a thick series of coal measures with four or five 6 ft (2 m) seams of coal, was an important discovery because it formed a very strong link in the chain of geological similarity between Antarctica and other southern continents, supporting the contested theory of Continental Drift.

On Christmas Eve Guyon celebrated (in part) a ceremonial burying of his underclothes. Then a huge Christmas cake was produced, and small bottles of (medicinal) brandy were brought out and consumed.



The culmination was a wonderful session on the radio with fiancée Sally and with family. Christmas Day was back to work, and in the early New Year they discovered more fish beds.

By late January, the geology and surveying was essentially complete, and Guyon returned to base after four months in the field, and about 1,000 sledge miles. He returned home via ship, sailing into Lyttelton harbour, to be reunited with his fiancée Sally, family and friends.

Guyon and Bernie Gunn jointly published a number of scientific papers on their discoveries. However, the definitive work which has stood the test of time is the Bulletin and maps, published in 1962. This has been used as a reference by many post-TAE field parties and still acts as a monument to Guyon and Bernie's efforts.

For those who experienced similar field and base conditions in Antarctica in the late 1950s and 1960s, this will be a nostalgic visit to the past. It is also a fitting tribute to the memory of Guyon.

The daily journal of an Antarctic Explorer – 1956–1958 is published by Copy Press Books.

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The Fourth Man

This man is nothing, invisible, This man is ghostly, impossible, Nobody following us, nobody Keeping us silent company. Casting no shadow he follows Our long black following shadows.

"Some seaman's ghost perhaps? Some traveller from the crevasses?" In the mountains there are no ships, And this way no traveller passes. He is not here but he watches us, Checked on the edge of the precipice.

"Creatures of tempests and mists?" God help them if they go Wandering these white wastes While centuries sink in snow. This is no country for men, A land like the back of the moon.

"I cannot touch him nor see, I cannot speak to the air." Only we know we are three And a fourth man is moving here: On his own purposes bent, Grave and indifferent.

All night and all day and all night In the mountainous land without rest, And the trudging of heavy feet, The fingers of fog on the crest: He gives no direction, no warning, He is light in the sunlight burning.

All things flower out of nothing: Here nothing itself is moving; For this man is nothing, intangible, Yet he is with us, unchangeable, Travelling the snowfields, somebody, Keeping us silent company.

By Douglas Stewart,

From *Worsley Enchanted*, in Sun Orchids (1952), Angus and Robertson.