

The review and the following restructuring of SCAR beginning in the year 2000 is described as a milestone and turning point for the organization (compare the quotation from Lorus above). The key was to find ways of getting the scientific community more involved and being able to draw on the expertise which SCAR (at least potentially) had access to. This also required a more active and science-heavy leadership of the organization, i.e. a strengthening of the core of SCAR, the secretariat at Scott Polar. It is too early to tell if this modernisation of the organization will have a lasting value. No doubt the change has revitalised SCAR and the authors seem quite hopeful that the future will be bright for Antarctic science and that SCAR will continue to play an important role.

The book is written by people who have had a direct involvement in SCAR with a first-hand knowledge of much of the material described. Although the authors never talk in the first person, the reader is made aware of the fact: "I was there". The text is sprinkled with small anecdotes and value judgement (the wine was excellent at the banquet, ridiculous solutions and strange ideas on medical ethics etc.). It makes the narrative more amusing and helps to lighten up descriptions which tend otherwise to be rather repetitive and monotonous. On the other hand, these random comments make the reader somewhat uncertain about the facts and the objectivity of the presentation. The inserts with short biographies and pictures of SCAR presidents are very nice. There is an interesting collection of photos in the book (you usually have high expectations about pictures in a book about Antarctica!).

You can always complain about missing details in a presentation covering a wide scope of activities over such a long period. One event which could have been interesting to have comments on from a SCAR perspective was the building of the Greenpeace station on the Antarctic continent. Actually the whole issue of station establishments and their political (as well as scientific) roles is given less attention in the presentation than it might deserve.

The book is no doubt an extremely valuable source for information about SCAR and its history. It is a volume to come back to and find facts and data that one might be looking for and, for all of us who have had a relation to SCAR over the years, also a book of good memories. It does not claim to be the final account of SCAR. It will be the task of historians in the future, with the benefit of hindsight and with a distance to the sources of information and distance to the events, to return to this subject.

One last remark. The title *Science in the Snow* is not the most remarkable or creative invention. For many of us coming from the north and living in the snow for many months of the year the title does not point us in the direction of Antarctica!

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Putting South Georgia on the map

Alec F. Trendall

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The South Georgia survey expeditions of the early 1950s provide an inspiring example of private enterprise applied to Antarctic exploration. Whilst it is commonplace for independent expeditions to claim altruistic objectives, few can have delivered more than the three survey missions to South Georgia between 1951 and 1956 masterminded by Duncan Carse (1913–2004). Alec Trendall was the geologist accompanying the first two of these expeditions, in the 1951–52 and 1953–54 summers, but has written a fascinating account of the entire exercise, drawing extensively on the diaries and reminiscences of his colleagues during those two periods and the third expedition in the 1955–56 season. His record of the field activities is supplemented by well-researched reviews of the conception and aftermath of Carse's ambitious project. Appendices provide biographical details of the participants - a quite extraordinary group of men - and a discussion of the possible route taken by Shackleton on his epic crossing of the island in 1916, an aspect that Carse had hoped to clarify during the survey work (Carse 1959). Separately, Trendall's two accounts of his geological investigations were published (Trendall 1953, 1959) as scientific reports by the Falkland Islands Dependencies Survey, forerunner of the British Antarctic Survey.

On 1 January 1952 Trendall fell into a crevasse, high up between the Spenceley and Ross glaciers, and sustained a serious leg injury. Accordingly, much detail of the first expedition, including the account of Trendall's rescue and evacuation, is provided by Walter Roots, an experienced mountaineer working with the survey party. Trendall made a good recovery and rejoined the second of the survey expeditions, which was beset with difficulties - logistical, medical and strategic - such that of the original four-man party only he and Carse completed the full season. Trendall's account of the third, more successful, expedition utilizes diaries and letters from five of the eight-man team, all of which he skilfully melds with informed commentary and assessment. It is our good fortune that the diarists were literate and imaginative. We share their aspirations, eccentricities, lyrical appreciation of their surroundings, and frustrations with each other and South Georgia's weather. They also provide some vivid insights into the whaling and sealing work pursued by companies based at the onshore stations in Stromness and Cumberland bays. All of these disparate themes are well illustrated in colour, reflecting the photographic talents of several expedition members but also, more significantly, the serious effort made to record all aspects of the teams' progress. This policy has allowed almost

2000 expedition photographs to be lodged in the British Antarctic Survey archive. As might be expected in an account of surveying expeditions, the eight maps supporting the text are clear and informative.

Essential logistical support, including transport to and around South Georgia, was provided by the whaling companies then operating around the island, with Salvesen of Leith to the fore. However, once they had been landed on remote beaches the survey teams were very much alone, the excessive weight of the necessary batteries even precluding radio communication. Inland surveying work required triangulation sites on high vantage points that were accessed by man-hauling sledges up and along the principal glaciers to establish base camps. It was difficult, arduous work and dangerous too, with several near disasters. The result was the publication in 1958 by the Directorate of Overseas Surveys of DOS 610: South Georgia at a scale of 1:200 000. This remained the definitive map of the island until superseded in 2004 by an edition based on satellite imagery. Alec Trendall provides a fitting tribute to the men who made it happen, principal amongst whom was Duncan Carse. Woven into the survey story is biographical detail about this complex character, best remembered by older members of the British public as the radio voice of Dick Barton - Special Agent, but probably better known in Antarctic circles for his role in the 1934–37 British Graham Land Expedition. Carse's lifelong ambition, ultimately unrealized, was to emulate his hero, Shackleton, and lead major Antarctic exploration. In 1953 he distributed plans for a Transantarctic expedition, and conceived the South Georgia surveys as a means of improving his credentials for leading such an undertaking. Trendall's assessment is sympathetic but honest: as a leader Carse could be inspirational but also infuriating - and at some crucial moments simply absent, with depression and alcohol both contributing.

Alec Trendall's book can be thoroughly recommended and is an important contribution to the South Georgia literature. It is a delight to read, is superbly illustrated, is candid in its description of events and in passing exposes one or two myths. Quite apart from the detailed accounts of the surveying work and the topography of South Georgia, there are first-hand descriptions of life in the whaling industry and fascinating insights into the backroom manoeuvrings amongst the Antarctic élite as British science and exploration policy evolved through the early 1950s. And perhaps most important of all, *Putting South Georgia on the map* invites long overdue recognition for a remarkable pioneering venture.

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References

CARSE, V.D. 1959. The survey of South Georgia, 1951–57. *The Geographical Journal*, **125**, 20–37.

TRENDALL, A.F. 1953. The geology of South Georgia. Part 1. *Falkland Islands Dependencies Survey Scientific Report*, No. 7, 26 pp.

TRENDALL, A.F. 1959. The geology of South Georgia. Part 2. *Falkland Islands Dependencies Survey Scientific Report*, No. 19, 48 pp.

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Cold region hazards and risks

Colin A. Whiteman

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Living (as I do) in a city where it is not particularly unusual to have a daily commute with temperatures in the -40°C s, where snow can be several metres deep, where ice jams on the local river have caused flooding of both industrial and residential areas, and where roads are commonly closed due to avalanches, this book deals with what are realities for many of us. One simply does not drive without survival clothing in the car and we keep adequate cooking equipment and clothing in the house against possible power failures due to ice storms or trees falling on power lines. Of course, the other side of the coin is that we can cool beer quickly by just putting it outside - the "cold region risk" being leave it too long and it may freeze! While cold region risks apply to many of us in association with our fieldwork, it is surprising just how many people do live with such risks as part of their daily (winter) life and for whom much of what is in this book is not exceptional. That said, this is a wonderful text dealing with a broad-based topic that has not been (to the best of my knowledge) dealt with in such an extensive way before. Also it deals with issues for both poles, extensive non-polar regions that experience cold, as well as mountains regions. It is truly all-encompassing. Further, it brings home how cold region events in one part of the world may well affect those of us living in warmer climes - certainly the unseasonable destruction of grapes due to cold in, say, Argentina may well impact the price of my wine in England, coastal flooding of many countries due to melting land ice being at the more serious end of that scale.

The book is divided into 11 chapters plus has extensive references, as well as a most useful glossary and a section on acronyms. The book covers all attributes I could think of except for the hazard (very real to some of us) of car-animal (especially moose) interactions, which can be a major year round risk and one exacerbated in winter by driving conditions (blizzard, icy roads etc), or that of thermal shock weathering to windscreens - on c. 60% of the cars where I live one can see (and I have experienced) large cracks in the windscreen which are parallel to the dashboard and are created by the car's heater impacting a