Record Nr. UNINA9910818384403321 Theoretical ecology: principles and applications / / edited by Robert M. **Titolo** May and Angela R. McLean Pubbl/distr/stampa Oxford;; New York,: Oxford University Press, 2007 **ISBN** 0-19-191737-0 9786611160685 0-19-152619-3 1-281-16068-7 1-4294-7053-4 Edizione [Third edition.] Descrizione fisica ix, 257 p.: ill Collana Oxford scholarship online Altri autori (Persone) MayRobert M <1936-> (Robert McCredie) McLeanAngela R Disciplina 577 Soggetti **Ecology** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali This edition previously issued in print: 2007. Includes bibliographical references (p. 216-248) and index. Nota di bibliografia Nota di contenuto Intro -- Contents -- Acknowledgements -- Contributors -- 1 Introduction -- 2 How populations cohere: five rules for cooperation --3 Single-species dynamics -- 4 Metapopulations and their spatial dynamics -- 5 Predator-prey interactions -- 6 Plant population dynamics -- 7 Interspecific competition and multispecies coexistence -- 8 Diversity and stability in ecological communities -- 9 Communities: patterns -- 10 Dynamics of infectious disease -- 11 Fisheries -- 12 A doubly Green Revolution: ecology and food production -- 13 Conservation biology: unsolved problems and their policy implications -- 14 Climate change and conservation biology --15 Unanswered questions and why they matter -- References -- Index -- A -- B -- C -- D -- E -- F -- G -- H -- I -- J -- K -- L -- M -- N --O -- P -- Q -- R -- S -- T -- U -- V -- W -- Y. Sommario/riassunto Theoretical Ecology provides a succinct, up-to-date overview of the field set in the context of applications, thereby bridging the traditional division of theory and practice. It describes the recent advances in our understanding of how interacting populations of plants and animals

change over time and space, in response to natural or human-created

disturbance. In an integrated way, initial chapters give an account of the basic principles governing the structure, function, and temporal and spatial dynamics of populations and communities of plants and animals. Later chapters outline applications of these ideas to practical issues including fisheries, infectious diseases, tomorrow's food supplies, climate change, and conservation biology.