

Science in the Snow

*Sixty years of international collaboration through
the Scientific Committee on Antarctic Research*



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the Scientific Committee on Antarctic Research*

By

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Second Edition for SCAR's 60th Anniversary

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Frontispiece: Man against the elements in McMurdo Sound, Antarctica.
Photograph: Peter Clarkson.

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Dedication

This book is dedicated to the memory of all those who have travelled to Antarctica to undertake and support scientific research and the pursuit of knowledge in the south polar regions and who have not returned.

“To strive, to seek, to find, and not to yield.”

Acknowledgements

The authors realized when setting out to write this volume that they would be unable to do justice to the thousands of scientists who have contributed to the development of Antarctic science over the past 50 years. All they could do is to sample the diversity, reflect the trends and attempt to capture the spirit of collaboration that has suffused SCAR from its earliest beginnings. They therefore apologize in advance to those readers who do not find their own subject covered in sufficient depth.

Corporate histories are difficult to make exciting yet for us the stories and exploits covered in these pages are not only a testament to the imagination and dedication of many scientists and support staff but also illustrate just how the Antarctic has grown from a regional interest to global scientific significance.

We are, of course, indebted to many of our colleagues past and present for help in compiling this history. We have tried to draw an invisible line between what SCAR has actually done and what is more correctly attributable to national activities but we are sure many will disagree with our decisions. What we do know from personal experience is that it has been at SCAR meetings that many of the new science ideas have first seen the light of day over a meal, a glass of beer or a committee table, and it is for providing those opportunities that SCAR can take credit.

For most of the fifty years SCAR has been operating with few staff and a tiny budget, and it is not surprising therefore that little attention has been devoted to the archives. We have pieced together the story as best we can from the existing files, *SCAR Reports* and *SCAR Bulletins* but, in some instances, there seems to be information missing in terms of particular groups or activities. In addition there has never been any attempt to collect an archive of photographs to record the changing personnel and many venues used for meetings so we have tried to garner material directly from the older members. It is both because the archives are not yet professionally curated and to make the text more readable that we have not attempted to reference the statements in the text.

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We are also indebted to a range of people for other things including information, advice, and critical comments: Ian Allison, Peter Barratt, Charlie Bentley, Arnoldus Blix, Andrew Clarke, Fred Davey, David Drewry, Al Fowler, Guy Guthridge, George Hemmen, Knowles Kerry, Yeadong Kim, Dick Laws, Jerónimo López-Martínez, Cornelia Lüdecke, Tony Rocha-Campos, Bob Rutford, Mike Sparrow, Mike Thomson, John Turner and Gunter Weller. Our apologies if we have inadvertently omitted anyone.

The authors accept full responsibility for the contents of this volume. It is not and was never intended to be an official SCAR history agreed by all SCAR members and, although based on factual material published by SCAR and available in SCAR archives, it does contain the opinions of the authors which should not to be attributed to SCAR.

Foreword

It is important to pause on occasion to review, assess and record past events to inform future directions. This compilation of the history of the Scientific Committee on Antarctic Research (SCAR) serves as a chronicle of SCAR's evolution during its first five decades. It is especially informative to understand the origins of SCAR and recognize the efforts and contributions of those that have gone before. Over its 50-year history there has been an ebb and flow in SCAR as an organization that reveals the dynamics of past times including changes in leadership and directions. SCAR began as a small group of dedicated scientists that saw and appreciated the value of international scientific collaboration and partnerships as the International Geophysical Year came to a close in the late 1950s. Over the years, SCAR has grown in complexity that is only surpassed by the changes in the milieu within which it operates. SCAR has benefited from the dedication and hard work of many individuals over the years and owes its current status and reputation to the foundational efforts summarized here. It is often a challenge for an organization to evolve as the world around it undergoes complex and often unpredictable transformations. While SCAR has been seen, at different times, as more or less relevant to the community of Antarctic scientists and policy shapers, the need for such a group has rarely been questioned. The core strength of SCAR over the years has been that it has remained true to the principles set forth in its founding constitution. These values have never been more important to the Antarctic community it serves, and to the broader global audience, than today. Antarctica has occupied an important and inspiring place in humankind's psyche before, and even more since, its discovery just a few hundred years ago. Antarctica's wildlife has become an icon of one of our planet's last remaining wilderness and under-explored regions and are now embedded in societies worldwide. While we know more than ever before about Antarctica and the Southern Ocean, it is still seen as mysterious, inspiring, and a place of innate worth as a heritage of our planet. SCAR has and continues to serve a unique and vital role as a steward of this perception, educating the public about why it is a key, if not critical, element of the Earth System. The global debate on climate warming has crystallized this niche as never before. As we look back, we also look forward and I am pleased to report that SCAR's mission, vision, and objectives remain immensely important.

While SCAR was perceived as being in a state of decline in the not too distant past, SCAR leadership recognized, and by all accounts, reversed this trend. Today, the status of the organization has been re-asserted and re-energized by committing to serve better the large, growing and diverse community of dedicated practitioners of Antarctic science and research. The state of the organization is strong and it is more relevant today to the global dialogue than ever before. These are challenging times but the opportunities for SCAR are great. SCAR has re-established itself as the premier, international organization that facilitates and champions the study and understanding of our planet's southern regions. As the preface to the most recent SCAR strategic plan suggests, if not SCAR then who? SCAR is at the threshold of a renaissance in polar science punctuated by the International Polar Year 2007-08.

SCAR has important and critical roles in advancing scientific frontiers, discerning emerging issues, and supporting sound environmental stewardship. It serves as the pre-eminent provider of the best and highest quality scientific advice to guide us through the next 50 years of the increasingly complex and difficult questions of relevance to the Antarctic Treaty Parties and their wider constituencies. When others pause to write the next history of SCAR, I believe that the past and next few decades will be seen as a turning point in the history of how Antarctica is managed for all of humankind. The task before us is to ensure that when the next retrospective is written, SCAR is seen as having made the right decisions, exercised its responsibilities to the best of its collective abilities, and that we made a difference in navigating through the challenges before us.

Mahlon “Chuck” Kennicutt II
President of SCAR 2008–12

Foreword to the Second Edition

In 1957 the International Council of Scientific Unions charged a Special Committee on Antarctic Research to ...prepare a plan for the scientific exploration of Antarctica... Between the 3rd and 6th of February 1958, SCAR held its first meeting in The Hague, Netherlands.

The Scientific Committee on Antarctic Research, as it soon came to be known, has grown in 60 years to become a large and diverse organization coordinating and facilitating science in, from and about Antarctica and the Southern Ocean.

After the Antarctic Treaty came into force in 1961, SCAR became a primary advisor to the Treaty. Indeed, it is the only Observer that is written into a Treaty-related agreement. The Protocol on Environmental Protection to the Antarctic Treaty, Article 10.2 states that Antarctic Treaty Consultative Meetings [shall draw fully] upon the advice of the Scientific Committee on Antarctic Research.

SCAR is therefore the premier scientific body coordinating Antarctic and Southern Ocean research and providing policy-ready advice, not only to the Antarctic Treaty System, but also to a range of other bodies, including those of the United Nations. Indeed, in doing its work, SCAR also gives effect to the priorities of the International Council for Science (as ICSU is now known).

Over its history, SCAR has been served by an extraordinary range of scientists, researchers and visionaries. Almost all of this service has been voluntary. While SCAR Members support the organization through their annual financial contributions, the greatest support has come from civil society through voluntary contributions. These have been made in time, in subsidised travel, and through more than one kitchen cleared to solve a pressing problem or plan a coordinated research activity late into the night.

This volume, *Science in the Snow*, provides a history of SCAR's work and a partial picture of those involved. Originally finalized in 2010 and issued in 2011, it has now been updated.

In describing SCAR's achievements and the people behind them, this volume portrays clearly the value of the voluntary contributions to the organization. In the modern world, often regulated by key performance indicators and adjudicated in economic terms, the extraordinary social good provided through strong institutions peopled by volunteers is undervalued, forgotten, or even disliked. Strong institutions hold us accountable. Those in science do so by making plain the implications of the evidence. And these messages are sometimes unpalatable. Yet they must be heard.

SCAR has an extraordinary history of facilitating discoveries and unveiling their implications. It has also helped deliver fundamental science that it is breathtaking in its scope and its beauty.

Long may its members, volunteers and visionaries continue to do so.

Steven L Chown
Melbourne, Australia, June 2018