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""11. Cryospheric Environments in Polar Regions (Glaciers and Ice Sheets, Sea Ice, and Ice Shelves)""

Sommario/riassunto

"Sheds new light on the microbial ecology and physiology of the Earth's polar regions. Examines the microbial investigations during the International Polar Year of 2008 focusing on the Arctic and Antarctic, along with earlier investigations on critical environmental issues such as climate change, ozone depletion, and elemental cycling. Offers a survey of what is known and unknown about the microbial inhabitants of polar environments, addresses the adaptations and physiology of cold-adapted microorganisms, and explores the ecological role that polar microbial communities play in biogeochemical cycling. Presents the challenges that polar and subpolar microorganisms face and describes the lowest temperatures in which microbial life can exist--and the prospects for life on other planets. Recommended for a general microbiology audience as well as for scientists and students in all areas of biology and geomicrobiology."