

Fishing: How the Sea Fed Civilization

Brian Fagan.

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Elegant and sweeping in scope, Brian Fagan's *Fishing: How the Sea Fed Civilization* is a timely publication on an important yet often-overlooked topic. From hominin to 21st-century *Homo sapiens*, Fagan details our age-old dependence on seafood—the last and major remaining resource from the wild. As is revealed through dozens of case studies from throughout the world, humble fishing was indispensable to the development of social complexity, the rise of civilizations and the eventual instauration of the modern world. Firmly anchored in current archaeological, ethnographic, historical, paleo-anthropological, -environmental, and -ecological research, the book skillfully straddles the unusual literary border of a scientifically-grounded work with serious public reading appeal.

Part One is dedicated to early subsistence fishing prior to the appearance of cities and the rise of civilizations. Fagan sets off the first chapter by illustrating how 1.75 million years ago our resourceful hominin ancestors caught catfish trapped in receding pools at Olduvai Gorge, Tanzania. He argues that opportunism driven by curiosity and observation set human ancestors and early humans apart from other animals, leading them to creatively subsist on readily-available fish and mollusk resources. This then opened the door to migration within and out of Africa and subsequent adaptation to an array of new environments, each with new and unique fishing opportunities. In their search for new fishing grounds and shell beds, humble fishers were the catalysts of human mobility and drove the settling of new continents.

Chapters three through eleven draw upon a diversity of case studies from around the world following human migration out of Africa. As is revealed, Neanderthal and Magdalenian bands in southwestern Europe not only depended on large Ice Age game, but their omnivorous diets also included salmon and trout speared during annual runs upstream to spawn. After the Ice Age, major climatic changes and quickly flooding coastal landscapes forced human migration and swift adaptations, often on the timescale of a few generations. Alongside these changes, after 10,000 BC some human bands also began to settle down, developing more complex social organization and fishing technology and gathering strategies to feed growing populations as was the case with the Jōmon in Japan or the Calusa in Florida. The invention and perfecting of watercraft also followed suit and fisherfolk soon started targeting not only easily-accessible marine and riverine resources but also larger marine mammals and pelagic fish by boat in the Pacific northwest and in Oceania. Marine mobility also brought along with it the creation of exchange networks and alliances, as was, for example, the case with the Chumash of coastal California.

Part Two discusses the rise of complex societies and fishing no longer for mere communal subsistence but rather for state rations and long-distance trade and mobility. Preserving large catches from spoilage became paramount, and salting, drying and fermentation methods were developed, enabling, for instance, the ancient Egyptians to feed pyramid builders with fish rations, the Incas to trade dried anchovies from the coast high into the Andes, or the Romans to commerce garum and salt-fish to the farthest reaches of their empire. As populations ballooned, erratic wild aquatic resources were complemented by more stable supplies via increasingly sophisticated aquaculture. The Romans perfected the art of fish farming in Europe, while in Ancient China carp farming reached enormous proportions. Fish thus came to feed the

urban populations, armies, and merchant seafarers of large civilizations on scales never seen before.

Finally, Part Three, begins with the post-Roman world and increasing large-scale fishing in the North Atlantic. Christian meatless holy days and growing urban populations dramatically increased the insatiable European demand for fish during the medieval period. Preserved minnows, herring and, eventually, cod led to the first ever international fish trade. The discovery of the Newfoundland cod fisheries in 1497 by Venetian John Cabot ushered in the mercantile capitalist world system. Soon, salted North American cod not only fed much of Christian Europe, but also became an indispensable ration for enslaved sugar workers in the 17th- through 19th-century West Indies. With industrialization, steam trawlers and mechanized boats with enormous seine nets quickly began exploiting and decimating marine life at an unprecedented rate. Diesel engines only expanded industrial fishing to the farthest reaches of the ocean.

Throughout this diversity of examples, Fagan makes clear that opportunistic humans made the best of changing environmental conditions and relentlessly dwindling fish stocks. Overfishing has pushed our marine resources almost beyond recovery and gravely endangered global food security. To Fagan, the devastation of our seas, however, cannot be seen simply as a consequence of the modern fishing industry. Fagan veers clear of the fallacy of the “environmentalist” ancient fisher. Overfishing is ancient, and as soon as populations began to shift from mobile bands to settled communities, aquatic resources that were considered limitless came under increasing strain. Actively conserving oceanic and aquatic resources is our only solution to continue sustainably fishing into the 21st century. It is after all, among other things, by understanding our aquatic past that we can conscientiously forge a more promising future for ourselves and our embattled oceans. Through this book Fagan achieves not only placing seafood

in its appropriate limelight but he, moreover, gives due centrality to bodies of water—be they streams or rivers, lakes or oceans—in human history. Fagan's is a fully and satisfyingly aquacentric archaeological book.

Subtly academic yet free from dense scholarly terminology, Fagan's book is written in his characteristic unfussy and forthright manner, making it accessible to a broad non-academic audience. Given the importance of the topic, this accessibility guarantees wide-ranging readership and broad raising of awareness of the public as to our age-old dependence on the sea and our steady annihilation of its biodiversity. This book is by all means a must read for any person interested in humans, environment and the sea.

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