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Abstract

The textbook is divided in two sections, fisheries (five chapters) and fisheries biology (five chapters). The first section (Fisheries) includes an introductory chapter to fisheries science and its components (includes the major achievements in fisheries science and important scientists but also major institutions that contribute to fisheries science), a chapter on fishing gear and selectivity for the main fishing gears used in the Mediterranean Sea, a chapter on marine production processes and fisheries resources including marine captured production databases for Greece, Mediterranean and the world, a chapter on types of fisheries, fishing effort and overfishing and ends with the direct and indirect effects of fishing on marine organisms and the structure and functioning of marine ecosystems (including basic concepts such as the fishing down the marine food

webs). The second section (Fisheries Biology) deals with age (methods of ageing fish using skeletal structures and length frequencies), growth (methods of determining growth parameters, weight-length relationship, condition factor and growth equations), mortality (total, natural and fishing mortality, methods of estimation and empirical equations), reproduction (sex ratio, onset and duration of spawning, size and age at maturity and fecundity) and feeding (trophic levels, mean weighted trophic level of the catch and trophodynamic indicators). Each chapter contains links to databases and species summary pages in FishBase and SeaLifeBase and ends with questions and exercises for the students. The book ends with a reference list of the vast majority of key publications, including all the classic papers, which shaped fisheries science in the last 100 years.

