

CLASP TO THE AUSTRALIAN ANTARCTIC MEDAL

(21 June 2012)

Dr Graham George ROBERTSON AAM

9 Roba Court, Kingston Tas 7050

For continued outstanding research on seabird mortality in long line fisheries.

Occupation In Antarctica:

Seabird Ecologist/Ornithologist

Service in Antarctica:

Overwintered in 1988 remaining for the 1988/89 summer season. For the past two decades Dr Robertson has carried out extensive research activities relating to southern fisheries and impact on seabirds working in remote locations and on board fishing vessels.

In 1988 Dr Robertson was part of a wintering party at Mawson and spent much of the winter living in a remote field hut enduring very low temperatures studying Emperor penguins at Auster Rookery. In the summer of 1988/89 he spent a further three months based in the field studying the Taylor Glacier Emperor Penguin Rookery. He was awarded the Australian Antarctic Medal for his contribution to the scientific knowledge of Emperor penguins.

Dr Robertson has continued his outstanding work which has seen him acknowledged as a world leader in the development of science-based solutions to the problem of seabird mortality in long line fisheries.

Since 1989 Dr Robertson has spent several years conducting research related to seabird bycatch in fisheries controlled by the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR). This has covered many aspects, several of them novel, including:

- research to understand the 'mechanics' of setting and hauling fishing lines (e.g. the effects of prop wash and turbulence, how weighted lines behave underwater, measuring line sink rates) as well as studying how different fishers behave and the consequences of both the mechanical and the human factors on fishing practices and;
- designing, developing and testing innovative mitigation measures to reduce seabird bycatch; and
- developing observation protocols for fisheries observers to gather data on fishing practices and gears, and the impacts on seabirds.

In the process, he has shown great dedication to field work at sea, often under arduous conditions and a rare ability to work collaboratively with a wide variety of people, including fishers of all backgrounds and cultures. In recognition of the critical need to work with Spanish speaking fishers (and scientists), he has even learnt a second language. He has worked at very isolated locations to study Southern Ocean seabirds whilst collaborating with many other scientists in Australia and overseas. He has played an important mentoring role to younger scientists, including those in Chile.

Dr Robertson has been a very influential force in domestic and international fisheries scientific forums, including CCAMLR, in successfully arguing for improved seabird bycatch mitigation measures. Importantly, he has recognised the need for, and delivered, clear scientific advice to policy and other staff so they can in turn press for better fisheries management and compliance arrangements that are an essential complement to effective bycatch mitigation measures.

THE AUSTRALIAN ANTARCTIC MEDAL

(21 June 2012)

Dr Neil David ADAMS, deceased

Late of Howrah Tas 7018

For outstanding contributions to the development of the Science of Antarctic Meteorology..

Occupation In Antarctica:

Forecaster, Scientist, Operational support

Service in Antarctica:

Dr Adams summered as a Forecaster at Casey in 92/93; 97/98 and 98/99 and wintered at Casey in 93/94. From his first season in 1992/93, Dr Adams was at Casey for a total of 19 months.

Dr Neil Adams has made outstanding contribution to the development of the science of Antarctic meteorology. His exceptional abilities as a forecaster have contributed immensely to the achievement of scientific programs for three decades.

Dr Adams' was the Manager of the Bureau's Antarctic Meteorological Section based in the Tasmania and Antarctica Region. Dr Adams was responsible for the development and implementation of polar research and services as well as the operational use of polar observations.

The observation and forecasting infrastructure which underpins the Bureau's Antarctic forecasting service provides testimony to Dr Adams' work. The polar Numerical Weather Prediction (NWP) suite; the observational data and NWP model output viewing system; the Australian Antarctic Division (AAD) aviation-based Automatic Weather Station network; and the Bureau's satellite facilities in Antarctica: these have all greatly benefited from his insightful contributions and hands-on input.

Dr Adams made, and his Antarctic Meteorological team continue to make, an enormous impact on the work of the AAD. Dr Adams himself was the lynchpin of the familiar relationship between the AAD and the Bureau of Meteorology (BoM), which is crucial as the work of the unit Dr Adams ran is critical to the operations of the AAD. BoM's forecasts support the AAD's station, traverse, shipping, flights and deep field activities while contributing to ensuring safety of personnel and infrastructure.

THE AUSTRALIAN ANTARCTIC MEDAL

(21 June 2012)

Dr James DOUBE

Kingscote, Kangaroo Island SA 5223

For outstanding contributions to the theory and practice of polar medicine.

Occupation In Antarctica:

Antarctic Medical Practitioner, Search and Rescue Leader, Field Training Officer, Watercraft Operator.

Service in Antarctica:

March 2006 – December 2007, April 2008, December 2009 – August 2011 and April 2012 at Macquarie Island.

Dr Doube commenced his service with the Australian Antarctic Division as a registrar and completed his Fellowship of the Australian College of Rural and Remote Medicine with advanced skills in General Practice Surgery whilst providing outstanding service to Australia's Antarctic Program. He is characterised as a multi-skilled expeditioner with extensive experience in pre-hospital medicine. His enthusiasm and abilities have embraced all aspects of ship and station life and he has substantially contributed, both as an individually and team member, to the success of each voyage and expedition in which he has been involved.

Dr Doube has been described as "an inspiration to other doctors in practicing remote medicine" and, during his time with the Australian Antarctic Division, has demonstrated his outstanding qualities in the practice and theory of polar medicine through his willingness, enthusiasm and his versatility across the disciplines of procedural generalist medicine, expedition medicine, public health and occupational medicine.

Dr Doube has made a multi skilled contribution to successive Macquarie Island expeditions, and while this alone is an expectation normally held of expeditioners, the degree to which Dr Doube has contributed goes far beyond the norm and is considered exceptional. Specifically, he has undertaken the role of Field Training Officer and lead Search and Rescue Teams, and has been extensively involved in boat operations (commanding both inflatable craft and amphibious LARCs), all of which require enhanced ability given the Macquarie Island environment. Additionally he has contributed substantially to seal, seabird and botanical research in which his former qualifications in biology proved particularly valuable.

Dr Doube also made a significant contribution to the success of the Macquarie Island Pest Eradication Program (MIPEP). This contribution has been acknowledged as outstanding by the Tasmanian Parks and Wildlife Service. His contribution has been far in excess of what would have been expected of an expedition medical officer and ranged from conducting bait trials and developing methods using thermal imaging equipment to census rabbit populations, to planning and operational strategy, and to developing emergency response capacity in the challenging environment.

Dr Doube displayed exceptional service in volunteering for "back to back" wintering service during 2010 and 2011. It is rare for service to be for such an extended time, let alone for exceptional service to be sustained at a superior level across so many aspects of an annual program. The demands of these two years were well above the normal pressures on an Antarctic Medical Practitioner, and his exceptional combination of abilities and skills has contributed to and enabled the success of the programs.

THE AUSTRALIAN ANTARCTIC MEDAL

(21 June 2012)

Dr Stephen Rich RINTOUL

CSIRO Marine and Atmospheric Research, GPO Box 1538, Hobart Tas 7001
For outstanding contributions as Leader, Antarctic Climate and Ecosystems Cooperative Research Oceans Program.

Occupation In Antarctica:

Stream Co-leader: Oceans and marine ice in the Southern Hemisphere. Leader: Antarctic Climate and Ecosystems Cooperative Research Centre (CRC) Oceans Program.

Service in Antarctica:

Dr Rintoul has undertaken 14 marine science voyages, being Chief Scientist on 11, and has spent about 13 months at sea in the Antarctic.

Dr Rintoul has contributed in an outstanding way to the success of Australia's Antarctic science program, and thus to global understanding about the workings of the Southern Ocean and its significance in the global climate system. For this he was elected a Fellow of the Academy of Science in 2006 and appointed a CSIRO Fellow in 2007 – CSIRO's highest accolade for science excellence.

His major involvement has been to develop a new concept of the dynamics of the Southern Ocean in which three-dimensional ocean circulation such as eddy fluxes, wind forcing and topographic interactions are intimately linked. Dr Rintoul's work has shown that deep Antarctic water is becoming fresher and warmer at a much higher rate than previously thought – an observation of crucial importance for future climate predictions.

He was the inaugural winner of the Georg Wüst medal by the German Society of Marine Research (2005). He is co-Chair of the new Southern Ocean Observing System, on behalf of the Scientific Committee on Antarctic Research.

Dr Rintoul is a program leader in the Antarctic Climate and Ecosystems CRC, and has been since it started in 2010. His work figures prominently in the Intergovernmental Panel on Climate Change reports, and will do so again in 2013. Dr Rintoul's contribution to global understanding of Southern Ocean dynamics is of world significance, as his international standing and discipline recognition attest.