LIFE IN THE SLOW LANE. John A. Musick, ed. 1999. American Fisheries Society, Bethesda, Maryland. ISBN 1-888569-15-8. xiv + 265 p., 76 figs., 52 tables. $47.00 (paperback).—Biology is a complex subject. This fact, coupled with our human penchant for dichotomy, typically results in a parochial emphasis of our research interests and personal ken. Therefore, biologists often limit themselves to the study of plants or animals, prokaryotes or eukaryotes, invertebrates or vertebrates, cells or organisms, cold- or warm-blooded vertebrates, cartilaginous or bony fishes, marine or terrestrial phenomena, ecological or physiological processes, etc. Nevertheless, moving outside one’s preferred taxon or discipline invariably results in unique insights that may be gained only via such collaborations. Although these synergies are uncommon, we all are fortunate that some individuals have the ability to foster their production.

Musick, who describes himself as being gifted with intellectual schizophrenia, is sufficiently polymathic to promote multidisciplinary considerations of common biological questions. His most recent contribution is this volume, the proceedings of “The Symposium on the Ecology and Conservation of Long-Lived Marine Animals” that he organized and chaired for the 1997 annual meeting of the American Fisheries Society in Monterey, California.

This volume is unique in that it presents the thoughts and data of workers who study elasmobranchs, chondrosteans, teleosts, sea turtles, sea birds, pinnipeds, or cetaceans. Published reviews of the demographic characteristics and vulnerabilities of each of these groups are not uncommon, but this volume is a welcome contribution in that it is the simultaneous discussion of a wide range of marine taxa that all share long lifespans, slow growth, late maturity, and either low fecundity or sporadic recruitment.

Musick was careful to assemble a well-balanced cadre of biologists who, for the most part, were careful to avoid overly narrow presentations; thus, most chapters of this book contain discussions that are taxonomically, geographically, or temporally diverse and mirror the scope and objective of the volume as a whole. This book, volume 23 of the AFS Symposium series, is comprised of 19 chapters written by 45 authors. Of the 19 chapters, 11 include a discussion of two or more species, nine present methods or theoretical approaches that could be applied to any taxon, three discuss an impressive range of taxa, and three are based on 50–100 years of collected data. In fact, of the eight chapters that present data for a single species only, four provide the only discussion of an important taxon (e.g., chondrosteans, pinnipeds, odontocetes, or mysticetes), and two use data from a single species to present methods that could be applied to any taxon; hence, nearly all chapters compliment the multidisciplinary scope of the volume itself.

Chapter 1 (authored by Musick) provides the reader with a useful introduction to the problem of exploitation of long-lived animals. He succinctly summarizes the life-history parameters that unite these seemingly disparate taxa, result in their populations being particularly vulnerable to exploitation, and cause the recovery of their decimated populations to take decades. Next, he introduces the neophyte to two indices [the von Bertalanffy growth coefficient (k) and the intrinsic rate of increase (r)] that are useful in assessing the vulnerability of stocks to excessive exploitation. Finally, he makes a comprehensive plea to managers of long-lived marine animals to become more sensitive to the inherent vulnerability of these creatures.

The remaining 18 chapters of the book do not appear to be arranged in any obvious order. Chapters 3, 4, 7, 14, and 16 are relatively provincial discussions of the plight of single species. Nevertheless, these five chapters taken as a unit compare and contrast the strategies of teleosts, chondrosteans, mysticetes, and pinnipeds. Chapters 6, 9, 10, 11, and 19 may seem to be of limited appeal because they contain data derived from one population of a single species yet should be of more general interest to the reader. This is because the thrust of these five chapters is to present a methodology that is useful for addressing the vulnerability of any long-lived animal. A more synoptic approach is taken in chapters 2, 5, 12, 13, 17, 18, and 19. These chapters, in most cases, review the life histories of a wide range of species within one group, review the global status of an entire taxon, or take one approach to compare several disparate taxa. For example, Russell compares the life-history tactics of 63 species of seabirds (in 10 families) in chapter 5; Hest reviews all studies on