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	Nota di contenuto	CONTENTS; Acknowledgments; Contributors; Chapter 1 Automatic Systems for Capturing the Normal and AbnormalBehaviors of Honey Bees; Chapter 2 Computational Modeling of Organization in Honey BeeSocieties Based on Adaptive Role Allocation; Chapter 3 Illustrating the Contrasting Roles of Self-Organization inBiological Systems with Two Case Histories of CollectiveDecision Making in the Honey Bee; Chapter 4 Models for the Recruitment and Allocation of Honey Bee Foragers; Chapter 5 Infectious Disease Modeling for Honey Bee Colonies Chapter 6 Honey Bee Ecology from an Urban Landscape Perspective:The Spatial Ecology of Feral Honey BeesChapter 7 QSAR Modeling of Pesticide Toxicity to Bees; Chapter 8 Mathematical Models for the Comprehension of ChemicalContamination into the Hive; Chapter 9 Agent-Based Modeling of the Long-Term Effects ofPyriproxyfen on Honey Bee Population; Chapter 10 Simulation of Solitary (Non-Apis) Bees Competing for Pollen; Chapter 11 Estimating the Potential Range Expansion and EnvironmentalImpact of the Invasive Bee-Hawking Hornet, Vespa velutinanigrithorax
	Sommario/riassunto	Bees are critically important for ecosystem function and biodiversity

maintenance through their pollinating activity. Unfortunately, bee populations are faced with many threats, and evidence of a massive global pollination crisis is steadily growing. As a result, there is a need to understand and, ideally, predict how bees respond to pollution disturbance, to the changes over landscape gradients, and how their responses can vary in different habitats, which are influenced to different degrees by human activities.Modeling approaches are useful to simulate the behavior of whole popula