1. Record Nr. UNINA9910831047703321

Titolo	Fish biology [[electronic resource] /] / edited by Paul J.B. Hart and John D. Reynolds
Pubbl/distr/stampa	Malden, MA, : Blackwell Pub., 2002
ISBN	9786610291915 0-470-69380-0
Descrizione fisica	1 online resource (430 p.)
Collana	Handbook of fish biology and fisheries ; ; 1
Altri autori (Persone)	HartPaul J. B ReynoldsJohn Douglas <1959->
Disciplina	597 639.22
Soggetti	Fishes Fishing
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	Handbook of Fish Biology and Fisheries; Contents; List of Contributors; Preface; List of Abbreviations; 1 BANISHING IGNORANCE:UNDERPINNING FISHERIES WITH BASIC BIOLOGY; 1.1 Introduction; 1.2 Global .sheries; 1.3 The quest for knowledge; 1.4 Part 1:Biodiversity; 1.5 Part 2: Production and population structure; 1.6 Part 3:Fish as predators and prey; 1.7 Part 4:Fish in ecosystems; 1.8 Ignorance banished?; 1.9 Conclusions; Part 1:Biodiversity; 2 PHYLOGENY AND SYSTEMATICS OF FISHES; 2.1 Introduction; 2.2 Phylogenetic methods and classi .cation; 2.3 Fish diversity and phylogeny; 2.4 Conclusions 3 HISTORICAL BIOGEOGRAPHY OF FISHES3.1 Introduction; 3.2 Concepts and methods; 3.3 Distribution,faunal composition and historical biogeography by region; 3.4 Conclusions; Part 2:Production and Population Structure; 4 THE PHYSIOLOGY OF LIVING IN WATER; 4.1 Introduction; 4.2 Buoyancy,or coping with pressure; 4.3 Swimming; 4.4 Osmoregulatory problems in fresh and salt water; 4.5 Respiration and special adaptations for living in low oxygen.; 4.6 Digestion and absorption; 4.7 Bioluminescence; 4.8 Conclusions; 5 ENVIRONMENTAL FACTORS AND RATES OF DEVELOPMENT AND GROWTH; 5.1 Introduction

5.2 Terminology of life-history stages5.3 Development and growth during early life history; 5.4 Growth models and equations; 5.5 Age determination,back-calculation and validation techniques; 5.6 Length - weight relationships and indices of condition and growth; 5.7 Energy budget and bioenergetics:energy partitioning and storage; 5.8 Growth at different latitudes:models of growth compensation; 5.9 Estimating food consumption; 5.10 Conclusions; 6 RECRUITMENT: UNDERSTANDING DENSITY-DEPENDENCE IN FISH POPULATIONS; 6.1 Introduction; 6.2 The link between spawner abundance and subsequent recruitment
6.3 Generalities through meta-analysis6.4 Carrying capacity; 6.5 Variability in recruitment; 6.6 At what life-history stage does density-dependent mortality occur?; 6.7 Estimating density-dependent mortality from long-term surveys; 6.8 Pelagic egg,larval and juvenile stages; 6.9 Future research; 6.10 Conclusions; 7 LIFE HISTORIES OF FISH; 7.1 Introduction; 7.2 In .uence of survival and growth rate on age, size and reproductive effort at maturity; 7.3 Offspring size and number strategies; 7.4 Alternative life-history strategies; 7.5 Effects of .shing on life history; 7.6 Conclusions
8 MIGRATION8.1 Introduction; 8.2 Exploitation and ecology; 8.3 Fish migrations; 8.4 Migratory mechanisms; 8.5 Techniques; 8.6 Distribution and genetics; 8.7 Fishery applications; 8.8 Conclusions; 9 GENETICS OF FISH POPULATIONS; 9.1 Introduction; 9.2 Genetic tools; 9.3 Statistical tools; 9.4 Specimen and species identi .cation; 9.5 Fish population genetics; 9.6 Genetics of sex determination in .sh; 9.7 Conclusions; 10 BEHAVIOURAL ECOLOGY OF REPRODUCTION IN FISH; 10.1 General introduction; 10.2 Introduction to breeding systems; 10.3 Parental care; 10.4 Sexual selection; 10.5 Mating patterns
10.6 Reproductive behaviour and life histories

Sommario/riassunto

Recent decades have witnessed strong declines in fish stocks around the globe, amid growing concerns about the impact of fisheries on marine and freshwater biodiversity. Fisheries biologists and managers are therefore increasingly asking about aspects of ecology, behaviour, evolution and biodiversity that were traditionally studied by people working in very separate fields. This has highlighted the need to work more closely together, in order to help ensure future success both in management and conservation. The Handbook of Fish Biology and Fisheries has been written by an