

1. Record Nr.	UNINA9910141009603321
Titolo	Phylogenetics : theory and practice of phylogenetics systematics // [edited by] E.O. Wiley & Bruce S. Lieberman
Pubbl/distr/stampa	Hoboken, N.J., : Wiley-Blackwell, 2011
ISBN	9786613026644 9781118017876 1118017870 9781283026642 1283026643 9781118148105 111814810X 9781118017869 1118017862 9781118017883 1118017889
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (432 p.)
Altri autori (Persone)	WileyE. O LiebermanBruce S
Disciplina	576.8/8
Soggetti	Phylogeny Biology Cladistic analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographic references and index.
Nota di contenuto	PHYLOGENETICS: Theory and Practice of Phylogenetic Systematics; CONTENTS; PREFACE TO THE SECOND EDITION; PREFACE TO THE FIRST EDITION; 1: INTRODUCTION; PHYLOGENETIC PROPOSITIONS; TOPICS COVERED; TERMS AND CONCEPTS; Disciplines; Organisms and Grouping of Organisms; Phylogenetic History and Evolution; Attributes of Organisms; Classification; PHILOSOPHY AND SYSTEMATICS; The Form of Phylogenetic Hypotheses; CHAPTER SUMMARY; 2: SPECIES AND SPECIATION; WHAT IS IT TO BE A SPECIES?; Species as Kinds; Species as Sets; Species as Individuals; SPECIES CONCEPTS; Process-Based

## Concepts

The Evolutionary Species Concept Justifications for the ESC; Variations on the ESC; Process-Based Concepts Emphasizing Reproductive Isolation; Phylogenetic Species Concepts; Some Additional Species Concepts; SORTING THROUGH SPECIES CONCEPTS; SPECIATION: MODES AND PATTERNS; Allopatric Speciation; Allopatric Mode I : Vicariance; Allopatric Speciation, Mode II Peripatric Speciation; Distinguishing between Allopatric Modes of Speciation; Parapatric Speciation; Sympatric Speciation; IDENTIFYING MODES OF SPECIATION IN THE FOSSIL RECORD; THE EVOLUTIONARY SPECIES CONCEPT, SPECIATION, AND ECOLOGY  
EMPIRICAL METHODS FOR DETERMINING SPECIES LIMITS Nontree-Based Methods; Tree-Based Methods; CHAPTER SUMMARY; 3: SUPRA-SPECIFIC TAXA; CONCEPTS OF NATURALNESS AND SUPRA-SPECIFIC TAXA; THE NATURAL TAXON; MONOPHYLY, PARAPHYLY AND POLYPHYLY; HENNIG'S CONCEPTS PLACED IN HISTORY; NATURAL HIGHER TAXA AS MONOPHYLETIC GROUPS SENSU HENNIG (1966); LOGICAL CONSISTENCY: THE HALLMARK OF PROPOSED NATURAL CLASSIFICATIONS; PARAPHYLETIC GROUPS MISREPRESENT CHARACTER EVOLUTION; PARAPHYLY AND POLYPHYLY: TWO FORMS OF NONMONOPHYLY; NODE-BASED AND STEM-BASED MONOPHYLY: SAME CONCEPT DIFFERENT GRAPHS; CHAPTER SUMMARY  
4: TREE GRAPHS PHYLOGENETIC TREES; Stem-Based Phylogenetic Trees; Node-Based Phylogenetic Trees; CYCLIC GRAPHS; CLADOGRAMS; Nelson Trees in Phylogenetics; From Nelson Trees to Phylogenetic Trees; GENE TREES; INDIVIDUALS VERSUS SETS OF INDIVIDUALS USED IN AN ANALYSIS; REPRESENTING CHARACTER EVOLUTION ON TREES; UNROOTED TREES AND THEIR RELATIONSHIP TO PHYLOGENETIC TREES; NODE ROTATION; OTHER KINDS OF TREE TERMINOLOGY; CONCEPTS OF MONOPHYLY AND TREES; CHAPTER SUMMARY; 5: CHARACTERS AND HOMOLOGY; A CONCEPT OF CHARACTER; CHARACTER STATES AS PROPERTIES; SHARED CHARACTER STATES  
HISTORICAL CHARACTER STATES AS PROPERTIES A HISTORICAL KIND PROPERTIES; HISTORICAL GROUPS AND NATURAL KINDS; HOMOLOGY; Haszprunar's Homology Synthesis; Concepts of Homology in Systematics; Phylogenetic Characters and Phylogenetic Homology: An Overview; Taxic Homologies as Properties of Monophyletic Groups; Transformational Homology: Linking Different Hypotheses of Qualitative Identity in a Transformation Series; DISCOVERING AND TESTING HOMOLOGY; Patterson's Tests; Similarity and Remane's Criteria; Similarity in Position: Morphology; Similarity in Position: Molecular Characters  
Special or Intrinsic Similarity

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## Sommario/riassunto

The long-awaited revision of the industry standard on phylogenetics Since the publication of the first edition of this landmark volume more than twenty-five years ago, phylogenetic systematics has taken its place as the dominant paradigm of systematic biology. It has profoundly influenced the way scientists study evolution, and has seen many theoretical and technical advances as the field has continued to grow. It goes almost without saying that the next twenty-five years of phylogenetic research will prove as fascinating as the first, with many exciting developments yet to come.

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