



BAFFIN ISLAND: Field Research and High Arctic Adventure, 1961-1967 by Jack D. Ives

ISBN 978-1-55238-830-3

THIS BOOK IS AN OPEN ACCESS E-BOOK. It is an electronic version of a book that can be purchased in physical form through any bookseller or on-line retailer, or from our distributors. Please support this open access publication by requesting that your university purchase a print copy of this book, or by purchasing a copy yourself. If you have any questions, please contact us at ucpress@ucalgary.ca

Cover Art: The artwork on the cover of this book is not open access and falls under traditional copyright provisions; it cannot be reproduced in any way without written permission of the artists and their agents. The cover can be displayed as a complete cover image for the purposes of publicizing this work, but the artwork cannot be extracted from the context of the cover of this specific work without breaching the artist's copyright.

COPYRIGHT NOTICE: This open-access work is published under a Creative Commons licence. This means that you are free to copy, distribute, display or perform the work as long as you clearly attribute the work to its authors and publisher, that you do not use this work for any commercial gain in any form, and that you in no way alter, transform, or build on the work outside of its use in normal academic scholarship without our express permission. If you want to reuse or distribute the work, you must inform its new audience of the licence terms of this work. For more information, see details of the Creative Commons licence at: <http://creativecommons.org/licenses/by-nc-nd/4.0/>

UNDER THE CREATIVE COMMONS LICENCE YOU MAY:

- read and store this document free of charge;
- distribute it for personal use free of charge;
- print sections of the work for personal use;
- read or perform parts of the work in a context where no financial transactions take place.

UNDER THE CREATIVE COMMONS LICENCE YOU MAY NOT:

- gain financially from the work in any way;
- sell the work or seek monies in relation to the distribution of the work;
- use the work in any commercial activity of any kind;
- profit a third party indirectly via use or distribution of the work;
- distribute in or through a commercial body (with the exception of academic usage within educational institutions such as schools and universities);
- reproduce, distribute, or store the cover image outside of its function as a cover of this work;
- alter or build on the work outside of normal academic scholarship.

✧ BUILDING THE TEAM ✧
AND DEVELOPING CREDIBILITY

The 1961 reconnaissance had provided a mass of geographical and glaciological data, opening up the chance for careful planning on a much enlarged scale. It was apparent, however, that the field plan would have to be integrated with the reorganization of the Geographical Branch and the improvement of its long-term financial base. Dr. van Steenburgh's continued support would also be essential. A promising indication was that he had asked me for a detailed plan of operations to be delivered to him personally as soon as possible.

The breakdown of my activities for the next months, therefore, was clear: a detailed scientific agenda for the proposed fieldwork on Baffin Island and its presentation to Dr. van Steenburgh; enlargement of the permanent branch staff; and plans to justify this and to recruit experienced personnel capable of meeting the scientific objectives. In addition, there were a number of what became delicate, even controversial, administrative negotiations. Funding a multi-year operation in a distant and logistically challenging environment would have to be balanced with strengthening the other divisions of the branch, especially its Division of Economic Geography.¹

The first major task was to establish within the branch structure an effective Division of Physical Geography, which would need additional staff committed to arduous fieldwork along with a well-equipped geomorphological laboratory in Ottawa. Frank Cook, a permanent member of the branch staff who had been a graduate student with me at McGill, offered to take temporary care of the development of the lab, for which we recruited a promising young man, Rolf Kihl, as technician. Frank had worked for several years on patterned ground and frost heaving in the Arctic; he would train Rolf and ensure acquisition of the equipment necessary for analyzing various types of soils.

Following the uncertainties, mental stress, and long periods of isolation of the summer, Peter Hill was quick to declare that fieldwork in the Arctic was not for him; he resigned, embarking instead on a career as a high school geography teacher. I was sorry for this but could hardly deny that he was making a wise choice. And so a vacant position became available. John Andrews was an ideal candidate, although civil service regulations of the time gave priority to Canadian citizens and John was a recent immigrant from the U.K.

The recruitment of John to a permanent position proved yet another learning experience; it would help me negotiate recruitment of several other specialists over the next few years. Since the process was vital to the success of the Baffin Island plans, it is explained here in some detail. In the 1960s, geographers had a lowly professional standing within the civil service, and the normally stringent rules of government recruitment were difficult to accommodate. For one thing, vacant positions were open to Canadian citizens only, although where

a certain specialization was not available in Canada, non-citizens could be recruited from other countries. Veterans were given preference—and especially wounded veterans—provided their qualifications were similar to those of other applicants. In most cases, of course, such treatment was both ethical and laudable. Although it was incomprehensible that a wounded veteran would ever be expected to carry a heavy pack across glaciers in the Arctic, inappropriate appointments were a distinct possibility due to the perceived low status of geographers.²

John Andrews was not a Canadian citizen; rather, he had entered Canada as a graduate student less than three years earlier. Next, because academic rank was taken into account, a candidate with a doctorate would out-compete one with a master's degree (when all else was equal). John had just obtained his MA from McGill University.

Documents submitted by applicants were reviewed, candidates interviewed, and final decisions made by a committee composed of two senior officers from the recruiting department, representatives of the Civil Service Commission and the Department of Veterans Affairs, and one non-civil servant, usually a professional in the same or similar discipline—for instance, in our case, a geologist or historian would be suitable if no geographer were available.

The position left vacant by Peter Hill was advertised; I had drafted the job description, for a geomorphologist to undertake work in the Arctic that would involve long field seasons. Mary McCracken, our department's representative on the commission, was most helpful and I took her advice to restrict the competition to applicants living in the local region (i.e., Montreal-Ottawa-Toronto). For the non-civil service member, I was able to persuade Professor Bogdan Zaborski, chair of the University of Ottawa's geography department, to collaborate. Bogdan was an expatriate Pole who had been on the faculty of McGill during my doctoral studies and had served on my thesis committee, so I knew him as a most congenial colleague. Volumes could be written about Bogdan,

including his internment in the Siberian Gulag during the war. When released in 1946, he chose to head east rather than back west to Warsaw because he felt it was a geographer's sacred mission to learn as much as possible about “unknown” territory whenever he had a chance. So, after many adventures, he came to McGill via Vladivostok, accumulating hundreds of maps en route. Without him, John Andrews likely would not have entered “Her Majesty's Civil Service.”

There were only a handful of applicants, and none were veterans, probably because few hopefuls aspired to “brutal” labours for long periods in the so-called wastes of the Far North. John had only a single serious competitor—another immigrant, but one with Canadian citizenship and a doctorate in economic geography. Several members of the adjudicating committee ranked him first and John second, on the basis of the written applications. Although I was concerned that the “top” candidate's expertise had no relevance to Arctic research, the fact remained that John had two counts against him: he was not a citizen, and he had only a master's degree.

As it transpired, during the interviews it became clear to Bogdan and the other members that the first-placed candidate was totally out of his depth when questioned about Arctic matters, geological, geomorphological, or even economic. John was offered the position and subsequently made a major contribution to the glacial history of Baffin Island, eventually becoming a world leader in his field. The lesson learned from John's recruitment proved very useful. It also seemed in retrospect that the process had been as much a test of me, because all subsequent recruitment of non-citizen specialists proceeded with relative ease.

Recruiting for leadership

The next step in my recruitment drive focused on Scandinavia and the coincidence of an invitation to lecture at Stockholm University. Shortly after returning to Ottawa from Baffin Island in September 1961, I was invited by Professor Gunnar Hoppe to visit Stockholm and to give a lecture on the results of the 1950s fieldwork in Labrador-Ungava and the 1961 Baffin Island reconnaissance. I was eager to do this as Hoppe's own research in the Swedish Arctic and Subarctic had provided me with many new ideas, and he had mentioned that many of the Scandinavian specialists in glacial geomorphology would attend. I arrived in Stockholm in early January 1962 and was a personal guest of Dr. Valter Schytt, whom I had met with Professor Hoppe during my participation in the now famous Abisko Symposium of July 1960.³ In addition to the lecture, which prompted a lot of useful discussion, I had the opportunity to discuss plans for the Geographical Branch's Division of Physical Geography.⁴ Dr. Gunnar Østrem, with whom I had also become acquainted during the Abisko Symposium, had developed an intriguing research approach to dating ice-cored moraines. He was immediately captivated by my descriptions of Baffin Island. He also spoke and wrote well in English, so I was delighted to discover that he was greatly attracted to the possibility of testing his new methods on the moraines of the Barnes Ice Cap.⁵ This led to extensive discussion following dinner with his family, and I quickly realized I had a highly qualified new recruit who would greatly reinforce plans for a glaciology section in the branch. Even then, my subsequent formal recommendation for such a unit met with strong opposition from the GSC; specifically, many federal geologists seemed convinced that glaciology belonged firmly to the GSC.

As the departmental debate about glaciology expanded following my return from Stockholm, I was invited by GSC Director Dr. James Harrison to attend an annual meeting of the National Advisory

Committee for Geological Research. Although I was given a very fair hearing, I was deluged with objections until an interjection from Dr. J. Tuzo Wilson, a pre-eminent Canadian geophysicist and a senior, non-GSC member of the national committee. He pointed out that, as the GSC had had more than a century to set up a glaciology section but had failed to do so, I should be given the opportunity.

The final decision rested with Dr. van Steenburgh. Dr. Harrison and I were to present our arguments during a private meeting with him. After a good deal of amiable, yet serious, discussion—which came down to Dr. Harrison's insistence that geography was not really a coherent discipline and, certainly, glaciology was an integral part of geology—I began to despair and to realize that I was fighting far above my weight class. As a last ditch effort, I quoted Tuzo Wilson's remarks to the effect that the GSC had done nothing about glaciology for the entire century of its existence and that "Jack should be given a chance." Dr. van Steenburgh exploded with laughter. He turned to Jim Harrison and indicated that he had decided in my favour.⁶

Gunnar Østrem was an excellent choice for head of the new Glaciology Section. First, however, I had to ensure his recruitment through the corridors of the Civil Service Commission. Further assistance from Mary McCracken led to a very specific technical job description plus a stipulation for fluency in a Scandinavian language.⁷ The language stipulation required very careful justification as it was obvious that it would seriously limit any competition. Nevertheless, the formal process proceeded with amazing speed and Gunnar arrived in Ottawa the following July. Shortly after his arrival, he would leave with me for Flitaway Lake and the Barnes Ice Cap (see chapter 4).

Gunnar's appointment set in motion a number of related developments. Dr. Nicholson supported the enlargement of the Division of Physical Geography and its subdivision into three sections: Glaciology, Climatology, and Geomorphology. This was quickly approved by Dr. van Steenburgh. The bureaucratic

channels still had to be negotiated, however, as well as support obtained for additional staff positions. Nevertheless, the process was well underway.

For the fast-approaching Baffin 1962 field season, I obtained approval for a second position in addition to Gunnar Østrem's. I was fortunate to recruit Brian Sagar. Brian was a geographer who had worked as a glaciologist in the Canadian High Arctic with Dr. Geoff Hattersley-Smith on the Gilman Glacier and on the northern Ellesmere Island ice shelf as part of the Defence Research Board's "Operation Hazen." Brian was enthusiastic to commit himself to a summer on the crest of the Barnes Ice Cap. We recruited two university students, Uwe Embacher⁸ and Chris Bridge, as his summer assistants, early enough to arrive on the ice cap by May 18.

Undergraduate students as field assistants in the Arctic

As plans for the 1962 Baffin Island expedition began to fall into place, it became apparent that I would have to select and recruit very fit, intelligent, and willing young men; the women would have to wait another three years because of adamant departmental opposition. The McGill Lab was the ideal place from which to recruit graduate students. These students were especially well suited because the fieldwork most of them would have completed for their master's degrees were extensions of the research program I had established while director of the lab. Further, I had been an informal advisor to several of them, assisting with their selection of field research areas, and all of them had served as meteorological observers through a Subarctic winter—a decided advantage.

Recruitment of undergrads for summer employment was strictly formalized, especially as a summer federal appointment was a significant financial and possible career asset for the successful applicants. I was also conscious of the opportunity to use the Baffin field experience of a considerable number of

undergraduates and graduates to create a pool of strong candidates for future permanent Geographical Branch recruitment, as well as for strengthening the growing number of university departments of geography across Canada. But despite being a great adventure for many young people, summers in the Arctic could also be a hardship at any age, and the selection was critical.

Applications were invited and received from across the country, but except for neighbouring universities, there was no chance for personal interviews. We relied instead on academic records, personal letters, and letters of reference from faculty members. In university geography departments where I was well acquainted with members of the faculty, we could rely on forthright letters of recommendation: thus, Ross Mackay (UBC), Brian Bird (McGill), Louis-Edmond Hamelin (Laval), Marie Sanderson (Windsor), and Bill Birch (Toronto) could inform potential applicants that a summer in Baffin Island could be very strenuous and should never be regarded as a holiday. Alternative openings were available, for office appointments in Ottawa. Nevertheless, recruitment was undertaken as a fair and open competition, with the exception that, at this stage, women could not be assigned to fieldwork. Partly to improve our system of contacts, I had begun to accept invitations to lecture at various departments of geography across the country. The University of Toronto was one of the first.

Dr. Nicholson, to whom I invariably presented my initial field plans (although he was more interested in the overall scope than the detail), expressed concern for the safety of inexperienced undergrads in isolated and mountainous Arctic terrain. I assuaged his fears as best I could. Group meetings were set up for the selected students, in which to outline expected behaviour (especially how to react in the event of accidents), first aid training, and other safety factors. As the size and complexity of the Baffin operation grew and fieldwork extended into the fiords of the north-east coast (polar bear territory), we accepted an offer

by the RCMP to provide instruction in the use of firearms, principally high-calibre rifles—equipment that, to my relief, was never needed. On a more formal footing, everyone, student assistants and regular staff alike, underwent a fairly rigorous medical examination prior to departure for the field.

For the 1962 summer expedition, Professor Bill Birch (University of Toronto) had provided one of the strongest recommendations I had read to date. Nineteen-year-old Michael Church had outstanding grades and easily passed the branch selection process. He duly reported for his medical examination with the others. The following day, however, I received a telephone call from the examining medical officer. Mike had been rejected as unfit for fieldwork in the Arctic because he was significantly underweight. I was shocked—and so was Mike when I invited him into my office to tell him the bad news. He was aghast and protested; after all, he took part in athletics, was an enthusiastic back-country hiker, had never been seriously ill, and so on. I was interested in his general activities and especially in his high grades in mathematics. I told him I would do my best to overturn the decision. I got in touch with the medical officer and repeated what I had learned from Mike, concluding that I wanted him in Baffin Island. I was informed that there was only one recourse: the federal government would accept no responsibility. Surely, I was told, there are plenty of other students available. My response was an emphatic “No!” So, against the advice of the medical officer, I signed a formal document accepting full personal responsibility, including the costs of any emergency evacuation, hospital expenses, and insurance that his family might choose not to carry. In other words, I decided to take the risk—though Dr. Nicholson told me I was an idiot. I like to think that I made a small but important contribution to this very young man’s career.⁹ Mike’s performance in Baffin Island was exemplary, that season and in many subsequent years.

Preparations for Baffin 1962

The aircraft charter of the previous summer, as related in chapter 2, had been a near disaster, so the selection from competing bids for 1962 was of major concern. In this I was assisted by Murray Sutherland, from our head office, and the process worked out extremely well. The acquisition of specialized glaciological instruments was another challenge, especially in view of Brian Sagar’s and Gunnar Østrem’s recruitment shortly before the field season. However, the Department of Transport, Meteorological Branch, lent us many of the meteorological instruments, others were purchased new, and Gunnar brought with him from Sweden and Norway a treasure trove of instruments and equipment.

I was able to capitalize on one remarkable success of the previous summer—the special air photography of the entire Barnes Ice Cap and surrounding terrain. The photography had been possible thanks to a personal intervention by Dr. van Steenburgh; he had negotiated the assistance of the RCAF 408 (Photo) Lancaster Squadron, based at Rockcliffe, which was primarily responsible for the aerial mapping of Canada.¹⁰ I also needed his support to secure the cooperation of the Surveys and Mapping Branch in order to use the new air photographs in the production of high-quality topographic maps.¹¹ While it was 1967 before the maps were printed, Sam Gamble, the branch director, was most amenable to setting the production process in motion. The maps were a remarkable resource for subsequent fieldwork in such an isolated area and represented a special measure of Dr. van Steenburgh’s support.

Brian Sagar was set to begin glaciological-meteorological studies on the crest of the Barnes Ice Cap. Seismic and gravity studies were added so that the thickness of the ice cap could be determined. Dr. Hans “Housi” Weber (J. R. Weber) had been the gravimetrist and a member of the Swiss mountaineering section of the AINA 1953 expedition to the Penny Ice Cap, in southeastern Baffin Island. He

now had a permanent position with the department's Dominion Observatory Branch. Like the Geographical Branch, the Observatory Branch was a very small departmental unit and its director, Dr. Beals, became a most helpful senior colleague. He once explained over coffee in his office that “we small branches have to stick together for mutual support to help avoid being overridden by the ‘big three’ [GSC, Mines Branch, and Surveys and Mapping Branch].”

In this manner, a joint research effort developed. Housi, a personal friend, was keen to go back to Baffin Island, so we were able to put together a team that led to a much more ambitious glaciological program than I had originally thought possible. My invitation

to the GSC to add a Pleistocene geologist to our party was met “with regrets”—there was no available geologist. I sent a similar invitation each subsequent year and always received the same answer. The GSC apparently could not accept the notion that geographers could actually assume the leadership of Arctic field expeditions.

By the close of 1962, everything seemed in place for a long-term study of north-central Baffin Island. The results from the first two seasons had been substantial. The progressive enlargement of the branch staff and rapidly increasing budget augured well for development of a fully interdisciplinary and international endeavour.

