

noted, nothing good can be said about Scott. The writer accepts uncritically the view expressed by Nigel Tangye (page 15) that Scott's second expedition was marred 'by poor leadership, bad planning and inefficient operation.' Even the great journey in search of the eggs of the emperor penguin was in pursuit of a 'crackpot' (page 14) theory. More generally, 'upper class twits' (page 16) were recruited onto British polar expeditions, and so forth. This reviewer has thought deeply concerning who these 'upper class twits' might have been. The list appears short. Sir Philip Brocklehurst of Shackleton's *Nimrod* expedition was in the party that accomplished the first ascent of Mount Erebus, Apsley Cherry-Garrard and Lawrence Oates of Scott's last expedition, whose achievements do not require listing, and, stretching the definition of 'upper class' a little, Benjamin Leigh-Smith whose expeditions in Svalbard and Franz Josef Land were successful and who brought his men out from the latter after the destruction of his vessel in a very Shackletonian open-boat voyage. 'Twits' never, and one concludes that as the writer mentions his own working-class origins, he retains the 'chip on the shoulder' said to be characteristic of Liverpudlians.

The book is attractively presented and the illustrations are interesting. Many of these are of the personnel of the expeditions and evoke an era that has now passed. Perhaps the most attractive is that of the author himself resolutely striding along a damp Liverpool street wearing his African shorts. There is also a set of useful maps indicating the travels of the field parties during the two summers of the Hazen expedition.

To conclude, this book is a racy account of the early part of the author's life full of interesting insights into life on a northern expedition. It is in no sense, and does not set out to be, a definitive account of Operation Hazen, but should be read by all with interests in that era of the history of the Canadian north. (Ian R. Stone, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

LAST GREAT WILDERNESS: THE CAMPAIGN TO ESTABLISH THE ARCTIC NATIONAL WILDLIFE REFUGE. Roger Kaye. 2006. Fairbanks: University of Alaska Press. xx + 283 p, illustrated, hard cover. ISBN 1-889963-83-6. \$US29.95. doi:10.1017/S0032247407006614

The Arctic National Wildlife Refuge (ANWR) is the United States' first ecosystem-scale conservation unit, encompassing an unbroken continuum of five sub-Arctic and Arctic ecological zones. The area, which covers nearly 80,000 square kilometers, is 300 km from the closest city (Fairbanks), and is free from roads or human-made trails. Its remoteness, size, and virtually pristine condition mean that large-scale ecological and evolutionary processes continue essentially as they have done since times immemorial. As such it typifies the US' statutory definition of wilderness—'An area where

the earth and its community of life are untrammelled by man'—hence the denomination of 'Last Great Wilderness' that gives the book its title.

As its subtitle indicates, the book is about the campaign to protect the natural area in the northeastern corner of Alaska that was to become the Arctic National Wildlife Refuge. The Refuge (the original name of which was 'Arctic Wildlife Range') was created by executive order in the last hours of President Dwight Eisenhower's administration in November 1960. It was expanded when President Jimmy Carter signed the 1980 Alaska National Interest Lands Conservation Act (ANILCA), which doubled its size. This book is important because it reminds us that wilderness protection requires timely and visionary action before it becomes a political and material impossibility.

As were some of the earlier proponents of the Refuge, Roger Kaye is an employee of the US Fish and Wildlife Service, with a strong interest in the Arctic and in wilderness protection—although this book is an independent work based on his PhD research. He tries, largely successfully, to provide an objective overview of both sides of the campaign, although—by his own admission—his sympathies are with those promoting protection.

The proposal built from the United States' philosophical tradition of wilderness protection and the pioneering establishment of natural protected areas, particularly the creation of the Yellowstone National Park, which was much larger than earlier protected areas. A product of its time, it emerged in the post-World War II years in the context of growing awareness of a global population explosion, the risks of nuclear proliferation, and the encroachment upon natural areas by the effect of 'progress.' In this context, wilderness was seen both as a place that was best left alone for its own sake, and also as a place of solace for those who ventured there or who simply were comforted by knowing it existed.

The concept of frontier was of importance to both sides of the debate, albeit each emphasised different aspects of that frontier. Those that opposed protection invoked the pioneering spirit that had made the US what it was—a land of opportunity where freedom, rugged individualism, and self-reliance had enabled the taming of wilderness and the development of the national character. Those supporting wilderness protection recognised that the advancing frontier could last only as long as there was wilderness land left somewhere—and judging from what had happened in the then 48 other states of the US, those times were ending. This gave the campaign a sense of urgency—if large tracts of virgin land were not set aside for protection at that time, then they would never be. The parallel between the near-extinct buffalo and the migratory caribou best exemplified the risks of maintaining the old model—a parallel that was extensively used during the campaign.

The book is based on extensive research into archival material such as letters, memoranda, press clippings,

and public hearings records. A downside of the author's scholarly pouring over this material is the frequent use of full quotations (sometimes several in a page), which at times interrupt the flow of the argument.

As the campaign evolved, different people became key players on either side of the campaign, while others disappeared from the scene. (In fact, some of the most influential thinkers who inspired the campaign were dead even before the campaign started.) This results in an extensive *dramatis personae* that can sometimes be confusing. Ultimately (and in a way that, oddly, reminded me of García Márquez' *One hundred years of loneliness*) for the non-specialist it does not matter all that much who said or did what, but rather how the campaign as a whole evolved, and its ultimate legacy. These are minor criticisms, however, of a book that is a very readable overview of a passionate campaign.

The genesis of the campaign can be traced to the writings of Bob Marshall, a forester whose main interest was exploring the relationship of people and the natural world. He advocated the protection of areas that would enable people to experience nature as it had always been, and recognised the potential of the Alaskan wilderness for this. (He co-founded The Wilderness Society in 1935.) Marshall's writings inspired George L. Collins and Lowell Sumner, two Park Service employees who conceived the Refuge and launched the protection campaign in the early 1950s. There are many others, too many to mention here. However, by far the best profile in the book is that of Olaus Murie, an Arctic biologist turned conservationist (and subsequently director of The Wilderness Society), who was then in his late 60s and who—working with his wife Margaret (Mardy) Murie—skillfully led the campaign despite declining health. He died in 1963; she continued working in conservation issues for nearly four decades.

The campaigners tried to develop the protection proposal to afford the greatest protection to the largest wilderness area for the longest possible period of time. This necessarily required making some compromises and pre-empting opposition. What was to be the name of the designated area—a 'wilderness,' a 'wildlife refuge,' or a 'wildlife range'? Who was to run it—the National Park Service, criticised for the tourism model it was implementing through national parks in the US; or the Fish and Wildlife Service, then bent on the 'active management' of wildlife? What was the most appropriate legal instrument for designation—a legislative act or an executive order? The campaign included a 1956 expedition to the Sheenjek River, media work, and extensive lobbying through the US and, crucially, Alaska itself. (Decades later in the Antarctic—the polar region with which I am most familiar—the environmental campaign that culminated with the adoption of the Protocol on Environmental Protection to the Antarctic Treaty also combined high profile fact-finding expeditions with media work and lobbying.)

The key to success was the campaign's attempt to make the proposal appealing to a broad base—conservation

organisations, hunting clubs, even the mining industry—while aiming for the highest possible protection category under US law. As the campaign evolved, many organizations of different kinds supported the proposal, ranging from well-known environmental organisations such as The Wilderness Society and the Sierra Club, to (for this reviewer) obscure entities such as the 'New York State Tryon County Muzzle Loaders Association.' The campaigners aimed—but ultimately failed—to gain the support of the mining industry, which realized that whilst the proposal allowed subsurface mining, it did not allow road construction, which made any mining all but impossible. The declaration of Alaska as the forty-ninth state in 1958 was an additional obstacle to the campaign. Alaskans were weary of outsiders controlling what was to be done with the land of their newly proclaimed state. This concern was exploited by the proposal opponents, who preferred the use of the term 'land withdrawal' to indicate that people would be prevented from accessing that land—particularly Alaskans, who lived there. However, the proponents emphasised wilderness as an area where people would find psychological comfort from knowing that it was there, and physical challenges from experiencing it as hikers, hunters, and fishers. This allowed the critical support of influential hunting organizations in Alaska. Unsurprisingly for the 1950s, the Inupiat Eskimos and Gwich'in inhabitants of the area that was to become the Refuge were never invited to the debate, nor was the protection of their cultural heritage used as a primary argument to support the proposal.

One of the most engaging parts of the book describes the public hearings that preceded the nomination of the Refuge. The lively debates reflect the character of some of the intelligent and strong-willed people who participated on either side of the debates. Many of the arguments used then for or against conservation have been endlessly recycled and are still in use in different contexts. There are characters that we would recognise today, such as the self-proclaimed conservationist politician who strongly opposes the proposal as a 'misapplication of conservation'; or the mining industry representative who sees through the intention of declaring a wildlife range as an attempt to declare a wilderness area—and grunts that 'we have had enough of wilderness.' Among the campaign supporters there were not only 'pure' conservationists but also hunters interested in preserving the recreational values of the area—some of whom were sportspeople appalled by the practice then in vogue of culling wolves from airplanes. Whilst the campaigners were ultimately pragmatic, idealistic views—what some may regard as almost naïve today—were also apparent. For instance, Olaus Murie strongly opposed the notion that any natural object should be named after a human being—himself included. (One wishes that this approach had been used in the Antarctic.)

Whilst current events are not the focus of this book, a brief update of the present-day status of the Refuge—particularly with regard to proposed oil

developments—would have been very useful. (One such update is available on <http://www.alaskawild.org>.) An epilogue summarises what happened to some of the key actors after the Refuge was declared. Many are dead, some for several decades now, but others were still alive when the book was written—some still actively supporting conservation causes. A selection of photographs through the book puts faces to some of the names.

Roger Kaye's book will be a valuable resource to those interested in Alaska, and more broadly to those concerned with wilderness issues. Whilst certainly not intended to be a 'how to' manual for environmental campaigns, the book does provide a useful case study on successful campaigning. The last chapter, which reviews the 'founding values' of the Refuge—wildlife and ecology, science, recreation, heritage, and bequest—is particularly instructive in this regard, as it highlights the meaning of protection—why, after all, one protects natural areas. Looking at the US Senate's recent agreement to allow oil drilling in the ANWR, development pressures over many other parts of the Arctic, and an incipient 'Antarctic frontier,' developing hand in hand with growing infrastructure and far reaching tourism, is also a reminder that long term protection of wilderness areas—and of the values they embody—is difficult to achieve and maintain. Whilst the events described in this book took place several decades ago, they remain uncannily contemporary. (Ricardo Roura, Arctic Centre, University of Groningen.)

SOUTH OF SIXTY: LIFE ON AN ANTARCTIC BASE. Michael Warr. 2005. Prince George, British Columbia: Antarctic Memories Publishing Company. 164 p, illustrated, soft cover. ISBN 0-9738504-0-X. \$Can24.95; \$US21.95.

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Books on Antarctica certainly stimulate public interest, especially those describing long and arduous sledge journeys faced with considerable deprivations associated with living in tents for months on end. The associated prolonged suffering from cold, injury, and malnutrition are well documented in, for example, the writings of Apsley Cherry-Garrard (a best-seller since 1922) and Sir Ranulph Fiennes (1993).

Conversely, publications about Antarctic exploration conducted during longer-term residence, such as two or more winters at more permanent bases, have tended to be rather neglected. This is certainly not due to a lack of adventure at many bases, such as those operated by the Falkland Islands Dependencies Survey (FIDS) from 1945, which changed its name to the British Antarctic Survey (BAS) in January 1962. At its heyday during the International Geophysical Year of 1957–58, FIDS operated 11 bases in Antarctica with 87 potential authors!

It must be noted that three books *have* been published on life and work with FIDS in the 1950s, two primarily

associated with Base D at Hope Bay (Anderson 1957; Herbert 1968) and one with Base E at Stonington Island (Walton 1955). These early publications (and later reprints) remained the only accounts of personal experiences covering two years at Antarctic bases for almost 50 years, although Sir Vivian Fuchs (1982) published a definitive history of FIDS/BAS from 1945 until 1973.

Since 2004, however, two books have been produced on FIDS/BAS activities in the 1960s, namely, *The silent sound* by Cliff Pearce and the book featured in this review, *South of sixty* by Michael Warr, published by the Antarctic Memories Publishing Company. Hopefully in the future, these memories will include recent experiences with BAS from a female perspective, to contrast with those of the Americans Jennie Darlington and Jackie Ronne at Stonington Island in 1947–48.

South of sixty covers two winters with BAS between 1963 and 1965. The first winter was spent at Base B on Deception Island in the South Shetlands in the so-called 'banana belt.' Here, the socialising with the Argentine and Chilean neighbours (with visits to their stations about once a fortnight) provided an unusual Antarctic experience in the 1960s and eventually became a distraction and something of a chore. However, the advantages of this regular contact were many, associated with the availability of medical treatment, fresh meat (other than penguin and seal), chicken eggs, and wine. This represented an absolute bonus to FIDS surviving on monotonous tinned and dried food.

Warr's second winter was spent at Base T on Adelaide Island, south of the Antarctic Circle in Marguerite Bay. Warr refers to this location as the real or rugged Antarctica, well away from South American distractions. Here he undertook more serious dog sledging along the 90-mile long piedmont glacier, with week-long fun trips and the occasional met observations, until his main team, 'the Huns,' were airlifted to Fossil Bluff.

I thoroughly enjoyed the text, and it brought back memories of my days with FIDS/BAS between 1958 and 1962, when he referred to *Shackleton* crew, base members, and huskies that I had known in my days down south. The book is well written, with a cheerful and lucid style, and it is an honest account of Warr's feelings and performances. For example, it includes his problems with sea sickness, the winter tensions and associated verbal blasts when confined to base, and the poor quality of his early met observations, when he was threatened with eviction from Base B.

The only minor criticism of the text was related to its poor continuity due to a large number of short chapters (sometimes only two pages long); 40 chapters covering 162 pages is somewhat disjointed! The major disappointment was the photographs, which were few in number and rather irrelevant. The plates should have illustrated more aspects of base life and work, which dominate the routine at a static/non-sledging station. These should have included photographs of the interior