

1. Record Nr.	UNINA9910781560703321
Autore	Willmer Pat <1953->
Titolo	Pollination and floral ecology / / Pat Willmer
Pubbl/distr/stampa	Princeton, New Jersey ; ; Oxfordshire, [England] : , : Princeton University Press, , 2011 ©2011
ISBN	1-283-31040-6 9786613310408 1-4008-3894-0
Edizione	[Core Textbook]
Descrizione fisica	1 online resource (789 p.)
Classificazione	WI 3120
Disciplina	571.8/642
Soggetti	Pollination Pollination by insects Pollination by animals Plant ecology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Frontmatter -- Contents -- Preface -- Acknowledgments -- Part I. Essentials of Flower Design and Function -- Chapter 1. Why Pollination is Interesting -- Chapter 2 Floral Design and Function -- Chapter 3. Pollination, Mating, and Reproduction in Plants -- Part II. Floral Advertisements and Floral Rewards -- Chapter 5. Advertisements 1: Visual Signals and Floral Color -- Chapter 6. Advertisements 2: Olfactory Signals -- Chapter 7. Rewards 1: The Biology of Pollen -- Chapter 8. Rewards 2: The Biology of Nectar -- Chapter 9. Other Floral Rewards -- Chapter 10. Rewards and Costs: The Environmental Economics of Pollination -- Part III. Pollination Syndromes? -- Chapter 11. Types of Flower Visitors: Syndromes, Constancy, and Effectiveness -- Chapter 12. Generalist Flowers and Generalist Visitors -- Chapter 13. Pollination by Flies -- Chapter 14. Pollination by Butterflies and Moths -- Chapter 15. Pollination by Birds -- Chapter 16. Pollination by Bats -- Chapter 17. Pollination by Nonflying Vertebrates and Other Oddities -- Chapter 18. Pollination by Bees -- Chapter 19. Wind and Water: Abiotic Pollination -- Chapter 20. Syndromes and Webs:

Specialists and Generalists -- Part IV. Floral Ecology -- Chapter 21. The Timing and Patterning of Flowering -- Chapter 22. Living with Other Flowers: Competition and Pollination Ecology -- Chapter 23. Cheating by Flowers: Cheating the Visitors and Cheating Other Flowers -- Chapter 24. Flower Visitors as Cheats and the Plants' Responses -- Chapter 25. The Interactions of Pollination and Herbivory -- Chapter 26. Pollination Using Florivores: From Brood Site Mutualism to Active Pollination -- Chapter 27. Pollination in Different Habitats -- Chapter 28. The Pollination of Crops -- Chapter 29. The Global Pollination Crisis -- Appendix -- Glossary -- References -- Subject Index -- Index of Animal Genera -- Index of Plant Genera

Sommario/riassunto

Pollination and Floral Ecology is the most comprehensive single-volume reference to all aspects of pollination biology--and the first fully up-to-date resource of its kind to appear in decades. This beautifully illustrated book describes how flowers use colors, shapes, and scents to advertise themselves; how they offer pollen and nectar as rewards; and how they share complex interactions with beetles, birds, bats, bees, and other creatures. The ecology of these interactions is covered in depth, including the timing and patterning of flowering, competition among flowering plants to attract certain visitors and deter others, and the many ways plants and animals can cheat each other. Pollination and Floral Ecology pays special attention to the prevalence of specialization and generalization in animal-flower interactions, and examines how a lack of distinction between casual visitors and true pollinators can produce misleading conclusions about flower evolution and animal-flower mutualism. This one-of-a-kind reference also gives insights into the vital pollination services that animals provide to crops and native flora, and sets these issues in the context of today's global pollination crisis. Provides the most up-to-date resource on pollination and floral ecology Describes flower advertising features and rewards, foraging and learning by flower-visiting animals, behaviors of generalist and specialist pollinators--and more Examines the ecology and evolution of animal-flower interactions, from the molecular to macroevolutionary scale Features hundreds of color and black-and-white illustrations
