

1. Record Nr.	UNINA9910809350203321
Titolo	Lobsters : biology, management, aquaculture and fisheries / / edited by Bruce F. Phillips
Pubbl/distr/stampa	Chichester, : Wiley-Blackwell, 2013
ISBN	1-118-51744-X 0-470-67113-0 1-299-31380-9 1-118-51752-0
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (506 p.)
Altri autori (Persone)	PhillipsBruce F
Disciplina	595.3/84
Soggetti	Lobsters
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	Cover; Title page; Copyright page; Contents; Preface; Contributors; Chapter 1: Lobsters as Part of Marine Ecosystems - A Review; 1.1 Introduction; 1.2 Species overviews; 1.2.1 Western rock (spiny) lobster <i>Panulirus cygnus</i> ; 1.2.2 The American lobster <i>Homarus americanus</i> ; 1.3 How far have we come in thinking about lobsters as part of the ecosystem?; 1.3.1 <i>Panulirus cygnus</i> ; 1.3.2 <i>Homarus americanus</i> ; 1.4 Human role in ecosystem dynamics; 1.4.1 Institutional structures; 1.4.2 Direct effects of management; 1.4.3 Indirect effects - top-down forcing by predator removal 1.4.4 Indirect effects - bottom-up forcing by bait subsidies 1.4.5 Climate change impacts; 1.5 Single species to ecosystem management - how far have we come?; 1.5.1 <i>Panulirus cygnus</i> ; 1.5.2 <i>Homarus americanus</i> ; 1.6 Implications for management and research; 1.6.1 Top-down, bottom-up ecology; 1.6.2 Inclusive governance systems; 1.6.3 Stock rebuilding strategies; 1.6.4 Environmental drivers of settlement patterns; 1.6.5 Historical ecosystem structure; 1.7 Conclusions; References; Chapter 2: Genetics of Wild and Captive Lobster Populations; 2.1 Introduction; 2.2 Population structure 2.2.1 Chaotic genetic patchiness 2.2.2 Post-glaciation demographic expansions; 2.3 Species identification; 2.4 Applications of species identification and DNA barcoding to lobster research and management;

2.4.1 DNA surveillance of product substitution and cross-contamination; 2.4.2 Identification of wild lobsters; 2.4.3 Charactering lobster diets; 2.4.4 DNA-based methods typically employed for species identification; 2.4.5 Polymerase chain reaction-restriction fragment length polymorphism; 2.4.6 Melt-curve analysis; 2.4.7 Species-specific polymerase chain reaction  
2.5 Variation in reproductive success  
2.6 Genetic effects of harvesting;  
2.6.1 Fishing-induced evolution; 2.6.2 Impacting genetic diversity; 2.7 Considerations for aquaculture and stock enhancement; 2.7.1 Aquaculture; 2.7.2 Stock enhancement; 2.8 Conclusions and future directions; References; Chapter 3: Enhancement of Lobster Fisheries to Improve Yield and Value; 3.1 Introduction; 3.1.1 What is enhancement?; 3.1.2 The motivation for enhancement; 3.2 Monitoring the outcomes of enhancement operations; 3.2.1 Growth and reproduction; 3.2.2 Survival/changes to natural mortality  
3.2.3 Displacement and integration of released lobsters  
3.2.4 Habitat and predator change; 3.3 Economic and policy issues; 3.3.1 Economic feasibility; 3.3.2 Optimal management of harvests with enhancement; 3.3.3 Ownership, policy and risk; 3.4 Case studies; 3.4.1 Clawed lobster restocking; 3.4.2 Range extension of American lobster to Europe; 3.4.3 Improving yield in Southern rock lobster: translocating low quality adults; 3.5 Conclusions; References; Chapter 4: The Impact of Climate Change on Exploited Lobster Stocks; 4.1 Introduction; 4.2 Case studies  
4.2.1 Western rock lobster (*Panulirus cygnus*)

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#### Sommario/riassunto

This expanded and fully updated Second Edition of the most comprehensive and successful book on lobsters, comprises contributions from many of the world's experts, each providing core information for all those working in lobster biology, fisheries research and management and lobster aquaculture. Under the editorship of Bruce Phillips, the Second Edition of *Lobsters: Biology, Management, Fisheries and Aquaculture* delivers exhaustive coverage of these fascinating creatures, stretching from growth and development to management and conservation. A number of chapters from the First

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