



**3** OPEN ACCESS

## **BOOK REVIEW**

**Svalbard from above**, by Bjørn Fossli Johansen, Harald Faste Aas, Anders Skoglund & Oddveig Øien Ørvoll, Tromsø, Norwegian Polar Institute, 2017, 215 pp., hardback, 399 NOK (approximately 51 USD). ISBN 978-82-7666-410-2

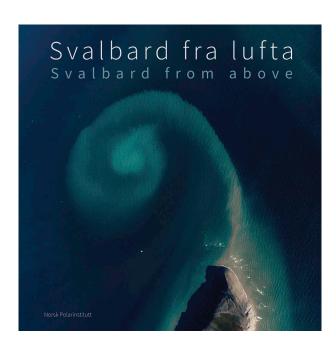
The aerial photography of Svalbard was kicked off by Roald Amundsen's change of heart. When he called off his attempt to reach the North Pole by plane in 1923, a support expedition tasked with setting out supply depots was already on its way to Svalbard. The erstwhile support team, which included a photographer, shifted gears: photographing Spitsbergen from their small plane was their new objective. Engine malfunctions cut short the work, but the resulting images – of areas north of Isfjorden and west of Hinlopenstretet – constitute the first set from a series of increasingly sophisticated aerial picture surveys of Svalbard, the most recent of which was a state-of-the-art survey undertaken in 2008–2012.

Two key events in the history of the archipelago bracketed that first aerial photographic foray over Svalbard: the submission of the Spitsbergen Treaty (later called the Svalbard Treaty) to the League of Nations in 1920; and its ratification in 1925. Of all the nations that had been exploiting Svalbard's resources for centuries, Norway was granted sovereignty (with stipulations). In 1936-38, Norway's Svalbard and Arctic Ocean Survey - the forerunner of today's Norwegian Polar Institute - vigorously mapped Svalbard using traditional ground-based techniques combined with the new method of aerial photography, thereby filling in some of the few remaining empty spaces on the world map. As the European imperial powers had amply proven during the 19th and earlier centuries, to map and to name was the route by which possession was cemented.

The Norwegian Polar Institute (my own institute) is still responsible for mapping Svalbard, and now my colleagues in its mapping unit, whose printed maps and online map portal have won national and international awards, have scrutinized thousands of images and selected the most striking. The fruit of these efforts is *Svalbard from above*, a large-format hardcover book, in English and Norwegian.

Introductory sections explain the evolution of aerial photography in Svalbard. Altitudes, film types, angles of photography, near-infrared ("false colour") imagery, image processing, satellite imagery and how photographs are turned into maps are among the topics covered.

The full-page aerial photographs (about 100 of them) are the book's main attraction. Receding glaciers, shifting coastlines and disintegrating sea ice illustrate how technological developments during the last 95 years have been matched by



dramatic changes to the archipelago itself. Also pictured are: the remnants of 'blubber ovens' and other features of a 17th-century whale processing station; the eerily skeletal remains of Walter Wellmann's airship hangar (testament to a failed early 20th-century Arctic expedition); modern mining facilities; the archipelago's "capital" (a thriving town engaged in tourism, higher education, research and industry); and other evidence of the evolution of human exploitation of the islands through time. Pictures of walruses huddled together on a sandy beach – used by scientists to make headcounts and thereby to track the recovery of the population after it was almost wiped out by hunting – illustrate how aerial photography has become an important tool in research and conservation.

If the bird's-eye-view images of Svalbard have both scientific and mapping value, they also have aesthetic merit. One would not be blamed for taking, at first glance, some of these artfully cropped photographs for abstract paintings, not least the book's cover image of a delicate turquoise spiral of meltwater runoff at the little island of Hopen.

Humans have been surface-bound creatures for all but the thinnest sliver of our existence, and even now – in the age of personal drones – looking at the Earth from the air is mesmerizing, and sometimes disquieting. The success of the stunning coffee-table book *The Earth from the air* (Arthus-Bertrand & Brown 1999) and its subsequent editions testify to this, but there is no better example than the picture that came to be known as the Blue Marble, taken on 7 December 1972 by the crew of the *Apollo 17* at a distance of some 29 000 km from Earth. It became a symbol of the environmental movement and remains one of the most reproduced and iconic images of all time: "Our whole planet

suddenly, in this image, seemed tiny, vulnerable, and incredibly lonely against the vast blackness of the cosmos" (Petsko 2011). With one picture, the Earth's resources no longer seemed inexhaustible, its capacity to sponge up human impact and restore itself no longer seemed limitless. The undeniable finiteness of the Blue Marble stared one in the face. On a more modest scale, Svalbard from above carries the same message.

## **References**

Arthus-Bertrand Y. & Brown L. 1999. The Earth from the air. New York: Harry N. Abrams

Petsko G.A. 2011. The Blue Marble. Genome Biology 12, article no. 112, doi: 10.1186/gb-2011-12-4-112

> Helle V. Goldman Norwegian Polar Institute, Tromsø, Norway, **⊠** goldman@npolar.no

> > © 2018 Helle V. Goldman

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial License (http:// creativecommons.org/licenses/by-nc/4.0/), which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited. https://doi.org/10.1080/17518369.2018.1440515

