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| 1. Record Nr.           | UNINA9910163948203321   |
| Titolo                  | Advances in ecological research . Volume 45 The role of body size in multispecies systems // edited by Andrea Belgrano, Julia Reiss   |
| Pubbl/distr/stampa      | Waltham, Mass., : Academic Press/Elsevier, 2011   |
| ISBN                    | 1-283-28823-0<br>9786613288233<br>0-12-386476-3   |
| Edizione                | [1st ed.]   |
| Descrizione fisica      | 1 online resource (349 p.)  |
| Collana                 | Advances in ecological research, , 0065-2504 ; ; v. 45  |
| Altri autori (Persone)  | BelgranoAndrea<br>ReissJulia  |
| Disciplina              | 574.5082<br>591.41  |
| Soggetti                | Animal ecology<br>Body size   |
| 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.  |
| Nota di contenuto       | Front Cover; The Role of Body Size in Multispecies Systems; Copyright; Contents; Contributors to Volume 45; Preface; The need for a more integrative approach to ecology and a return to the roots of the science; A changing world view?; Searching for simplifying rules within a complex science; The division and reconnection of fisheries science and ecology; Individual-based Data and the "Curse of the Latin Binomial"; Beyond taxonomy and body size?; Acknowledgments; References; Chapter 1: Determinants of Density-Body Size Scaling Within Food Webs and Tools for Their Detection; Abstract I IntroductionII Density-Mass from Different Angles; III DMR and Food Webs; A Trophic Position; B Gape Limitation and DMR; C Discontinuities and the DMR; IV Statistical Issues; A Frequency Distribution; B Bivariate Relationships; C Multiple DMR in the Same Dataset; V DMR and Its Detection in a Metacommunity; A Study System; B Five DMRs in a Single System; C Cross-Community at Different Levels; D Amphibians as an Example of Discontinuous DMR; E Evaluation of Methodological Performance; VI Conclusions; Acknowledgments; References Chapter 2: Predicted Effects of Behavioural Movement and Passive |

Transport on Individual Growth and Community Size Structure in Marine EcAbstract; I Introduction; II Methods; A Model Development; B Growth and Mortality; C Spatial Flux; D Numerical Solution; E Parameter Choices; F Simulations; G Data; III Results; A Consequences of Behavioural Movement on Size Spectra; B Life Histories; C Parameter Sensitivities; D Consequences of Adding Abiotic Movement; E Effects of Simulated Phytoplankton Bloom; F Data; IV Discussion; Acknowledgments; References

Chapter 3: Seeing Double: Size-Based and Taxonomic Views of Food Web StructureAbstract; I Introduction; A The Allometry of Trophic Relations; B Overcoming Pitfalls Through a Plurality of Viewpoints; C Individual-Based Food Webs: An Emerging Field; II Methods; A Study Sites-The Seven Food Webs; 1 Afon Hirnant; 2 Broadstone Stream; 3 Celtic Sea; 4 Coilaco, Guampoe and Trancura Rivers, Chile; 5 Tadnoll Brook; B Aggregation into Different Levels of Resolution and Groupings; 1 Different Levels of Resolution Based on Taxonomic Groupings 2 Different Levels of Aggregation Based on Size-Class Groupings3 Food Web Aggregations; C Response Variables Analysed; 1 Size Structure Dimension Set #1: Trophic Orderings; a Predator Mass-Prey Mass; b Predator Mass - Predator-Prey Mass Ratio; c Species Mass-Trophic height (TH); 2 Size Structure Dimension Sets #2 and 3: Diet Variation and Predator variation; a Predator Mass-Variance of Prey Mass and Prey Mass-Variance of Predator Mass; b Predator Mass-Range of Prey Mass and Prey Mass-Range of Predator Mass; c Species Mass-In-Degree (Generalism) and Out-Degree (Vulnerability) D Statistical Analyses

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Sommario/riassunto

The general theme is being based around the ongoing European Science Foundation SIZEMIC Research Network, which has been running for several years. The network has focused on the role of body size in ecosystems and embraces a wide remit that spans all ecosystem types and a range of disciplines, from theoretical to applied ecology. Updates and informs the reader on the latest research findingsWritten by leading experts in the fieldHighlights areas for future investigation

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