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Sommario/riassunto	This book offers a gentle introduction to type-2 fuzzy sets and, in particular, interval type-2 fuzzy sets and their application in biological modeling. Interval type-2 fuzzy modeling is a comparatively recent direction of research in fuzzy modeling. As the modeling of biological problems is inherently uncertain, the use of fuzzy sets in this field is a natural choice. The coverage begins with a succinct review of type-1 fuzzy basic theory, before providing a comprehensive and didactic explanation of type-2 fuzzy set components. In turn, Fuzzy Rule-Based Systems, or FRBS, are shown for both types, interval type-2 and type-1 fuzzy sets. Applications include the pharmacological models, prediction of prostate cancer stages, a model for HIV population transfer (asymptomatic to symptomatic), an epidemiological disease caused by HIV, some models in population growth, included the Malthus Model,

and an epidemic model refers to COVID-19. The book is ideally suited to graduate students in mathematics and related fields, professionals, researchers, or the public interested in interval type-2 fuzzy modeling. Largely self-contained, it can also be used as a supplementary text in specialized graduate courses.