

Contents

1 Population Models Structured by Age, Size, and Spatial Position <i>G.F. Webb</i>	1
2 Infinite ODE Systems Modeling Size-Structured Metapopulations, Macroparasitic Diseases, and Prion Proliferation <i>M. Martcheva and H.R. Thieme</i>	51
3 Simple Models for the Transmission of Microparasites Between Host Populations Living on Noncoincident Spatial Domains <i>W.-E. Fitzgibbon and M. Langlais</i>	115
4 Spatiotemporal Patterns of Disease Spread: Interaction of Physiological Structure, Spatial Movements, Disease Progression and Human Intervention <i>S.A. Gourley, R. Liu, and J. Wu</i>	165
5 Aggregation of Variables and Applications to Population Dynamics <i>P. Auger, R. Bravo de la Parra, J.-C. Poggiale, E. Sánchez, and T. Nguyen-Huu</i>	209
6 The Biofilm Model of Freter: A Review <i>M. Ballyk, D. Jones, and H.L. Smith</i>	265