Wind as a Geomorphic Agent in Cold Climates

Wind erosion and deposition are extremely important factors in cold climates because of the open space and scarce vegetation. Aeolian processes connected with sand drift in Polar environments are similar to those in deserts, but in cold environments frost and snow also play an important role. Snow, and its transport by wind, make this white seasonal desert quite different from its low-latitude analogues.

The Arctic is characterized by strangely eroded rocks, special wind-formed lakes, large sand dunes and immense loess deposits that owe their formation to aeolian processes controlled by snow cover and frost formation. *Wind as a Geomorphic Agent in Cold Climates* presents a detailed description and explanation of these wind-generated Polar landforms. It includes numerous illustrations and photographs that will assist the reader in identifying and interpreting these features: both modern-day and those preserved in the geological record from earlier glacial periods. Unlike most aeolian geomorphology texts, which do not cover the high-latitude regions north and south of 60°, this volume brings together important information from scattered literature sources concerning these cold environments.

The book provides an important introduction to this area of geocryology and will form a useful reference for graduate students and researchers in a variety of fields, including geomorphology, geology and environmental science.

Matti Seppälä received a Ph.D. from the University of Turku, Finland, in 1971 and subsequently took up a position at the University of Oulu. In 1978 he moved to the University of Helsinki where he is now Professor in Physical Geography. He has travelled widely in order to conduct numerous Arctic field campaigns and to collaborate with colleagues around the world. He has worked as a research fellow at the Universities of Uppsala, Heidelberg, Montréal, Cambridge and Durham. Professor Seppälä's research interests include cold environment geomorphology, geomorphological mapping, cartography, climamorphology, aerial photo-interpretation, permafrost studies and aeolian processes. He has contributed to several book publications and has served on the editorial boards of *Géographie physique et quaternaire* and *Permafrost and Periglacial Processes*. Professor Seppälä is a fellow of the Arctic Institute of North America and of the Canadian Geological Association, and is actively involved in a number of international organizations relating to Polar research. He is the recipient of various honorary awards including the Erskine Fellowship, University of Canterbury, Christchurch, New Zealand; and the Ragnar Hult Medal of the Geographical Society of Finland.

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