



# Our Frozen Planet

## A Photographic Journey Through the World of Snow and Ice

**Michael Hambrey**

**Jürg Alean**

<b>ISBN</b>	9781906506735
<b>Publisher</b>	Papadakis
<b>Binding</b>	Hardback
<b>Territory</b>	World excluding USA & Canada
<b>Size</b>	310 mm x 225 mm
<b>Pages</b>	256 Pages
<b>Illustrations</b>	230 color, 1 b&w
<b>Price</b>	£40.00

- A sensational photographic exploration of the world of ice and snow, from oceans to ice sheets, glaciers and ice caves, and the stunning landscapes of the world's major mountain ranges
- Beautiful photography through which documents extraordinary changes across several decades
- On-topic: presents how global shifts in temperature are affecting snow and ice, melting glaciers, and how it affects the communities who live in those areas
- Authors are experts in their field and have been studying glaciers for over 50 years
- Gives a positive message as it's not only a reminder of what we stand to lose, but gives readers the courage to tackle the global climate emergency

*Beautiful and moving ... Stunning images of our frozen Earth* – **New Scientist**

We live on a planet where up to a third of the land area is covered by snow and ice during the winter. This frozen world, known as the cryosphere, is captured in all its remarkable beauty by the spectacular photography within this book. **Our Frozen Planet** is a celebration of these frozen realms, inviting readers to embark upon a stunning photographic journey through the cryosphere.

However, this book also carries a stark warning: although the cryosphere represents a significant component of Planet Earth, it is rapidly declining in response to global warming. The next few generations of humanity will see unprecedented change in ice and snow cover. Now is the time to place on record the magical beauty of such areas.

Experts in their field, authors and photographers Michael Hambrey and Jürg Alean have each studied glaciers for half a century. They have worked in both polar regions, and several of the world's major mountain ranges. Their work has led them to examine ice and snow on all scales, from the mighty glaciers and ice sheets that still cover ten percent of Earth's land surface, to frozen puddles and fluffy snow. In this book, they explore how a myriad of snowflakes are transformed into glacier ice, how this then flows under the influence of gravity, and finally disappears through melting. They discuss how glaciers have eroded Earth's surface to produce some of our most stunning landscapes, and the importance of deposition of debris to the provision of rich soils. They investigate ice in the ocean, on lakes and in rivers, and illustrate the delicate beauty of frost and snow. Finally, they show some of the myriad ways in which plants, animals, and humans interact with the cryosphere.

Replete with breathtaking photography ranging from the tiniest icicle to the most mammoth glacier, this book is a vibrant celebration of this fascinating and breathtaking world in which we live. **Our Frozen Planet** serves as a reminder of what we are at risk of losing, and, in doing so, gives us the courage to tackle the global climate emergency.

**Michael Hambrey** is Emeritus Professor of Glaciology and former Director of the Centre for Glaciology in the Department of Geography & Earth Sciences at Aberystwyth University, Wales, UK. He was also founding director of the Climate Change Consortium of Wales. His research interests include glacial geology and structural glaciology. He has published nearly 200 scientific papers and several books, including university-level textbooks *Glacial Environments* (1994) and, with Jürg Alean, *Colour Atlas of Glacial Phenomena* (2017). In addition Michael has co-written popular science books *Glaciers* (2nd edn, 2004) and *Gletscher der Welt* (2013) with Jürg Alean, and *Islands of the Arctic* (2002) and *The Continent of Antarctica* (2018) with Julian Dowdeswell. **Jürg Alean** was formerly a teacher of geography at the Kantonsschule Zürcher Unterland in Bülach, Switzerland. He has undertaken extensive fieldwork in the Swiss Alps, the Canadian Arctic, Alaska and South America. His research has led to various scientific papers, in particular concerning dangerous glaciers and ice avalanches. He has also published many popular scientific articles and several books, for example, *Gletscher der Alpen* (2010) and *Gletscher der Welt* (2013), as well as those mentioned above with Michael Hambrey.



CHAPTER 3

ICE FROM  
THE  
ATMOSPHERE

