SCIENCE

Over the last several decades, mathematical models have become central to the study of social evolution, both in biology and the social sciences. But students in these disciplines often lack the tools to understand them. A primer on behavioral modeling that includes both mathematics and evolutionary theory, *Mathematical Models of Social Evolution* aims to make the student and professional researcher in biology and the social sciences conversant in the language of the field.

Teaching biological concepts from which models can be developed, Richard McElreath and Robert Boyd introduce readers to many of the typical mathematical tools that are used to analyze evolutionary models and end each chapter with a set of problems that draw upon these techniques. *Mathematical Models of Social Evolution* equips behaviorists and evolutionary biologists with the mathematical knowledge to truly understand the models on which their research depends. Ultimately, McElreath and Boyd's goal is to impart the fundamental concepts that underlie modern biological understandings of the evolution of behavior so that readers will be able to more fully appreciate journal articles and scientific literature, and start building models of their own.

"Evolutionary arguments are increasingly used as explanations in a wide range of human sciences—psychology, economics, anthropology—as well as in biology itself. However, these arguments are frequently employed on the basis of a second-hand understanding of the principles by which they are derived. This is the first book to provide a thorough but accessible grounding in the methods underlying the major topics in the evolution of social behavior. It should become required study for graduate students in evolution and human behavior."
DANIEL NETTLE, NEWCASTLE UNIVERSITY

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