it ranges from Nathan Keyfitz's mathematical demography to M. Faustmann's treatment in German of the rotation age problem in forest management. The book is designed to introduce the student to all the relevant literature areas: each chapter ends with an extremely informative one-page essay introducing the important works expanding on the chapter and explaining the contents and historical significance of each item. The outlook is very modern, the reference list covering the literature to 1988.

The book is a penetrating analysis of the following problem, with all imaginable ramifications and extensions: There has been a traditional body of theory for managing renewable natural resources, developed primarily over the last 40 years. The results from application of this theory have often been drastic and unexpected. Why? The author's explanation, correct in my view, is that the decisions made by all the key political actors, from managers of fishing fleets to government bureaucrats, are in fact based on a wide variety of considerations, including not only the biological parameters of the exploited stock, but such factors as prices, costs, interest and inflation rates, and the logistics of the harvesting activity — to give only a small subset of the kinds of factors considered. The subject dealt with here is management of marine fish and mammals, although eight pages discuss forestry. The theory developed should be applicable to management of all renewable natural resources, including wildlife.

A major problem in reviewing this book is determining the intended audience. Much of the book could be understood by an undergraduate majoring in some type of resource economics or biology program. Indeed, the ideas in the book will have to be made accessible to a large audience if we are to manage resources rationally. Unfortunately, the mathematics presupposes a familiarity with at least one course in advanced calculus. This implies a two-tiered audience for the contents. Courses based on the entire book would be suitable for graduate students in biology or economics who had one prior course in both economics and ecology, and two years (six quarters or four semesters) of calculus. The bulk of the potential audience, undergraduates, could learn from the book if instructors made up a set of notes explaining the significance of the difficult parts, in language that pointed out the relation between the theory and the policy implications. Indeed, a professor could probably pull most undergraduates through a two-term sequence based on the book, by adding the necessary prerequisite mathematical, economic and ecological material as necessary. The immense gain in understanding would justify the effort on the part of professor and students.

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