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Nota di contenuto	Foreword; PREFACE; LIST OF CONTRIBUTORS; 1: WHY A HISTORY OF ECOLOGY? AN INTRODUCTION; REFERENCES; PART I: POPULATION ECOLOGY; 2: UNSTRUCTURED MODELS IN ECOLOGY: PAST, PRESENT, AND FUTURE; 2.1 INTRODUCTION; 2.2 THE BASIC (DETERMINISTIC) UNSTRUCTURED MODELS; 2.3 SINGLE SPECIES; 2.3.1 Continuous Time; 2.3.2 Discrete Time; 2.4 TWO SPECIES; 2.4.1 Continuous Time Exploiter-Victim Models; 2.4.2 Nicholson-Bailey Discrete Time Models; 2.4.3 SIR Epidemiological Models; 2.4.4 Competition; 2.5 MORE THAN TWO SPECIES; 2.6 TIME SERIES AND MODEL FITTING; 2.7 THE FUTURE OF UNSTRUCTURED MODELS ACKNOWLEDGEMENTS REFERENCES; 3: UNSTRUCTURED POPULATION MODELS: DO POPULATION-LEVEL ASSUMPTIONS YIELD GENERAL THEORY?; 3.1 INTRODUCTION; 3.2 CORE THEORY OR LIMITING CASE?; 3.3 DERIVING GENERAL POPULATION MODELS: STARTING WITH THE INDIVIDUAL; 3.4 THREE CASE STUDIES; 3.4.1 Consumer-Resource Interactions; 3.4.2 Tritrophic Food Chain; 3.4.3 Cannibalism; 3.4.4 Overall Conclusions; 3.5 AN APPROPRIATE MODELLING FRAMEWORK: PHYSIOLOGICALLY STRUCTURED POPULATION MODELS; 3.6 ON TESTABILITY; 3.7 DISCUSSION AND CONCLUDING REMARKS;

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Sommario/riassunto

This edited volume in the Theoretical Ecology series addresses the historical development and evolution of theoretical ideas in the field of ecology. Not only does it recount the history of the discipline by practitioners of the science of ecology, it includes commentary on these historical reflections by philosophers of science. Even though the theories discussed are, in many cases, are at the forefront of research, the language and approach make this material accessible to non-theoreticians. The book is structured in 5 major sections including population ecology, epidemiology
