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Autore	Hastings Alan
Titolo	Population Biology : Concepts and Models / / by Alan Hastings ; edited by Alan Hastings
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ISBN	1-4757-2731-3
Edizione	[1st ed. 1997.]
Descrizione fisica	1 online resource (XVI, 220 p. 8 illus.)
Disciplina	577
Soggetti	Ecology Biotic communities Population biology Animal migration Environmental sciences - Mathematics Conservation biology Community and Population Ecology Theoretical and Statistical Ecology Animal Migration Mathematical Applications in Environmental Science Conservation Biology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"With 77 illustrations."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1 Introduction -- I Single species -- 2 Density-Independent Population Growth -- 3 Population Genetics -- 4 Density-Dependent Population Growth -- 5 Evolution of Life Histories -- II Interacting Species -- 6 Interactions Between Species -- 7 Competition -- 8 Predator—Prey Interactions -- 9 Host—Parasitoid Interactions -- 10 Diseases and Pathogens -- Coda.
Sommario/riassunto	Population biology has been investigated quantitatively for many decades, resulting in a rich body of scientific literature. Ecologists often avoid this literature, put off by its apparently formidable mathematics. This textbook provides an introduction to the biology and ecology of populations by emphasizing the roles of simple mathematical models in explaining the growth and behavior of populations. The author only

assumes acquaintance with elementary calculus, and provides tutorial explanations where needed to develop mathematical concepts. Examples, problems, extensive marginal notes and numerous graphs enhance the book's value to students in classes ranging from population biology and population ecology to mathematical biology and mathematical ecology. The book will also be useful as a supplement to introductory courses in ecology.