

ICEVISIONS: REFLECTIONS ON ICE – OBSERVATIONS AT JÖKULSÁRLÓN GLACIER LAGOON. By KLAUS KRETZER. Skaftafell, Iceland: Klaus Kretzer, 2011. ISBN 978-9979-70-831-5. 123 p., 56 photographs, commentaries, quotations, index, notes, citations. Hardbound. US\$32.50, Order on-line at: <http://www.atlas-books.com/marktplc/03283.htm>.

ICEVISIONS is a self-published, large format book of ice photographs with text and selected literary quotations in English, French, German, and Icelandic. Klaus Kretzer, author, photographer, and publisher, has achieved a masterpiece of photographic art ranging from landscapes of Jökulsárlón, the well-known, rapidly enlarging glacier lake in southeast Iceland, and its mountain backdrop, together with exquisite, often abstract, close-ups of ice in many forms.

In the introduction he explains how he came to be captivated by the challenge of representing ice in many of its remarkable forms. As a visitor to Iceland from Germany he managed to find a job working with the Jökulsárlón tourist service. He became fascinated with the close-up forms and startling colours of ice but was dissatisfied with his early photographic efforts. As he accompanied photographers from all over the world, piloting them in a rubber boat amongst the icebergs on the lake, he had the good fortune to meet a professional Swiss photographer. Christian Mehr became his mentor, even lending him equipment. However, three years of effort failed to attract a publisher—even in Iceland, renowned for its prodigious production of high-quality photographic books. Such specialization on ice was not the best way to find a publisher. So he decided to go it alone.

Many of the 56 photographs, whether the wider landscapes or the abstract ice forms, deserve to be enlarged and framed as they would grace any living room. The blues and greens of the close-ups are breathtaking and warrant wide recognition. The layout of the book is itself a work of art, and the author acknowledges his colleague Petra Bachmann for assistance in this aspect of the production.

Excellent commentaries on the photographs themselves include an account of the formation of the glacier lake in the 1930s and its subsequent development, assisted by Dr Helgi Björnsson, Iceland's leading glaciologist. Each photograph is accompanied by an appropriate quotation. The sources range from the Old Testament, Ovid, and St. Brendan to Henry David Thoreau, Lt. James Fitzjames (who was with Franklin in 1845), Samuel Taylor Coleridge, Robert Frost, Mark Twain, Mary Shelley, Robert Falcon Scott, and Barry Lopez, amongst others.

The book was exquisitely printed and bound in Reykjavik. Klaus used Fuji Velvia film with no filters. His equipment included a Nikon F90 and Nikkor lenses: 80–200 mm, f2.8 AF-D; 35 mm, f1.4 AI-S; and 28 mm, f2.8 AI-S.

This reviewer found the book fascinating. It was a rare pleasure to be able to sit quietly and dream of ice, great poets, and early explorers, and to rejoice in one's own

excursions to glaciers and mountains and the people who live among them or visit them. Klaus has the best of both worlds, as he lives among ice and mountains with his wife, Regina Hreinsdóttir, who is Superintendent of nearby Skaftafell National Park.

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SATELLITE IMAGE ATLAS OF GLACIERS OF THE WORLD: ASIA. Edited by RICHARD S. WILLIAMS, Jr. and JANET G. FERRIGNO. Washington, D.C.: U.S. Government Printing Office, 2010. U.S. Geological Survey Professional Paper 1386-F. ISBN 978-1-4113-2609-5. 349 p., maps, b&w and colour illus., numerous contributors, references. Available from U.S. Geological Survey, Information Services, Box 25286, Federal Center, Denver, Colorado 80225, USA.

This United States Geological Survey publication is another major chapter that, along with its other 10 chapters (A to K), will eventually provide an exhaustive inventory and analysis of the world's glaciers and ice sheets. It is the ninth chapter to be published. A review of Chapter K (Alaska) published in the September 2009 issue of *Arctic* (Ives, 2009) emphasized the superb editing; excellent production and reproduction of photographs, satellite images, and maps; and consummate care in the minutiae of selection and presentation of images. The same can be said for the Asia chapter.

The basis for the world inventory is an exacting selection of satellite images dating from 1972 to 1981. For Chapter F (Asia), image sets were distributed to leading professionals by country to achieve coverage of most of Asia. This has resulted in sub-sections on the former Soviet Union, China, Afghanistan, Pakistan, India, Nepal, and Bhutan. The largest sub-section by far is that devoted to the former Soviet Union, including the present-day republics of Central Asia, the entire Caucasus, Siberia, and the Russian High Arctic. Iran, Turkey, Armenia, Indonesia, and other parts of Asia will be included in a separate chapter, although it appears that Burma (Myanmar) may have slipped between the cracks. The supporting text for each of the Soviet, Chinese, and Indian sub-sections, including ground and air photographs, maps, and tables, have been contributed by leading glaciologists and their co-workers from the relevant countries, notably, V.M. Kotlyakov, Shi Yafeng, and C.P. Vohra. The remaining sub-sections have been prepared by United States and Japanese glaciologists and their co-workers, notably, J.F. Shroder, K. Higuchi, and S. Iwata. This is without doubt a reflection of regional political uncertainties or lack of country expertise, or both.

The editors explain in footnotes to the country subsection headings that the manuscripts were written in the late 1970s and early 1980s. Because of a delay in publication, later references have been added, some of the individual manuscripts have been updated, and in one instance (Nepal) a specific supplement (by Y. Ageta) has been added. This does not amount to a significant detraction because the prime purpose is to use the early (mainly LANDSAT) images to provide a glacier benchmark, or “snapshot” (1972–81) that will facilitate study of glacier change with both earlier and more recent records. Comparisons with the more recent material, of course, will cover the period up to the present, a matter of considerable importance now that climate warming and its impacts have been generally accepted as fact, and will provide a vital benchmark against which the scale of progressive changes into the future can be determined. This renders the entire effort of the U.S. Geological Survey highly salutary.

In addition to the actual inventory, the volume contains very interesting treatments of special topics. These include a detailed analysis of the glacier disaster on 20 September 2002 in northern Osetiya (Caucasus), discussions of surging glaciers in the Pamir and of mountain geomorphology in northern Pakistan, and a summary of the dangers of glacial lake outbreaks (jökulhlaup) in Nepal and Bhutan.

A final subsection by L. DeWayne Cecil and co-workers (p. 335–349) provides a paleoenvironmental record preserved in middle latitude, high-mountain glaciers. It is an overview of the USGS experience in Central Asia and the United States. The information collected so far “includes the documentation of fall-out from nuclear-weapons testing ... quantification of pre-industrialization levels of mercury ... evidence for rapid climate change, and identification of microbial communities entrained in the ice” (p. 335).

Some of the basic data from analysis of the satellite imagery is worthy of inclusion in this review as it indicates the persistent inadequacy of information on Asian glaciers, which became especially apparent following the unfortunate misstatement in the 2007 IPCC report indicating that Himalayan glaciers will disappear by 2035 and the destructive debate arising out of the Copenhagen conference of December 2009.

Country	No. of glaciers	Glacierized area (km <sup>2</sup> )
Former USSR	28 881	78 938
China	no data	59 425
Afghanistan	no data	about 2700
Pakistan	no data	about 15 000
India	no data	about 8500
Nepal	no data	5324
Bhutan	no data	1317

More complete glacier numbers and total areas have since become available for much of the region; some of the determinations actually predate the manuscript updates and supplements (e.g., Mool et al., 2001). Similarly, important advances have been made in the assessment of the number, rate of expansion, and potential for catastrophic outburst

of supraglacial and moraine-dammed lakes (Vuichard and Zimmermann, 1987; Reynolds, 1999; Richardson and Reynolds, 2000; Mool et al., 2001).

The publication should have great value for earth and atmospheric scientists and students at large, as well as for development agencies and environmentalists, both national and international. It should also prove interesting to the concerned general public.

## REFERENCES

- Ives, J.D. 2009. Review of *Geographic names of Iceland's glaciers: Historic and modern*, by Oddur Sigurdsson and Richard S. Williams, Jr. *Arctic* 62(3):352–353.
- Mool, P.K., Bajracharya, S.R., and Joshi, S.P. 2001. Inventory of glaciers, glacial lakes, and glacial lake outburst floods: Monitoring and early warning systems in the Hindu Kush-Himalayan regions – Nepal. Kathmandu: International Centre for Integrated Mountain Development.
- Reynolds, J.M. 1999. Glacial hazard assessment at Tsho Rolpa, Rolwaling, Central Nepal. *Quarterly Journal of Engineering Geology* 32:209–214.
- Richardson, S.D., and Reynolds, J.M. 2000. An overview of glacial hazards in the Himalayas. *Quaternary International* 65-66:31–47.
- Vuichard, D., and Zimmermann, M. 1987. The 1985 catastrophic drainage of a moraine-dammed lake, Khumbu Himal, Nepal: Cause and consequences. *Mountain Research and Development* 7:91–110.

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CANADA'S FORGOTTEN ARCTIC HERO: GEORGE RICE AND THE LADY FRANKLIN BAY EXPEDITION 1881-1884. By JIM LOTZ. Wreck Cove, Cape Breton, Nova Scotia: Breton Books, 2009. ISBN 978-1-895415-94-0. Available from Breton Books at [www.capebretonbooks.com](http://www.capebretonbooks.com). viii + 182 p., maps, b&w illus., bib. Softbound. Cdn\$18.95.

Of the 22 men led by Lieutenant Adolphus W. Greely, U.S. Signal Corps, who wintered at Fort Conger in northeastern Ellesmere Island in 1881–83, manning one of the two American stations that represented the American contribution to the First International Polar Year, only 19 were citizens of the United States. Of the remaining three, two were Greenlanders, Frederick Christensen and Jens Edward, and one was a Canadian, George Rice. None of these three men was among the six who ultimately survived the expedition.