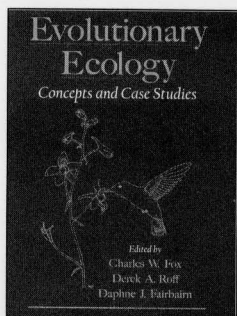


Publications



Evolutionary Ecology: Concepts and Case Studies

Edited by C.W. Fox, D.A. Roff and D.J. Fairbairn (2001).

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Evolutionary biology emphasises historical and lineage-dependent processes to establish phylogenetic reconstructions, while ecology is largely concerned with the contemporary impacts of environmental factors. Evolutionary ecology, according to the editors of this collection of essays, combines the two approaches to examine variation in organisms in relation to both the past and the present. Edited collections often disappoint but this one does not. One factor in its success is the broad, conceptual theme given to each contribution, covering such topics as variation, natural selection, adaptation, phenotypic plasticity, population structure, inbreeding and outbreeding. These general reviews occupy the first part of the book, followed by sections on life histories (including essays on life cycles, senescence, sex ratios, offspring size and number) and behaviour (mating systems, sexual selection, altruism, foraging). Interspecific interactions are then considered (predator-prey interactions, host-parasite, mutualism, plant-herbivore, co-evolution), followed by some thoughts on the human angle (pesticide resistance, biological control, conservation biology). Each essay sets out the theoretical basis for the topic covered and then illustrates it with experimental and field examples. The very strong North American emphasis in authors and examples could perhaps be regarded as the book's one weakness. The level at which the essays are constructed would be suitable for advanced undergraduate studies and ideal for postgraduate students wishing to assimilate an authoritative account of the subject and be introduced to the current literature. All teachers in such courses should certainly have this book on their shelves.