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Nota di bibliografia	Includes bibliographical references (p. [300]-301) and index.
Nota di contenuto	Caves: Processes, Development and Management; Contents; Preface and Acknowledgements; ONE: The Cave System and Karst; What is Karst?; What is a Cave?; Where are the Deepest and Longest Caves?; Caves as Geomorphic Systems; Now the Details ...; TWO: Cave Hydrology; Basic Concepts in Karst Drainage Systems; Karst Aquifers; Porosity and Permeability of Karstic Rocks; Zonation of the Karst Drainage System; Defining the Catchment of a Cave; Hydraulics of Groundwater Flow in Karst; Diffuse flow; Fissure flow; Conduit flow (turbulent and laminar cases); Flow nets in karst drainage systems The Role of Salinity Evolution of the Karst Drainage System; Analysis of Karst Drainage Systems; Water tracing techniques; Spring hydrograph analysis; Spring chemograph analysis; Structure and Function of Karst Drainage Systems; Storage and transfers in the karst system; The role of extreme events; Karst Hydrology of the Mammoth Cave Plateau, Kentucky; THREE: Processes of Cave Development; Introduction; Karst Rocks; Limestone; Dolomite; Sandstone; Processes of Dissolution of Karst Rocks; The solution of limestone in meteoric waters; Soil and vegetation in the limestone solution process

The zoning of solution in the unsaturated zone
Limestone solution in seawater; Solution of evaporites; Solution of silicates in meteoric waters; Rock Control and Cave Morphology; Role of lithology; Role of joints, fractures and faults; Cave breakdown and evaporite weathering; The Development of Common Caves; Formation of caves in plan; Formation of caves in length and depth; The Formation of Maze Caves; Caves formed by floodwaters; Caves formed by hydrothermal waters; Caves formed in gypsum; Lava Tubes, Weathering Caves and Pseudokarst; The formation of lava tubes
Weathering caves and pseudokarst
Origin of Caves: an Overview; Geological Control and the World's Longest Cave; FOUR: Cave Formations; Introduction; Carbonates; Controls over carbonate mineralogy; Cave deposits formed by carbonate minerals; Colour of calcite formations; Important Non-Carbonate Minerals; Evaporites; Phosphates and nitrates; Oxides, silicates and hydroxides; Other Minerals; Cave Formations of the Nullarbor Plain, Australia; FIVE: Cave Sediments; Introduction; Clastic Sediment Types; Processes of Sedimentation; Gravity-fall processes; Waterlain clastic sediments
Diagenesis of Cave Sediments
Stratigraphy and its Interpretation; Sediment Transport and Particle Size; Provenance Studies; Caves and Flood History in the Kimberleys, Australia; SIX: Dating Cave Deposits; The Importance of Dating Cave Deposits; Dating Techniques and the Quaternary Timescale; Palaeomagnetism; Radiocarbon; Uranium series; Trapped electron methods: ESR, TL and OSL; Timing the Ice Ages; SEVEN: Cave Deposits and Past Climates; Introduction; Basic Principles and Tests for Reliability; The Last Glacial-Interglacial Temperature Record; Carbon Isotopes and Environmental Change
Stalagmite Fluorescence and Sunspot Cycles

Sommario/riassunto

This book is aimed at students of the natural environment, but it will also appeal to those - cavers, environmental managers and field naturalists - who are curious about the underground world and its inhabitants. It is illustrated throughout with photographs, maps and line diagrams, almost all of which are original to the book.
