1. Record Nr. UNINA9910825375403321 Microbial life of cave systems / / editor, Annette Summers Engel Titolo Berlin, Germany;; Boston, [Massachusetts]:,: De Gruyter,, [2015] Pubbl/distr/stampa ©2015 **ISBN** 3-11-033988-9 3-11-038952-5 9783110389524 (EPUB) 9783110339888 (PDF) Descrizione fisica 1 online resource (xv, 335 pages): illustrations (chiefly colour) Collana Life in extreme environments;; volume 3 578.75/84 Disciplina Soggetti Biospeleology Cave ecology Microbiology Cave animals Cave plants Underground ecology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto Front matter -- Preface -- Contents -- Contributing authors -- 1. Bringing Microbes into Focus for Speleology: An Introduction -- 2. Methods for Characterizing Microbial Communities in Caves and Karst: A Review -- 3. "A Grand, Gloomy, and Peculiar Place": Microbiology in the Mammoth Cave Region -- 4. Starving Artists: Bacterial Oligotrophic Heterotrophy in Caves -- 5. Bacterial and Archaeal Diversity on Cave Speleothem and Rock Surfaces: A Carbonate Cave Case Study from Kartchner Caverns -- 6. Microbial Slime Curtain Communities of the Nullarbor Caves -- 7. Microbial Diversity and Manganese Cycling: A Review of Manganese-oxidizing Microbial Cave Communities -- 8. Microbial Diversity and Ecology of Lava Caves -- 9. Predicting bacterial diversity in caves associated with sulfuric acid speleogenesis -- 10.

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Sommario/riassunto

The earth's subsurface contains abundant and active microbial biomass, living in water, occupying pore space, and colonizing mineral and rock surfaces. Caves are one type of subsurface habitat, being natural, solutionally- or collapse-enlarged openings in rock. Within the past 30 years, there has been an increase in the number of microbiology studies from cave environments to understand cave ecology, cave geology, and even the origins of life. By emphasizing the microbial life of caves, and the ecological processes and geological consequences attributed to microbes, this book provides the first authoritative and comprehensive account of the microbial life of caves for students, professionals, and general readers.