Record Nr. UNINA9910790867503321 Autore Bascompte Jordi <1967-> Titolo Mutualistic networks / / Jordi Bascompte and Pedro Jordano Pubbl/distr/stampa Princeton:,: Princeton University Press,, [2014] ©2014 **ISBN** 0-691-13142-2 1-4008-4872-5 Edizione [Core Textbook] Descrizione fisica 1 online resource (225 p.) Monographs in Population Biology;; 70 Collana Monographs in population biology Classificazione WH 3400 JordanoPedro <1957-> Altri autori (Persone) Disciplina 577.8/52 Soggetti Mutualism (Biology) 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 and index. Frontmatter -- Contents -- Preface -- CHAPTER ONE. Biodiversity and Nota di contenuto Plant-Animal Coevolution -- CHAPTER TWO. An Introduction to Complex Networks -- CHAPTER THREE. The Structure of Plant-Animal Mutualistic Networks -- CHAPTER FOUR. Ecological and Evolutionary Mechanisms -- CHAPTER FIVE. Mutualistic Networks in Time and Space -- CHAPTER SIX. Consequences of Network Structure -- CHAPTER SEVEN. Epilogue -- APPENDIX A. Indices Used in Mutualistic Network Analyses -- APPENDIX B. Fitting Degree Distributions -- APPENDIX C. Measures of Nestedness -- APPENDIX D. Measures of Modularity --APPENDIX E. Phylogenetic Methods and Network Analysis -- APPENDIX F. Null Models for Assessing Network Structure -- APPENDIX G. An Analytical Theory of Mutualistic Networks -- APPENDIX H. Software for the Analysis of Complex Networks -- Bibliography -- Index --**Backmatter** Sommario/riassunto Mutualistic interactions among plants and animals have played a paramount role in shaping biodiversity. Yet the majority of studies on mutualistic interactions have involved only a few species, as opposed to broader mutual connections between communities of organisms. Mutualistic Networks is the first book to comprehensively explore this burgeoning field. Integrating different approaches, from the statistical

description of network structures to the development of new analytical

frameworks, Jordi Bascompte and Pedro Jordano describe the architecture of these mutualistic networks and show their importance for the robustness of biodiversity and the coevolutionary process. Making a case for why we should care about mutualisms and their complex networks, this book offers a new perspective on the study and synthesis of this growing area for ecologists and evolutionary biologists. It will serve as the standard reference for all future work on mutualistic interactions in biological communities.