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behavior; Competitive behavior; Defensive behavior; Mutualistic behavior; Efficiency of resource use; Factors affecting efficiency; Food quality; Size and physiological condition; Learning; Tradeoffs; Summary; Section- II; chapter 5 - Population Systems Population structureDensity; Dispersion; Metapopulation structure; Age structure; Sex ratio; Genetic composition; Social insects; Population processes; Natality; Mortality; Dispersal; Life history characteristics; Parameter estimation; Summary; chapter 6 - Population dynamics; Population fluctuation; Factors affecting population size; Density-independent factors; Density-dependent factors; Regulatory mechanisms; Models of population change; Exponential and geometric models; Logistic model; Complex models; Computerized models; Model evaluation; Summary; chapter 7 - Biogeography Geographic distributionGlobal patterns; Regional patterns; Island biogeography; Landscape and stream continuum patterns; Spatial dynamics of populations; Expanding populations; Metapopulation dynamics; Anthropogenic effects on spatial dynamics; Fragmentation; Disturbances to aquatic ecosystems; Species introductions; Conservation biology; Models of spatial dynamics; Summary; Section - III; chapter 8 - Species Interactions; Classes of interactions; Competition; Predation; Symbiosis; Parasitism; Commensalism; Mutualism; Factors affecting interactions; Abiotic conditions Resource availability and distribution

Sommario/riassunto

Dr. Timothy Schowalter has succeeded in creating a unique, updated treatment of insect ecology. This revised and expanded text looks at how insects adapt to environmental conditions while maintaining the ability to substantially alter their environment. It covers a range of topics- from individual insects that respond to local changes in the environment and affect resource distribution, to entire insect communities that have the capacity to modify ecosystem conditions. Insect Ecology, Second Edition, synthesizes the latest research in the field and has been produced in full color