Record Nr. UNINA9910818207303321 Evolutionary conservation biology / / edited by Regis Ferriere, Ulf **Titolo** Dieckmann, and Denis Couvet Pubbl/distr/stampa Cambridge, UK;; New York,: Cambridge University Press, c2004 **ISBN** 1-107-14714-X 1-280-54072-9 9786610540723 0-511-21423-5 0-511-21602-5 0-511-21065-5 0-511-32719-6 0-511-54202-X 0-511-21242-9 Edizione [1st ed.] Descrizione fisica 1 online resource (xvi, 428 pages) : digital, PDF file(s) Cambridge studies in adaptive dynamics;; 4 Collana Altri autori (Persone) FerriereRegis <1968-> DieckmannUlf <1966-> CouvetDenis <1960-> Disciplina 333.95/16 Soggetti Conservation biology Adaptation (Biology) **Evolutionary genetics** Nature - Effect of human beings on 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 and index. Nota di contenuto From individual interactions to population viability / Wilfried Gabriel and Regis Ferriere -- Age structure, mating system, and population viability / Stephane Legendre -- Spatial dimensions of population viability / Mats Gyllenberg, Ilkka Hanski and Johan A.J. Metz --Responses to environmental change: adaptation or extinction / Richard Frankham and Joel Kingsolver -- Empirical evidence for rapid evolution / David Reznick, Helen Rodd and Leonard Nunney -- Genetic variability and life-history evolution / Kimberly A. Hughes and Ryan Sawby --Environmental stress and quantitative genetic variation / Alexandra G.

Imasheva and Volker Loeschcke -- Fixation of new mutations in small populations / Michael C. Whitlock and Reinhard Burger -- Quantitativegenetic models and changing environments / Reinhard Burger and Christoph Krall -- Adaptive dynamics and evolving biodiversity / Ulf Dieckmann and Regis Ferriere -- Genetic structure in heterogeneous environments / Oscar E. Gaggiotti and Denis Couvet -- Conservation implications of niche conservatism and evolution in heterogeneous environments / Robert D. Holt and Richard Gomulkiewicz -- Adaptive responses to landscape disturbances: theory / Kalle Parvinen --Adaptive responses to landscape disturbances: empirical evidence / Bruno Colas, Chris D. Thomas and Ilkka Hanski -- Coevolutionary dynamics and the conservation of mutualisms / Judith L. Bronstein, Ulf Dieckmann and Regis Ferriere -- Ecosystem evolution and conservation / Michel Loreau, Claire de Mazancourt and Robert D. Holt -- The congener as an agent of extermination and rescue of rare species / Donald A. Levin.

Sommario/riassunto

As anthropogenic environmental changes spread and intensify across the planet, conservation biologists have to analyze dynamics at large spatial and temporal scales. Ecological and evolutionary processes are then closely intertwined. In particular, evolutionary responses to anthropogenic environmental change can be so fast and pronounced that conservation biology can no longer afford to ignore them. To tackle this challenge, areas of conservation biology that are disparate ought to be integrated into a unified framework. Bringing together conservation genetics, demography, and ecology, this book introduces evolutionary conservation biology as an integrative approach to managing species in conjunction with ecological interactions and evolutionary processes. Which characteristics of species and which features of environmental change foster or hinder evolutionary responses in ecological systems? How do such responses affect population viability, community dynamics, and ecosystem functioning? Under which conditions will evolutionary responses ameliorate, rather than worsen, the impact of environmental change?