Record Nr. UNINA9910809386603321 Cognitive ecology of pollination: animal behavior and floral evolution / **Titolo** / edited by Lars Chittka and James D. Thomson Pubbl/distr/stampa Cambridge;; New York, NY,: Cambridge University Press, 2001 **ISBN** 1-107-12054-3 1-280-42137-1 9786610421374 0-511-17469-1 0-511-04097-0 0-511-15469-0 0-511-32524-X 0-511-54226-7 0-511-04615-4 Edizione [1st ed.] Descrizione fisica 1 online resource (xiii, 344 pages) : digital, PDF file(s) ChittkaLars <1963-> Altri autori (Persone) ThomsonJames D. <1950-> Disciplina 571.8/642 Soggetti Pollinators - Ecophysiology Pollination Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Title from publisher's bibliographic system (viewed on 05 Oct 2015). Nota di bibliografia Includes bibliographical references. Nota di contenuto The effect of variation among floral traits on the flower constancy of pollinators / Robert J. Gegear and Terence M. Laverty -- Behavioral and neural mechanisms of learning and memory as determinants of flower constancy / Randolf Menzel -- Subjective evaluation and choice behavior by nectar- and pollen-collecting bees / Keith D. Waddington -- Honeybee vision and floral displays: from detection to close-up recognition / Martin Giurfa and Miriam Lehrer -- Floral scent, olfaction, and scent-driven foraging behavior / Robert A. Raguso -- Adaptation, constraint, and chance in the evolution of flower color and pollinator color vision / Lars Chittka, Johannes Spaethe, Annette Schmidt, Anja Hickelsberger -- Foraging and spatial learning in hummingbirds /

Susan D. Healy and T. Andrew Hurly -- Bats as pollinators: foraging

energetics and floral adaptations / York Winter and Otto von Helversen -- Vision and learning in some neglected pollinators: beetles, flies, moths, and butterflies / Martha R. Weiss -- Pollinator individuality: when does it matter? / James D. Thomson and Lars Chittka -- Effects of predation risk on pollinators and plants / Reuven Dukas -- Pollinator preference, frequency dependence, and floral evolution / Ann Smithson -- Pollinator-mediated assortative mating: causes and consequences / Kristina Niovi Jones -- Behavioural responses of pollinators to variation in floral display size and their influences on the evolution of floral traits / Kazuharu Ohashi and Tetsukazu Yahara -- The effects of floral design and display on pollinator economics and pollen dispersal / Lawrence D. Harder, Neal M. Williams, Crispin Y. Jordan and William A. Nelson -- Pollinator behavior and plant speciation: looking beyond the "ethological isolation" paradigm / Nickolas M. Waser.

Sommario/riassunto

Important breakthroughs have recently been made in our understanding of the cognitive and sensory abilities of pollinators: how pollinators perceive, memorise and react to floral signals and rewards; how they work flowers, move among inflorescences and transport pollen. These new findings have obvious implications for the evolution of floral display and diversity, but most existing publications are scattered across a wide range of journals in very different research traditions. This book brings together for the first time outstanding scholars from many different fields of pollination biology, integrating the work of neuroethologists and evolutionary ecologists to present a multi-disciplinary approach. Aimed at graduates and researchers of behavioural and pollination ecology, plant evolutionary biology and neuroethology, it will also be a useful source of information for anyone interested in a modern view of cognitive and sensory ecology, pollination and floral evolution.