

respective areas of inquiry, offering readers the unique insights that derive from having engaged in the work directly.

The inherent three-dimensionality of the marine environment, and the resultant dispersive capabilities of the organisms that live there, dictates that adequate conservation measures consider the innumerable connections among taxa and between taxa and ecosystems, both regionally and in some cases worldwide. A second strength of *Marine Conservation Biology* is the breadth of subject areas addressed, including multiple taxa, from multiple ecosystems, for locations around the world. No book can ever do justice to every threatened taxon or ecosystem, but a reader will find substantive coverage of many of the major threats to marine biological diversity here. Further, in so far as the management of the natural world is ultimately the management of human activities, the book concludes with a section on the human dimensions of marine conservation, including chapters on the legal aspects of conservation, the cultural issues at stake with fisheries management, and the development of a sea ethic.

Editing a diverse array of contributors is a major undertaking, particularly when the goal is a book seeking to present a unified theme. In this context, Norse and Crowder have done a remarkable job. However, as I finished the book, I was struck by what seemed to be a missed opportunity. The audience for this book will be diverse and by no means limited to academia. Yet, as the science of marine conservation biology develops and matures, the opportunities to teach courses on the subject will only increase. In this regard, the editors had a chance to make *Marine Conservation Biology* the necessary textbook for the instruction of future practitioners. Students should be presented with content, and *Marine Conservation Biology* is content rich. But enabling students to form connections and develop their own conclusions based on that content is perhaps the highest goal of education. Here the book missed an opportunity. Rather than enable students, many chapters openly and often vehemently advocate for a particular position. While the issue of advocacy should clearly be addressed in any text on conservation biology, the utility of advocacy as a pedagogical tool is limited. Outside of academia, this is a shortcoming only in so far as it may ultimately limit the audience for the book, by confirming the worst fears of some and turning off others. With a little work though, these concerns could very easily be addressed in a subsequent edition of the book.

In the end, *Marine Conservation Biology* is a book that should be read by anyone interested in the conduct of marine science and the challenges of managing marine systems.

James Lindholm

Division of Science and Environmental Policy California State University Monterey Bay 100 Campus Center, Building 53 Seaside, CA 93955

E-mail address: [james\\_lindholm@csumb.edu](mailto:james_lindholm@csumb.edu).

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**Adaptive Governance and Water Conflict: New Institutions for Collaborative Planning Resources for the Future, 2005, 274 pp., ISBN: 1-933115-19-X (pbk)**

Scholz and Stiffler piqued my interest early by writing that the case studies in their book feature failures as well as successes. The book delivers on this promise, providing an honest and often unsettling picture of efforts in adaptive governance. This is a readable, well-referenced and well-indexed volume that offers much to teachers, advocates, and policy-makers. The editors offer up a standard passage suggesting that although the focus is Florida, much of the material is more broadly applicable. Several pages later, however, they more accurately state that “adaptive water governance above all else requires attention to the specifics of any conflict.” A key value to this book is the depth it provides by limiting its focus to a single state.

In the introduction Scholz and Stiffler define adaptive governance and outline five challenges to achieving it: representation; decision process; scientific learning; public learning; and problem responsiveness. The first chapter provides an overview of jurisdictions, institutions, and governing bodies involved in Florida water management. This proved to be valuable in reviewing the eight case studies that followed. These cases offer a rich mix of issues, including water quality and quantity; human and ecosystem use; and relatively recent conflicts as well as issues dating back decades. They also feature diverse stakeholders and approaches toward resolving conflict. Several of the case studies explicitly note that they are trying to avoid mistakes from previous conflicts, reflecting learning, as well as the power of having a regionally focused set of cases.

What makes this book most useful, however, are the second and third sections, which offer “perspective” pieces from practitioners and researchers. The authors reflect on the case studies and present diverse views about adaptive governance, including exploring the power of the status quo, learning from mediators, and grassroots efforts. While there is not a chapter dedicated to it (I wish there were) the role of the media is a thread throughout the book and media coverage is featured in several of the case studies. What the book does cover well is the role of science in water management conflicts. Most specifically, Connie Ozawa’s, *Putting Science in Its Place*, offers key lessons on the difficulties in applying scientific principles and knowledge to political decisions. She notes that, “the lesson from these cases is not that science is unimportant, but that the issues that motivate stakeholders are in their essence not scientific but political.”

These perspective chapters offer a diversity of opinion that make this a good classroom text as well as relevant to anyone involved in water management. For example, some of the authors believe that collaboration and consensus-based decision-making are necessary to adaptive governance and others question whether collaborative approaches lead to improved water policy. There does seem to be common ground however around the idea that much current policy is crisis driven and that inertia is typically the order of the day.

Lawrence Susskind’s chapter, *Resource Planning, Dispute Resolution, and Adaptive Governance*, perhaps offers the best summary of the status quo. He identifies the following key features of water resource management drawn from the case studies:

- we assign authority to government to protect our interests in water;
- we place a high priority on maintaining historical patterns of water use;
- politics invariably outrank science in management decisions;
- most water disputes arise at the local level, not at the policymaking level;
- and we believe that we can meet all future water needs if we just manage our resources carefully and employ technological innovation.

These features, he concludes, indicate that, “the system appears to be doomed in the long run because the emphasis is not on learning how to do better or how to become more sustainable.” The rest of his chapter, and indeed, the majority of the book, offer ideas and varying degrees of optimism for changing this system.

In their conclusion, Stiftel and Scholz return to the five challenges facing adaptive governance and summarize key elements from the case studies and the perspective chapters. Despite noting that several authors are critical of collaboration, the editors conclude that the three key themes to improving adaptive governance are, “stronger collaboration in consensual processes, more realistic use of scientific information, and greater incorporation of market incentives.” They acknowledge that there is no panacea and that, “Nobody expects these processes to fully resolve conflicts” but that “these processes create spaces where adversaries can explore together and develop agreements that leave them better off.”

Kristan Cockerill  
Sustainable Development Program,  
Appalachian State University, United States  
E-mail address: [cockerillkm@appstate.edu](mailto:cockerillkm@appstate.edu).

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**Coexisting with Large Carnivores: Lessons from Greater Yellowstone**, Tim W. Clark, Murray B. Rutherford, Denise Casey (Eds.), Island Press(2005). ISBN: 1-59726-005-3 (paper), 1-59726-004-5 (cloth). 290 pp.

*Coexisting With Large Carnivores: Lessons from Greater Yellowstone*, edited by Tim W. Clark, Murray B. Rutherford, and Denise Casey (Island Press, 2005), is a valuable resource for managers, activists, and members of the public interested in large carnivore conservation.

Northwestern Wyoming, the southern portion of the Greater Yellowstone Ecosystem (GYE), provides a living laboratory within which this volume examines the causes of conflict between humans and mountain lions (*Puma concolor*), grizzly bears (*Ursus arctos horribilis*), and gray wolves (*Canis lupus*), and provides a roadmap for management leading towards coexistence.

In Part One, which provides context and background, the authors advance the view that “wildlife management” is actually a process of managing human behaviors that lead either to coexistence with, or elimination of, species like large carnivores. To this end, they argue, effective “wildlife management” must: account for the spectrum of human beliefs and values, define the problems in ways that lead to effective solutions, and set realistic goals. Chapter 2 further sets the stage with background on the landscape, people and perspectives, management institutions, and the problems and conflicts that arise between people and large carnivores in northwestern Wyoming. Of particular interest to the authors is the clash in values between the “Old West” and the “New West,” both of which are well represented in western Wyoming.

Part Two consists of case studies of management of the three large carnivores in the GYE: mountain lions, grizzly bears and gray wolves. Chapter 3 examines management of mountain lions, which falls solely within the jurisdiction of the Wyoming Game and Fish Department, as this species has never been under federal management. Conflicts over the management of mountain lions in Wyoming center on hunting quotas; specifically, a doubling of the mountain lion hunt quota in 1999 and a further increase in 2003. A subsequent public outcry, played out in public meetings and in the media, questioned the sustainability of these hunts given WGFD’s lack of data about mountain lion populations, trends, and predator–prey relations, as well as opposition to the hunting of females. The authors make the case that the conflict ultimately stems from WGFD’s choice to ally with “localist” rather than “New West” values, its failure to genuinely involve the public in management decisions, and its failure to adopt a mountain lion management plan with clear management goals and plans to achieve those goals.

Chapter 4 covers grizzlies, whose population growth in the past ten years has been accompanied by a disproportionate increase in conflicts in the southern GYE. Grizzly populations declined precipitously in Yellowstone in the early 1970s, following the closure of the Yellowstone garbage dumps, when the region’s bears suddenly had to do without an important anthropogenic food source. Populations began to increase following designation of grizzlies as threatened under the Endangered Species Act, and by the early 1990s, conflicts, particularly with ranchers, began to rise dramatically, and grizzlies eventually “became an important symbol in the broader fight over public land management.” The controversy, the authors argue, requires more than technical solutions to individual conflicts, because it is actually rooted in competing values and visions for the American West. The authors recommend a way forward that includes genuine dialogue with local and national interests represented, to evaluate problems and design and implement solutions.

Chapter 5 turns to wolves, particularly to Wyoming’s proposal to manage wolves as predators, allowing unregulated killing outside of national parks. The hardline stance of Wyoming’s proposal prompted rejection by the U.S. Fish and Wildlife Service and put delisting on hold. The authors recommend that biologists and managers work on the ground with local landowners to reduce conflicts and increase