Polar Lakes and Rivers: Limnology of Arctic and Antarctic Aquatic Ecosystems

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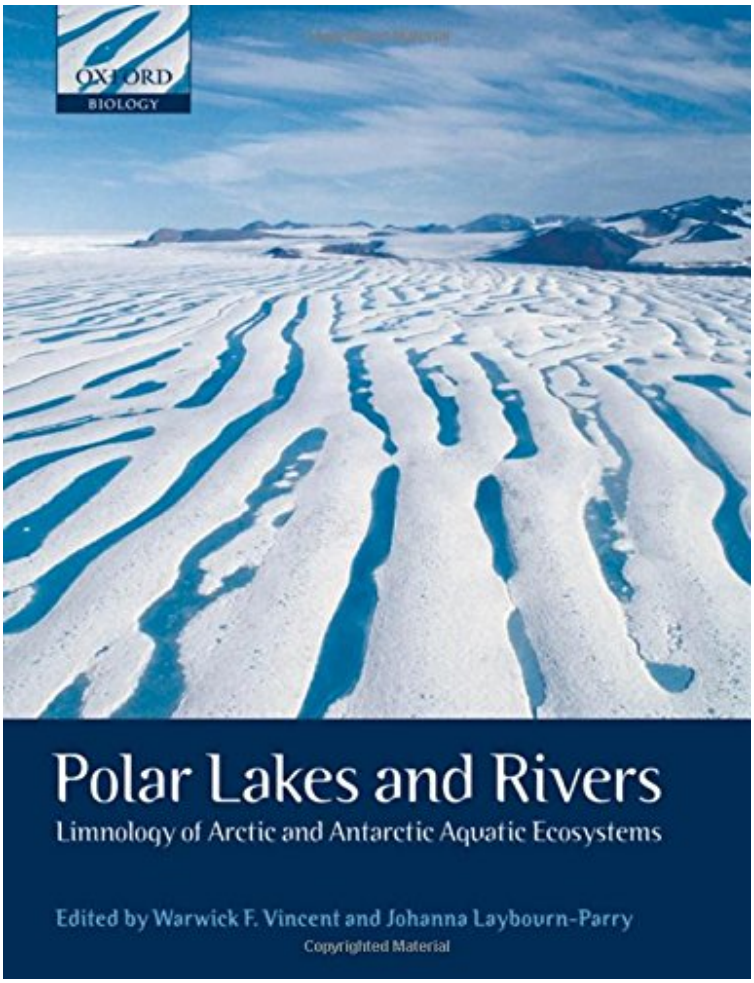

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From Oxford University Press : Polar Lakes and Rivers: Limnology of Arctic and Antarctic Aquatic Ecosystems before purchasing it in order to gage whether or not it would be worth my time, and all praised Polar Lakes and Rivers: Limnology of Arctic and Antarctic Aquatic Ecosystems:

This is the first book to describe the ecology of high latitude lakes, rivers and glacial environments in both the North and South polar regions. From the lake-rich floodplains of the Arctic to the deep, enigmatic waters of Lake Vostok, Antarctica, these regions contain some of the most extraordinary aquatic ecosystems on Earth. They provide a fascinating diversity of habitats for plant, animal and microbial communities, and are proving to be valuable model

systems for exploring many ecological themes including landscape-lake interactions, adaptation of life to environmental extremes, and controls on the structure and functioning of aquatic ecosystems. Some of these waters also have direct global implications, including permafrost thaw lakes as sources of greenhouse gases, subglacial aquatic environments as a storehouse of ancient microbes, and Arctic rivers as major inputs of freshwater and organic carbon to the World Ocean. Given that many polar areas are experiencing greater climate warming than at lower latitudes, these ecosystems can also be viewed as sentinels of global change. This timely volume brings together many of the world's leading researchers in polar limnology to describe these diverse aquatic environments and their ecology. It introduces each major ecosystem type, examines the similarities and differences between Arctic and Antarctic systems as well as their responses to environmental change, and describes new frontiers for future research. A glossary of terms is provided for non-specialists, and a set of colour plates introduces the ecosystems and their biota. Polar Lakes and Rivers will be of value to students and specialist researchers alike, as well as to those with a more general interest in aquatic ecology, polar environments or global change who require an authoritative overview of this fast emerging topic.

"The book thus provides a wide scale of illustrations from the Arctic and Antarctic, which will be appealing for both readers of general interest in environmental studies and scientists working exclusively in this research field. It is the first attempt paid to concentrate the various problems of polar limnology in one volume."--Journal of Sedimentary Research"There have been few comparative works on the aquatic systems of the Arctic and Antarctic, so this new volume...is a very welcome addition to the scientific literature...In my opinion, it will be a long time before River and Lakes is improved upon as the definitive comparative study of Arctic and Antarctic aquatic systems."--Antarctic ScienceAbout the AuthorDr. Warwick Vincent is Professor of Biology and Canada Research Chair in Aquatic Ecosystem Studies at Laval University, Qubec City, Canada. He is a member of the Royal Society of Canada, and honorary member of the Royal Society of New Zealand. His research focuses on aquatic microbial ecology, light and primary production, and ecosystem responses to climate change, with emphasis on Arctic and Antarctic waters. He has served on the editorial boards of Antarctic Science and Polar Biology, and on various research committees and studies. He was inaugural Chair of Canada's National Antarctic Committee. He teaches undergraduate, graduate and field courses in limnology at Laval University, and has been an instructor in the outreach initiative 'Students on Ice' to Antarctica. Dr. Johanna Laybourn-Parry is vice-provost Research at the University of Tasmania, Australia. Prior to that she was Executive Dean of Science at Keele University, UK, and Professor of Environmental Biology at Nottingham University. Her research is undertaken in the Antarctic with the Australian and US Antarctic programmes and in the Arctic at the Natural Environment Research Council Station in Svalbard. Her research interests focus on carbon cycling in polar lakes, protozoan ecophysiology, viral bacterial dynamics, bioprospecting for novel biochemicals, remote sensing of lake environments and biological processes on glaciers. She has published two sole authored books, and 128 peer reviewed articles and reviews. Her work has been funded by the Natural Environment Research Council, the Engineering and Physical Sciences Research Council, the Leverhulme Trust, The European Union, the Royal Society, Industry and logistic support from the Australian Antarctic Science Advisory Committee and NSF.