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Nota di contenuto	Frontmatter -- Contents -- Figures -- Tables -- Preface -- 1. Elementary Population Dynamics -- 2. Projection Matrices: Structured Models -- 3. Applications of Simple Population Models -- 4. A Closer Look at the "Dynamics" in Population Dynamics -- 5. Patterns and Dynamics in Space -- 6. Predator-Prey (Consumer-Resource) Interactions -- 7. Disease Ecology -- 8. Competition -- 9. Facilitation and Mutualism -- 10. What This Book Was About -- Glossary -- References -- Index
Sommario/riassunto	Ecology is capturing the popular imagination like never before, with issues such as climate change, species extinctions, and habitat destruction becoming ever more prominent. At the same time, the science of ecology has advanced dramatically, growing in mathematical and theoretical sophistication. Here, two leading experts present the fundamental quantitative principles of ecology in an accessible yet rigorous way, introducing students to the most basic of all ecological subjects, the structure and dynamics of populations. John Vandermeer and Deborah Goldberg show that populations are more than simply

collections of individuals. Complex variables such as distribution and territory for expanding groups come into play when mathematical models are applied. Vandermeer and Goldberg build these models from the ground up, from first principles, using a broad range of empirical examples, from animals and viruses to plants and humans. They address a host of exciting topics along the way, including age-structured populations, spatially distributed populations, and metapopulations. This second edition of Population Ecology is fully updated and expanded, with additional exercises in virtually every chapter, making it the most up-to-date and comprehensive textbook of its kind. Provides an accessible mathematical foundation for the latest advances in ecology Features numerous exercises and examples throughout Introduces students to the key literature in the field The essential textbook for advanced undergraduates and graduate students An online illustration package is available to professors

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