Though pricey and sometimes weighted down by science jargon, 'The Gulf of California' enlightens

# Water World

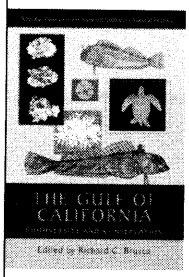
BY BRIAN PARK, mailbag@tucsonweekly.com

For many Southern Arizonans, the Gulf of California is primarily a Mexican beachfront destination, a place to cool off, cast a lure and unwind. The gulf has always been a place where gringos go to take it easy or party until their faces fall off.

But the Gulf of California is so much more than a U.S. tourist destination. About 8 million people live in this vast semi-enclosed sea and coastal region. Biologically, the gulf "is one of the most productive and diverse seas in the world," according to one of the chapters in a new book jointly published by the University of Arizona Press and the Arizona-Sonora Desert Museum.

The gulf's résumé is impressive: 857 species found nowhere else in the world; a mix of breathtaking environments, from the extensive tides of Puerto Peñasco (Rocky Point), Sonora, to more than 100 sizeable islands scattered throughout the sea, all supporting life; and about half of Mexico's total fish production, according to Richard C. Brusca, the editor of this noteworthy collection.

But there are numerous problems and challenges in this region that could decimate vital marine habitats and wipe out economically and ecologically valuable species—which include not only fish, but invertebrates, too, including shrimp, octopus and snails. Overfishing, poorly planned development, pollution of coastal wetlands and the hacking down of mangrove forests (mostly for shrimp farms) all are leaving their nasty marks on the region's ecosystem.




"Poor regulation of fishing activities has led to a condition where 85 percent of the gulf's fisheries are either at their maximum sustainable yield or overexploited," writes Miguel A. Cisneros-Mata in one of the book's most informative and engaging chapters, "The Importance of Fisheries in the Gulf of California and Ecosystem-Based Sustainable Co-Management for Conservation."

Don't be discouraged by this mouthful of a title. His subject includes a ton of data, but Cisneros-Mata knows how to make it relevant and easily comprehensible. Anyone interested in the fisheries of the gulf and their outlook for the future—as well as anybody who is simply curious about background information on shrimp and jumbo squid—should read this chapter. He also provides possible solutions to these imperiled fisheries and their related economic consequences, adding a nice touch of optimism.

This compilation can be a tough read in some spots. Particular chapters are steered in a more scientific direction, with jargon, citations and numbers cluttering the pages. This is not always a hindrance, but some people will probably be turned off. The book's scientific foundation also keeps the text from becoming overtly passionate, which can be arduous when discussing possible creatures that might go extinct in our lifetime (like the endemic vaquita porpoise and totoaba fish).

**The Gulf of California: Biodiversity and Conservation**

Edited by Richard C. Brusca

University of Arizona/Arizona-Sonora Desert Museum

400 pages; $75

The oceanography of the gulf, sea turtles, invertebrates, fishes, ospreys, marine mammals and the conservation movement are just some of the subjects covered. One highlight is a section on the region's cultural evolution as related to sea turtles, and how these creatures' relationships to people and fishers has progressed since first being documented in the gulf nearly 500 years ago. Jeffrey A. Seminoff helms this chapter, and while it's one of the book's longest, the author's enthusiasm and insight keep it crisp yet educational.

Another chapter worth pointing out focuses on marine mammals. Detailed species descriptions and population estimates are included for whales, dolphins, porpoises, seals and the lone endemic bat. This is an exemplary primer for anyone curious about these mammals, and the laws and conservation initiatives in place to protect them.

At $75, *The Gulf of California: Biodiversity and Conservation* is pricey—so unless you are a gulf aficionado, that price tag might be out of your range. I would recommend checking out this book at your library or bookstore first, or conducting your own research online to see if you really want to add it to your shelf. At 250 pages, though—not counting the bibliography, contributor notes and index—an astounding amount of information and data is included. Overall, this is an enlightening and remarkably researched book. Tw

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