## INNOCENTS IN THE ARCTIC: THE 1951 SPITSBERGEN EXPEDITION. By COLIN BULL. Fairbanks: University of Alaska Press, 2005. ISBN 1-889963-73-9. xviii + 254 p., maps, b&w and colour illus. (1 foldout), publication list, index. Hardbound, US\$34.95.

Colin Bull's delightful book, the story of the 1951 Spitsbergen expedition from Birmingham University, starts off with a list of expedition members, the *dramatis personae*. Qualifications such as "tent tidier," "tent untidier," "raconteur," "sleeping bag squeezer," "rock carrier," "tenor," "sandcastle builder," and "poet" give the reader an inkling of what is to come.

A foreword by Olav Orheim, then Director of Norsk Polarinstitutt in Tromsø and a former PhD student of Colin Bull's at the Institute of Polar Studies, The Ohio State University, provides essential details about the Svalbard archipelago. Orheim also notes the very significant contributions to our understanding of Svalbard's geology made by British expeditions, first those from Oxford University in the 1920s, and after World War II, those from several universities starting in 1948.

In the preface, Bull explains how this book came to be written. A luncheon held in September 2001 to commemorate the 50th anniversary of the expedition was attended by five of the ten original participants and their spouses. As several had kept excellent diaries, the idea of producing a book arose. The diaries, or excerpts, were sent to Colin, who was elected compiler, and he has quoted them liberally throughout the text. These quotes are a good idea: they add life and colour to the book and probably details new even for expedition members, who worked in three groups for much of their time in the field.

The first chapter provides further background to the 1951 expedition and to the history of geological exploration in Svalbard. Lionel Weiss, who had been a member of the 1948 Birmingham expedition, initiated the plan to return, and he enlisted other geologists. The efforts to raise sufficient funds are also detailed in this chapter. In this endeavour, the participants were aided greatly by the fact that Sir Raymond Priestley, of Antarctic renown, was vice-chancellor at Birmingham and readily agreed to be patron. In traditional British fashion, numerous companies were extremely generous in providing free supplies of food, socks, boots, and sweaters, in addition to toilet paper, pipe tobacco, and medical supplies. The Royal Society, the British Association, the Scott Polar Research Institute, Shell Petroleum, the Charles Henry Foyle Trust, Birmingham University, and the Royal Geographical Society provided funding, scientific equipment, or both.

Getting to Spitsbergen cheaply was another formidable challenge: enter *Miss Mabel*, a converted World War II Fairmile motor launch. This vessel had a bow strengthened by steel and concrete for ramming German E-boats and Uboats, and essentially no keel, so she rolled. She had to be picked up in Cork, Ireland, and sailed to Liverpool under the command of Roger Pirie, ex-Royal Navy, aided by a two-man crew. The story of *Miss Mabel*'s journey, via the Isle of Man, and her subsequent journey northward with all personnel, provisions, and equipment is almost a book in itself. Adventures along the west coast of Scotland, through the Caledonian Canal to Loch Ness and Inverness are described, as is the next leg of the voyage north, to Tromsø in northern Norway. There *Miss Mabel* was ignominiously impounded by the Norwegian *skipskontrollør*, who wisely stated something to the effect that "this vessel is unsafe to proceed in any direction." The vagaries of travel aboard *Miss Mabel* are perhaps the funniest part of the book.

The expedition was saved by the efforts of Fred Sæther, British proconsul in Tromsø. He was able to arrange passage for all 10 members on *Lyngen*, a steamer plying the route between Norway and the Norwegian coal mines at Longyearbyen, the capital of Svalbard. After nearly two weeks, *Lyngen* steamed out of Tromsø harbour on 31 July. However, the expedition members had put the enforced stay to good use by repacking stores for the different groups in the field, dividing up equipment, and working on maps.

Upon arrival in Longyearbyen on 4 August, arrangements were made with the Governor (Sysselmannen) to transfer all the expedition gear to Sysla, the Governor's ice-strengthened vessel. The ship soon headed out Isfjorden, first to Forlandsundet and then north toward St. Jonsfjorden, which was to be the expedition's base of operations for the next six weeks. The coastal party of four was put ashore, late on 5 August, at the southern entrance to St. Jonsfjorden. They camped beside a dilapidated trapper's hut, nicknamed "The Shambles." Lionel Weiss planned to continue work on the Hecla Hoek rocks there, as well as determine the extent of the Carboniferous rocks he had studied nearby in 1948, whereas Dave Dineley was to concentrate on the raised beaches and their fauna. Sysla continued into St. Jonsfjorden and deposited the six members of the inland group on the south coast, a good 15 km to the east of the coastal party. The base camp for the inland party was situated so that mountain ridges and nunataks could be reached via several north-flowing outlet glaciers. The main task of Phil Garrett and Dave Gossage, each accompanied by two "rock carriers" (Mike Box, Colin Bull, Dennis Gray, and Ted Hitchcock), was to investigate the Carboniferous and Permian rocks.

One difference between the coastal and inland groups was that the former had flysheets for their Meade tents but the latter did not, a decision based on the mistaken premise that "it never rains inland in Spitsbergen." The other difference was that the coastal group had two tents for four people, while the inland group had two tents for six people. The reader will appreciate the unpleasant consequences of the decision to limit purchase of tents, flysheets, and bedding: newspapers taken for wrapping rocks specimens were substituted for air mattresses! A substantial section records the traverses and tribulations of the inland group, focusing considerable attention on the problem of dealing with water inside the tents and sleeping bags.

Details of the coastal party's activities follow, mostly in the form of quotations from Dave Dineley, Gordon Brace, and Stan Cloke, with sketches by Lionel Weiss. There was much more wildlife and vegetation along the coast, but no bears, reindeer, or lemmings were encountered, only foxes. This group made two long traverses, the first to the east to meet up with the inland group, and the second southward along the coast, past Eidembreen (Eidem Glacier), to Farmhamna, where Sysla had left a box of food for them. They returned from the first trip on 26 August and set off southward three days later. Much of geological interest was encountered, but by 10 September they were all back at The Shambles, which had been made more windproof in anticipation of colder weather. The weather became increasingly wintry, so that snow had to be shovelled away from the tents, but in the late afternoon of 19 September, Sysla was sighted approaching from the north. The inland group was picked up first, then the coastal group.

Once back in Longyearbyen, after all had enjoyed a good shower and wash in the miners' bathhouse, the expedition was quartered at the governor's guesthouse. Transport was arranged aboard the collier Jakob Kjode, departing on 24 September for Harstad, Norway. The expedition's gear was transferred from Sysla to the collier, the trip back was uneventful, and the ship arrived on 27 September. Miss Mabel arrived from Tromsø shortly afterwards, Pirie and his crew having spent seven weeks trying to make her seaworthy for the return trip to Britain. But little had changed. Shortly after departure, the centre engine quit, this time for good. Eventually Miss Mabel reached Kristiansund, Norway, where she was refuelled. But on the second day out, two of the starboard propeller blades sheared off, so a course was set for Lerwick in the Shetlands. There the necessary repairs were made, and the rest of the trip to Inverness, through the Caledonian Canal, and back to Liverpool was accomplished with only one mishap. (The same cannot be said, however, for Miss Mabel's journey across the Irish Sea in a gale: she ended up in Wexford as salvage.)

The final chapter in this entertaining book is entitled "Aftermath." Its first section describes the two further geological expeditions from Birmingham that Dave Dineley and Phil Garrett jointly led, in 1954 and 1958. A major section that summarizes the careers of nine of the ten participants follows; it is clear that the "little" expedition of 1951 played a significant role in their lives. The final two pages list the publications that were produced by expedition members.

This book is printed on good paper in easy-to-read type. The black-and-white photographs are of exceptional quality. In addition, there is a group of fine colour photographs, as well as a fold-out page of sketches and cartoons in colour by Dave Dineley. Photo collation was done by Lionel Weiss. Colin Bull's book should be read by the members of every university expedition setting off for the Arctic for the first time, especially those contemplating the use of small boats! It is also recommended reading for anyone interested in the history of scientific work in Svalbard. Getting an expedition to Svalbard in the late 1940s and early 1950s was not an easy matter, but on balance, the 1951 Birmingham University Expedition must be considered a resounding success!

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ENCYCLOPEDIA OF THE ARCTIC. Edited by MARK NUTTALL. New York and London: Routledge, 2005. ISBN 1-57958-436-5, 3 vols., xlix + 2278 p., maps, b&w illus., list of contributors, index. Hardbound, US\$525.00.

This encyclopedia, comprising three volumes, 2278 pages, and some 1200 entries composed by 380 contributors, supported by a distinguished editorial board of 21 members, represents an impressive, ambitious, and comprehensive collaborative effort. It includes entries falling into categories ranging from Acts and Treaties to Explorers and Exploration, to Languages and Linguistics, to Marine Mammals, to Sociology and Anthropology. The editor and publishers are to be commended for the considerable emphasis placed on current and fast-changing topics such as political developments and land claims in the Arctic and climate change and its implications. Qualified colleagues who have read some of the entries on scientific, political, or sociological topics report them to be informative, accurate, and well written.

Feeling unqualified to comment usefully on the full range of topics covered, I have largely confined myself to a close examination of those entries with which I feel most comfortable, namely those on Explorers and Exploration (some 150 entries). While the coverage here, too, is fairly comprehensive and the information generally accurate, there is widespread evidence of a disturbing lack of copyediting and proofreading. For example, the entries on exploration contain at least a dozen instances of incorrect compass directions. Thus on p. 439 it is stated that from Cook Inlet, James Cook "sailed northwards along the Alaska Peninsula"-his course, of necessity, was southwestwards! In the entry on Anthony Fiala (p. 613), Franz Josef Land is located "north of Spitsbergen"-it lies almost due east! On p. 1915, Thomas Simpson is reported as having died "under mysterious circumstances east of Winnipeg"—he died near the Turtle River, near present-day Grand Forks, North Dakota, i.e., almost due south of Fort Garry (now Winnipeg).

Unfortunately, these are not the worst errors; more serious factual errors are common. Thus, for example, on p. 85 it is stated that Amundsen's *Maud* "never succeeded