

1. Record Nr.	UNINA9910461569803321
Autore	McCann Kevin S (Kevin Shear), <1964->
Titolo	Food webs [[electronic resource] /] / Kevin S. McCann
Pubbl/distr/stampa	Princeton, NJ, : Princeton University Press, 2012
ISBN	1-283-29071-5 9786613290717 1-4008-4068-6
Edizione	[Course Book]
Descrizione fisica	1 online resource (389 p.)
Collana	Monographs in population biology
Disciplina	577/.16
Soggetti	Food chains (Ecology) Biotic communities Electronic books.
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 index.
Nota di contenuto	Front matter -- Contents -- Preface -- Part 1. The Problem and the Approach -- CHAPTER ONE. The Balance of Nature: What Is It and Why Care? -- CHAPTER TWO. A Primer for Dynamical Systems -- CHAPTER THREE. Of Modules, Motifs, and Whole Webs -- Part 2. Food Web Modules: From Populations to Small Food Webs -- CHAPTER FOUR. Excitable and Nonexcitable Population Dynamics -- CHAPTER FIVE. Consumer-Resource Dynamics: Building Consumptive Food Webs -- CHAPTER SIX. Lagged Consumer-Resource Dynamics -- CHAPTER SEVEN. Food Chains and Omnivory -- CHAPTER EIGHT. More Modules -- Part 3. Toward Whole Systems -- CHAPTER NINE. Coupling Modules in Space: A Landscape Theory -- CHAPTER TEN. Classic Food Web Theory -- CHAPTER ELEVEN. Adding the Ecosystem -- CHAPTER TWELVE. Food Webs as Complex Adaptive Systems -- Bibliography -- Index
Sommario/riassunto	Human impacts are dramatically altering our natural ecosystems but the exact repercussions on ecological sustainability and function remain unclear. As a result, food web theory has experienced a proliferation of research seeking to address these critical areas. Arguing that the various recent and classical food web theories can be looked at collectively and in a highly consistent and testable way, Food

Webs synthesizes and reconciles modern and classical perspectives into a general unified theory. Kevin McCann brings together outcomes from population-, community-, and ecosystem-level approaches under the common currency of energy or material fluxes. He shows that these approaches--often studied in isolation--all have the same general implications in terms of population dynamic stability. Specifically, increased fluxes of energy or material tend to destabilize populations, communities, and whole ecosystems. With this understanding, stabilizing structures at different levels of the ecological hierarchy can be identified and any population-, community-, or ecosystem-level structures that mute energy or material flow also stabilize systems dynamics. McCann uses this powerful general framework to discuss the effects of human impact on the stability and sustainability of ecological systems, and he demonstrates that there is clear empirical evidence that the structures supporting ecological systems have been dangerously eroded. Uniting the latest research on food webs with classical theories, this book will be a standard source in the understanding of natural food web functions.

2. Record Nr.	UNINA9910165178503321
Autore	Bateson P. P. G (Paul Patrick Gordon), <1938-2017, >
Titolo	Behaviour, development and evolution // Patrick Bateson
Pubbl/distr/stampa	Open Book Publishers Cambridge, England : , : Open Book Publishers, , [2017] ©2017
ISBN	2-8218-8393-5
Descrizione fisica	1 online resource (134 pages)
Disciplina	150.1943
Soggetti	Behaviorism (Psychology)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Sommario/riassunto	The role of parents in shaping the characters of their children, the

causes of violence and crime, and the roots of personal unhappiness are central to humanity. Like so many fundamental questions about human existence, these issues all relate to behavioural development. In this lucid and accessible book, eminent biologist Professor Sir Patrick Bateson suggests that the nature/nurture dichotomy we often use to think about questions of development in both humans and animals is misleading. Instead, he argues that we should pay attention to whole systems, rather than to simple causes, when trying to understand the complexity of development. In his wide-ranging approach Bateson discusses why so much behaviour appears to be well-designed. He explores issues such as 'imprinting' and its importance to the attachment of offspring to their parents; the mutual benefits that characterise communication between parent and offspring; the importance of play in learning how to choose and control the optimal conditions in which to thrive; and the vital function of adaptability in the interplay between development and evolution. Bateson disputes the idea that a simple link can be found between genetics and behaviour. What an individual human or animal does in its life depends on the reciprocal nature of its relationships with the world about it. This knowledge also points to ways in which an animal's own behaviour can provide the variation that influences the subsequent course of evolution. This has relevance not only for our scientific approaches to the systems of development and evolution, but also on how humans change institutional rules that have become dysfunctional, or design public health measures when mismatches occur between themselves and their environments. It affects how we think about ourselves and our own capacity for change.
