1. Record Nr. UNINA9910299452603321 Autore Bockheim James G Titolo Cryopedology / / by James G. Bockheim Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2015 3-319-08485-2 **ISBN** Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (182 p.) Collana Progress in Soil Science, , 2352-4774 Disciplina 55 550 631.4 919.8 Soggetti Physical geography Soil science Soil conservation Polar regions Earth System Sciences Soil Science & Conservation Polar Geography 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 at the end of each chapters and index. Nota di contenuto Introduction -- Cryosols: a Three-Part System -- Description, sampling and analysis of Cryosols -- Soil Formatting Factors -- Cryogenic Processes -- Classification of Cryosols -- Distribution of Cryosols --Arctic Cryosols -- Antartic Cryosols -- Alpine Cryosols -- Cryosols and Earth-system Sciences -- Cryosols in a Changing Climate --Management of Cryosols -- Cryosol Databases and Their Use. This is the first book solely devoted to Cryopedology, the study of soils Sommario/riassunto of cold regions. The analysis treats Cryosols as a three-part system (active layer, transition layer, permafrost). The book considers soilforming factors, cryogenic processes, and classification and distribution of Cryosols. Cryosols of the Arctic, Antarctica, and the high mountains are considered in detail. The chapters address cryosols and

earth-system science, cryosols in a changing climate, cryosols

databases and their use, and management of cryosols. The book is rich in color photographs and highlights the author's 43 field trips to Antarctica, the Arctic, and alpine areas.