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Nota di contenuto	Front matter -- CONTENTS -- List of Illustrations -- Preface -- Acknowledgments -- CHAPTER ONE. Social Behavior and Evolutionary Thought -- CHAPTER TWO. Models of Social Behavior -- CHAPTER THREE. The Price Equation -- CHAPTER FOUR. Inclusive Fitness and Hamilton's Rule -- CHAPTER FIVE. Nonadditive Interactions and Hamilton's Rule -- CHAPTER SIX. Conditional Behaviors and Inclusive Fitness -- CHAPTER SEVEN. Variants of Hamilton's Rule and Evolutionary Explanations -- CHAPTER EIGHT. Heritability, Maximization, and Evolutionary Explanations -- CHAPTER NINE. What Is Fitness? -- CHAPTER TEN. Evidence, Other Approaches, and Further Topics -- Glossary -- Notes -- Bibliography -- Index
Sommario/riassunto	Social behavior has long puzzled evolutionary biologists, since the classical theory of natural selection maintains that individuals should not sacrifice their own fitness to affect that of others. Social Evolution and Inclusive Fitness Theory argues that a theory first presented in 1963 by William D. Hamilton-inclusive fitness theory-provides the most fundamental and general explanation for the evolution and

maintenance of social behavior in the natural world. James Marshall guides readers through the vast and confusing literature on the evolution of social behavior, introducing and explaining the competing theories that claim to provide answers to questions such as why animals evolve to behave altruistically. Using simple statistical language and techniques that practicing biologists will be familiar with, he provides a comprehensive yet easily understandable treatment of key concepts and their repeated misinterpretations. Particular attention is paid to how more realistic features of behavior, such as non-additivity and conditionality, can complicate analysis. Marshall highlights the general problem of identifying the underlying causes of evolutionary change, and proposes fruitful approaches to doing so in the study of social evolution. *Social Evolution and Inclusive Fitness Theory* describes how inclusive fitness theory addresses both simple and complex social scenarios, the controversies surrounding the theory, and how experimental work supports the theory as the most powerful explanation for social behavior and its evolution.
