

book's dimensions (25.5 × 31 cm) illustrate to full advantage the remarkable photo record of this part of Victoria Land. Errors are few and of no consequence, involving proper geographic names. The map (p. 13) labels "Dais" as "The Dias," consistently misspelled on three pages in the text. "Upper Wright Glacier" on the map is called "Wright Upper Glacier" on p. 93 (the latter is correct), and Mt. Cerberus is mistakenly spelled "Cerebus" on p. 113 and 128. On p. 21, the author has the wrong year that Scott wintered at Hut Point Peninsula (1911 instead of 1901), which could be a simple typo. Wintering actually occurred on the expedition ship, not in the hut.

I recommend this book for anyone who appreciates the beauty of wilderness areas and the photos that illustrate their attributes, or who collects books on the polar regions. This one should not be overlooked. The 100 or so color photos alone, all on high-quality paper, make it well worth the price (NZ\$59.95 equates to about US\$42 in mid-2004).

John Spletstoesser
P.O. Box 515
Waconia, Minnesota, U.S.A.
55387
spletts@usfamily.net

BRADFORD WASHBURN: A LIFE OF EXPLORATION.

By MICHAEL SFRAGA. Corvallis: Oregon State University Press, 2004. ISBN 0-87071-010-9. 260 p., maps, diagrams, b&w illus., notes, bib., index. Softbound. US\$24.95.

Henry Bradford Washburn Jr. is an historian's dream come true. Not only has he amassed an astonishing legacy of exploration, photographs, maps, and scientific investigation (easily enough to befit two men), but he is very much alive at 94 years of age and still able to recall past events. The material that Sfraga draws upon includes resources held in the Alaska and Polar Regions Archives at the University of Alaska, Fairbanks (over 9000 photographs, equipment, clothing, cameras, diaries, notes, and expedition log books); expedition accounts published in the *National Geographic Magazine* and elsewhere; and personal interviews with Washburn and Robert H. Bates, a member of Washburn's early expeditions. Many people contributed information in several research areas, as noted in the acknowledgements.

This book is a scholarly one, with large contributions from Sfraga's doctoral thesis on the history of science in Russian America. There are five chapters. In Chapter 1, we learn about the young 'Brad' and see how the seeds of his passion for exploration germinated. For instance, he found that climbing Mt. Washington in New Hampshire improved his hay fever. Both parents instilled in him the adage, "Whatever you do, try to do it well" (p. 12), and his mother encouraged an early interest in photography. By age 16, Brad had published a small scrambling guidebook for the Presidential Range (White Mountains), thanks to his wealthy Uncle Charles, who went on to pay for mountaineering vacations for Brad and his

brother in the French Alps (1926–29), where they learned mountaineering skills from the best guides. Brad's camera was always active, and he was soon writing articles in school and other journals. He attracted the attention of publisher George P. Putnam and by age 17, Bradford had his second book, *Among the Alps* (1927), published by Putnam's firm. The following year (1928), Putnam published *Bradford on Mt. Washington*. By this time, Brad had avidly listened to lectures given by members of the 1924 British Everest Expedition and the 1925 Mt. Logan expedition. With this background, he took the extraordinary leap, at age 20, of leading his own first Alaskan expedition.

Chapter 2 (Glaciers, Grosvenor and Grand Explorations), the longest chapter, starts with this phase in Washburn's career and chronicles the next decade. It is here that Sfraga fully exploits his vast knowledge about the early exploration of Alaska ("Russian America" until 1867) and intricately weaves it into Washburn's evolving expeditionary activities. These frequent historical flashbacks interrupt the smooth, chronological flow and can tax the concentration on Washburn. However, the author uses extensive quotations from Brad's field diaries, and these narratives certainly liven up the text. Of the four Alaskan expeditions (to Mounts Fairweather and Crillon), the one to Mount Crillon in 1934 was the most successful, and it was featured in Brad's first major article in *National Geographic Magazine* in March 1935 (Gilbert Grosvenor was the magazine editor). This article cemented the association between Bradford Washburn and the National Geographic Society. On 13 November 1934, Brad submitted a proposal to map a poorly charted section of the southwest Yukon (and Alaska) from the 141st meridian to the Alsek River, of which 5000 square miles remained blank. The section included all the highest peaks of Canada, dominated by Mt. Logan. Two days later, he had a cheque for \$5000! Today that would be the equivalent of over \$100 000, and it would have taken eight months to get. That expedition included many aerial flights to aid in the mapping, and it produced the first published aerial photograph of Mt. Logan taken from the south, as well as a second article in *National Geographic Magazine* (1936). Washburn, according to Sfraga, was in the wave of the second stage of exploration in Alaska/Yukon. The frequent historical 'withdrawals' the author makes are to the first stage of exploration, which covers the era of the navigators (e.g., Bering, Vancouver, Malaspina, La Perouse, etc.). A unique fast-forward time jump is from the 1935 expedition account to the 1965 expedition that mapped the Mounts Hubbard-Alverstone-Kennedy massif, during which Senator Robert Kennedy climbed the mountain named after his late brother, President John F. Kennedy. Washburn stressed that the ground party's success and safety in 1935 were ensured by the acquisition of aerial photos that he had earlier developed and printed in Carcross (Yukon). There were other pre-war expeditions to Mt. McKinley (1936), Mt. Lucania (1937), and Mt. Logan (1938). For the 1938 trip, Washburn had a new, large-format aerial camera with a Schneider lens, with which he took some breathtaking photos of Mount Logan. The 1937 summer had been a near disaster:

Washburn and Robert Bates, after being dropped by plane on the Walsh Glacier, Yukon, were abandoned and left to return to civilization on foot. This they did by making the first ascent of Mt. Lucania (17 150 ft) and the second ascent of Mt. Steele. They opted to walk out to Burwash Landing on Kluane Lake, the exact reverse of Walter Wood's 1935 expedition route to Mt. Steele. The best story about this adventure has been told graphically by David Roberts in *Escape from Lucania* (2002).

In March 1939, Washburn was appointed Director of the New England Museum of Natural History, now the Boston Museum of Science, with which he has had a continuing association. In April 1940, he married the secretary he had personally appointed, and he recruited her for subsequent expeditions, the most notable being on Mt. McKinley (see Chapter 4).

Chapter 3 (The War Years) is entirely different from the others and documents Washburn's involvement in developing and testing cold-weather clothing for the U.S. military. It is a rather 'clinical' chapter, in that it involves military protocol, many officers of differing rank, disagreements, cover-ups, and sometimes bewildering circumstances. The clothing research involved several of Brad's companions from the Mt. Crillon expedition, plus explorer-geographer Walter Wood (then with American Geographical Society) and renowned glacial geologist Robert Sharp. By his own admission, Brad was a thorn in the side of the military, and at times he "gave them hell" (p. 117), for example, when he leaked "intractable" operational problems to President Roosevelt. Here, Washburn's insistence on doing a job well is very much evident. The chapter dwells excessively on the investigation of a military C-47 plane crash on the side of what is now known as Mt. Deception (11 826 ft). Not finding any bodies in the snow, Washburn took the liberty of making the first ascent of the mountain. During this 'era' (July 1942), Brad also made his first climb (and the third overall ascent) of Mt. McKinley.

Chapter 4 is about Washburn's main Mt. McKinley expeditions. After some more historical 'pre-ambling,' Sfraga unravels an interesting account of Operation White Tower (1947), which combined an ascent of the mountain's twin peaks with trigonometric surveying (for Washburn's future map), cosmic ray measurements, and RKO (Hollywood) filming activities. Brad's wife, Barbara, became the first woman to reach the summit. At the end of the expedition, Brad used a Lockheed Electra to photograph Mt. McKinley (with the now famous Fairchild K-6 camera) from all angles. Later that year, he 'arranged' for high-altitude military aircraft to obtain vertical photos of the mountain. Washburn then built towards another survey expedition in 1951, during which he established his now classic West Buttress route. By this time he had received an honorary doctorate, the first of many such distinctions. After more than six decades of involvement with Mt. McKinley, Washburn is fittingly rated by Sfraga (p. 194) as the "grand old man of the mountain." Washburn's 1960 map is now the classic map of Mt. McKinley. In that year, he managed to get a U-2 spy plane to photograph the mountain from 68 000 ft!

Chapter 5 is the shortest chapter by far, and does not really do justice to the later activities of Washburn, who was now entering the "third stage" of exploration. This mainly took place outside Alaska and Yukon: Washburn was involved in mapping projects in the Grand Canyon and on Mt. Everest. For Mt. Everest, 'high-tech' surveying techniques were used: laser distance measurements to the summit and GPS determinations of control point position (Washburn, 1988).

Overall, Sfraga portrays a true image of Washburn in the most detailed chapters, 2, 3, and 4. Unfortunately, the in-text black-and-white photographs are generally a disappointment, but fortunately most can be found in their true splendour in other books by Washburn. The glossy photos between p. 148 and 149 are of much better quality, and here we see the famous photo that Professor Robert Sharp described as "a veritable textbook of glacial features" (in front of Woodworth Glacier, Alaska). The extensive end notes are keyed to each chapter. Editing is well done, although one word is obviously missing at two different places in the text. The cited literature list is quite thorough and the index is very useful. This 'economy' book is well worth obtaining for the price, and it is suitable for readers from a wide range of backgrounds and age groups. But I recommend that it be read with the National Geographic Book *On High* (2002), which covers similar material but contains better-reproduced photographs.

REFERENCES

- ROBERTS, D. 2002. *Escape from Lucania: An epic story of survival*. New York: Simon and Schuster.
- WASHBURN, H.B., Jr. 1927. *Among the Alps with Bradford*. New York: George P. Putnam's Sons.
- . 1928. *Bradford on Mt. Washington*. New York: George P. Putnam's Sons.
- . 1935. The conquest of Mount Crillon. *National Geographic Magazine* 67(3):361–400.
- . 1936. Exploring Yukon's glacial stronghold. *National Geographic Magazine* 69(6):715–748.
- . 1988. Mount Everest: Surveying the third Pole. *National Geographic Magazine* 174(5):653–659.
- . 2002. *On high*. Washington, D.C.: National Geographic Society.

*Gerald Holdsworth
Senior Research Associate
The Arctic Institute of North America
University of Calgary
Calgary, Alberta, Canada
T2N 1N4*