Record Nr. UNINA9910222232603321 Bargagli Roberto Autore Titolo Antarctic ecosystems: environmental contamination, climate change, and human impact / / R. Bargagli Berlin; ; New York, : Springer, c2005 Pubbl/distr/stampa **ISBN** 1-280-33786-9 9786610337866 3-540-26465-5 Edizione [1st ed. 2005.] Descrizione fisica 1 online resource (411 p.) Ecological studies, , 0070-8356;; v. 175 Collana Disciplina 577.586 Soggetti Ecology - Antarctica Nature - Effect of human beings on - Antarctica Biotic communities - Antarctica Pollution - Environmental aspects - Antarctica Climatic changes - Environmental aspects - Antarctica Antarctica Environmental conditions Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references (p. [315]-377) and indexes. Nota di contenuto Antarctica: Geomorphology and Climate Trends -- Glacial, Terrestrial and Freshwater Ecosystems -- The Southern Ocean Environment: Anthropogenic Impact and Climate Change -- Persistent Contaminants in the Antarctic Atmosphere -- Persistent Contaminants in Snow, Terrestrial Ecosystems and Inland Waters -- Contaminants in Antarctic Seawater and Sediments -- Persistent Contaminants in Antarctic Marine Food Chains -- Climate Change, Anthropogenic Impact and Environmental Research in Antarctica: a Synthesis and Perspectives. Sommario/riassunto Choice Outstanding Title! (January 2006) The image of Antarctica as a symbol of the last great wilderness and pristine environment has changed considerably in the last two decades. Environmental problems such as the ozone hole and the break-up of ice-shelves have shown that Antarctica is inextricably linked to global processes and exposed to the impact of human activities in the rest of the world. This volume

provides an overview of climate change data, its effects on the

structure and functioning of Antarctic ecosystems, and the occurrence

and cycling of persistent contaminants. It discusses the unique physico-chemical characteristics of the Antarctic environment, ecophysiological adaptations of terrestrial and marine organisms, the transfer of contaminants in pelagic and neritic food chains and the possible consequences for animals at higher trophic levels. The text concludes with possible future scenarios of climate change and atmospheric contamination and the role of Antarctic organisms in the early detection of environmental perturbations.