NET LOSS

Song for the Blue Ocean: Encounters Along the World's Coasts and Beneath the Seas, by Carl Safina, Henry Holt and Company, $30; 458 pp.

"Space . . . is big. Really big. You just won't believe how vastly hugely mind-bogglingly big it is," said Douglas Adams in The Hitchhiker's Guide to the Galaxy. Sadly, the dominant species on our blue mote in space has similar difficulty comprehending the immensity of sea. Ninety-nine percent of the biosphere that plants and animals permanently inhabit (that is, feed and reproduce in) is sea. Below the wavy surface, events happen out of sight and largely out of mind. But unless we open our eyes to what is really happening, we cannot protect and sustainably use the sea.

Now comes an eye-opener: Song for the Blue Ocean, Carl Safina's lyrical celebration of the diversity of marine life. Carl Safina, a biologist, sport fisherman, and veteran of marine conservation battles, heads the Living Oceans Program at the National Audubon Society. With the kind of insight, clarity, and eloquence found only in the very best nature writing, he enlightens us about the decline of fisheries worldwide and weaves together the diverse voices of citizen conservationists, scientists, international diplomats, and people who fish for a living.

The author uses three themes to illustrate the broader story of humankind's effects on marine ecosystems. He first examines the bluefin tuna, a warm-blooded missile of a fish that can outweigh and outpace a horse and whose migratory routes from spawning to feeding grounds cross vast oceanic expanses. Bluefins are apex predators, species--like lions, wolves, and eagles--that evolved largely without predation from other species. We now regard the bluefin's terrestrial counterparts as magnificent creatures, and protect them accordingly, yet value this giant tuna primarily as sashimi. In Tokyo, the finest 715-pound frozen bluefin sells wholesale for $83,500, producing staggering, corrupting profits.

The International Commission for the Conservation of Atlantic Tunas (ICCAT), an organization of Atlantic-rim countries, plus Japan, was founded to ensure healthy populations of tunas and similar species. But ICCAT's scientific reports, Safina concludes, show that most species under its authority--including bluefin, sword-fish, and blue and white marlin--are in decline. He shows that ICCAT members have used both nationalist demagoguery and intimidation to keep bluefin catches so high that bluefin breeding populations in the western Atlantic have declined 90 percent since 1970. ICCAT, says Safina, "might well stand for International Conspiracy to Catch All the Tunas."

The second theme is an elegy to Pacific Northwest salmon, which range the ocean, then return to their natal streams, fighting currents and vaulting cataracts to hurl pea-sized eggs bearing their genes into the future in one paroxysmal, fatal spawning. Salmon once supported the rich indigenous cultures of Northwest Coast Indians. Each year, they waited for fish fattened in the North Pacific to be honored...
guests at their celebrations of thanksgiving. Rapaciousness replaced reverence, however, when Euro-
Americans invaded.

The once-bounteous salmon population has collapsed before a blitzkrieg of forces: overfishing, 
logging of ancient forests, pollution, and--most of all--dams that bar adult salmon from natal streams 
hinder their smolts' return to the sea. Safina's depiction of the political dynamics behind the 
disappearance of hundreds of salmon runs is both illuminating and depressing: everybody blames 
somebody else, and no one takes responsibility. Salmon and their habitats are coveted by the 
protagonists of many economic sectors, each maximizing immediate profit while passing on the costs, 
both present and future, to others and doing anything necessary to evade the regulatory structures set 
up to curb its excesses.

The final theme is fishing in tropical Western Pacific coral reefs, home to the world's most diverse 
shallow-water marine biota, including more than 2,500 species of fishes and nearly 500 species of 
corals. Seemingly a paradise to many, the reefs are marred by an ugly reality: The islanders fish 
spawning aggregations of groupers and other species with dynamite, cyanide, and bleach to appease 
Hong Kong consumers' taste for live fish, and to sell as short-lived curios for marine aquariums. As 
with bluefins and salmon, short-term profits, not ecological processes, now rule, and the fishes are 
fast disappearing from the reefs. The islanders have gone from fishing for food to fishing for money, 
and the cooperation of their governments is easily bought.

Among the book's grace notes are the remarkable people it depicts: commercial fisherman Dick 
Good, who despite a meager day's catch of only four salmon, gives one of them to Safina; and 
ecologist Bob Johannes, who discovered that indigenous Micronesians had evolved ways of fishing 
coral reef fishes sustainably until a cash economy replaced their subsistence economy. But this book 
is also revealing of the author, who is candid about his own foibles and chides himself for his 
sometimes hasty judgments about people. He writes with insight and wit; and his best, often sensuous 
phrases last like memories of chocolate after the taste itself is gone.

Safina's lesson is clear: the sea is a rich endowment of biological capital whose interest could sustain 
us forever. But we should not forget that billions of passenger pigeons darkened America's skies in 
1850 and became extinct in 1914--in just one human life span. That was before the United States had 
strong conservation laws, such as the Endangered Species Act and the Magnuson-Stevens Fishery 
Conservation and Management Act. But this author has observed that our federal government is 
reluctant to invoke their protective provisions to avoid offending fishing companies, loggers, cattle 
ranchers, real estate developers, the electric power industry, and members of Congress be holden to 
them. Despite the scientific data and protective legislation, we are pushing our favorite food fishes 
toward the fate of the passenger pigeons, squandering our oceans' biological capital like drunken 
sailors. Reading this book just might sober up enough of us to help change course. What could be a 
better gift to future generations than a living blue Earth?

Left: Tuna, Tsukiji Market, Tokyo
Below: Drying fish on Russia's Pacific Coast. From the Faces of Fishing: People, Food and the Sea at the Beginning of the Twenty-First Century by Bradford Matsen, Monterey Bay Aquarium Press, 1998, $19.95, 199 pp., illustrated.

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