

## AN UNNATURAL HISTORY OF THE SEA

Reviewed by Bill Keep

Callum Roberts' *An Unnatural History of the Sea* (435pp., Island Press, 2007), about the greed-driven overfishing of the world's oceans from earliest times to the present, pricked some long held illusions.

I had believed that the decimation of the ocean's most spectacular creatures – whales, large predators like sharks, bluefin tuna and swordfish, gorgeous coral reefs, to name a few – was relatively recent. That the world's fishery managers were probably doing their best. That fishers (and nations) would act in their own best interests. All pipe dreams.

As early as the Middle Ages Europeans were fishing out and stagnating rivers with dams, pollution and silt, and once they'd eliminated their rich fresh water fisheries, turning to the sea. There exploitation moved from estuaries and seashores to continental shelves and seamounts, as we fished each in turn to scarcity. Roberts quotes many early explorers' and travelers' accounts of unbelievable abundance. As late as the 19<sup>th</sup> century the oceans were widely believed to be inexhaustible. The fact is that by then a small fraction of their original abundance remained. More and more fishers, with more and more deadly gear, were progressively sweeping the oceans clean.

This tragedy of the commons, where only self-restraint can curb over-exploitation of a globally-shared bounty, has continued apace to the present. It now extends to the ocean's deepest reserves, half a mile down, and to the

scouring of third world countries' waters by rich nations through "access agreements."

Today vast areas of the world's oceans have been converted by huge bottom scraping trawlers into deserts. GPS and sonar lead fishers to remaining stocks' spawning grounds, where they're concentrated and thus easy game. Cod and tuna give place to pollock and sea urchins. As desirable species grow scarce (bluefin tuna, for instance) their market value rises astronomically, keeping the hunt keen.

Uncounted miles of snagged nets continue over decades to snare uncounted millions of sea creatures – fish, turtles, birds – ghost fishing, it's called. Uncounted tons of "low grade" bycatch is turned into animal food, and more uncounted tons are dumped into the sea as useless – in some cases as much as half what's kept. You have to read Roberts' detailed accounts to feel the profound sadness of it all.

Who's in control? All too often, politicians wishing to stay in office and fishers eager to earn their daily bread, rather than scientists managing for the long haul. The life of the sea is a vast interconnected web; we cannot effectively manage species by species – for instance, managing for cod but not the cod's prey or predators.

What can we do? Reduce the amount of fishing. Catch quotas allow too many loopholes, too much waste. Eliminate decisions that risk further destruction. Let scientists, not politicians, call the shots. Require fishers to keep what they catch, period: no more selective dumping of less valuable species. Use the best gear possible to reduce bycatch. Technology is available to allow us to fish much

more selectively, with much less collateral damage, if only we'd use it. Ban or restrain the most damaging gear – bottom trawls, vast gillnets, longlines – wherever they're most destructive.

Above all, turn a third or more of our ocean's total area into marine reserves. The tiny reserves that have already existed for a decade or more have allowed the sea's creatures to renew themselves, even to approach former abundance. This has benefited local fishers as well, since the bounty spreads into surrounding waters. They can catch more fish with less effort, and have better lives themselves.

The final word: some of Roberts' suggestions have already become realities; there's still hope for the sea.