1. Record Nr. UNINA9910728941003321 Autore Mucina Ladislav Titolo Biomes of the Southern Hemisphere / / by Ladislav Mucina Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2023 Pubbl/distr/stampa **ISBN** 3-031-26739-7 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (229 pages) Biome Ecology, , 2948-1473; ; 1 Collana Disciplina 577.091814 Soggetti **Botany Ecology** Biodiversity Biotic communities Population biology Plant Science Community and Population Ecology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Nota di contenuto 1 -- Introduction -- 2. Southern tropical and subtropical rainforests --3. Multi-faced southern seasonal tropics 3.1 Heterogeneity of the savanna biomes: a southern perspective -- 4. Southern mediterranean: an extratropical plant marvel -- 5. Dry face of the 'wet hemisphere': southern deserts and semideserts -- 6. Austral temperate forests: a biome-classification conundrum -- 7. Southern 'steppes' and other grassy oddballs -- 8. The biomes of the coldest corners of the World --9. Synthesis: A New Global Zonobiome System -- 10. Further Challenges and Research Agenda -- References. Sommario/riassunto This is the first comprehensive and critical evaluation of the biome (large-scale, functional biotic communities) patterns in the Southern Hemisphere. Revising the Heinrich Walter's zonobiome system for the Southern Hemisphere appeared as necessary because of the bioclimatic imbalance between the Hemispheres. This revision resulted in formulation of a new zonobiome system, considering the geographic peculiarities of both Hemispheres, hence creating a new, powerful tool of global nature-resource survey and conservation. The system has a

potential to attract the interest of the global climate modeling

community as the concept of biome (and associated hierarchical system) has a strong functional focus. All zonal biomes of the Southern Hemisphere are featured, and the major challenges we face in understanding their origins, structure, and functioning are discussed. The book contains a wealth of original data resulting from collation of bioclimatic data and vegetation mapping.