

BOOK REVIEW

Fishing and Shipwreck Heritage: Marine Archaeology's Greatest Threat? By SEAN A. KINGSLEY. Debates in Archaeology. New York: Bloomsbury Academic, 2015. Pp. xviii + 158. Hardcover, \$78.00. ISBN 978-1-4725-7360-5.

In 2001 UNESCO adopted the Convention on the Protection of the Underwater Cultural Heritage, which recognizes the threat of “unauthorized activities directed at” and “the possible negative impact on underwater cultural heritage of legitimate activities that may incidentally affect it.” The convention expresses particular concern for “the increasing commercial exploitation of underwater cultural heritage” (think the salvaging of the *RMS Titanic*) and makes preservation *in situ* the first option for any management of that heritage. Reflecting public perceptions, the convention concerns itself with looting and commercial archaeological exploitation of underwater cultural heritage and leaves undefined and unaddressed “legitimate activities that may incidentally affect it.” But those “legitimate activities” in fact present a far greater threat to our fragile marine heritage than do looting and commercial exploitation. Sean Kingsley aims to correct what he rightly perceives as imbalanced attention to the less harmful of these activities by describing the enormous destruction that bottom fishing causes to our underwater cultural heritage.

Kingsley, an experienced marine archaeologist, director of Wreck Watch International, and frequent consultant for commercial and non-profit marine archaeological organizations, has a record of defending commercial and academic underwater archaeological activity against what he considers excessive concern with *in situ* preservation. He begins his latest book (in Bloomsbury’s important series Debates in Archaeology) with a review of his position on underwater archaeology and affirmation of the archaeological value of underwater sites and wrecks. He then moves to what he considers the far greater threat to underwater cultural heritage: bottom fishing and other activities that disturb the sea floor. Due to intense public scrutiny, some of these—aggregate dredging, cable-and pipeline-laying—operate with proper regulation and can avoid wrecks. But appropriate and enforceable national and international regulation does not adequately control bottom fishing.

Kingsley explains the various types of gear used by commercial fishermen and vividly describes the damage they do to the sea bottom. As they drag through sediments, destroy habitat, and level the seabed, they tear through seagrass, coral, and wrecks alike, ripping apart structure (even the steel hulls of sunken submarines), and dragging artifacts hundreds of meters from their contexts. A series of case studies throughout the world's oceans reviews prominent wrecks or other marine archaeological sites and the damage caused to them by fishing: the Mesolithic site off Yarmouth, Isle of Wight; the late Roman Sinope A wreck in the Black Sea; the fifteenth-century Longquan wreck in the South China Sea; the nineteenth-century "Blue China" wreck off Jacksonville, Florida; and many others. A few photographs, plans, and side-scan sonar images graphically enhance the discussion.

Trawlers scour some 50% of the continental shelves every year. Marine biologists have documented the toll on habitat (e.g., 90% of the corals off the southeastern United States, up to half of the *Posidonia* meadows in the Mediterranean) and fish populations (two-thirds of fish species have collapsed in the last half century), and they have advanced powerful arguments for controlling the fishing industry's devastation of the marine ecology and thereby enhancing the industry's economic viability. Kingsley wants underwater archaeologists to join the biologists. He wants them to base their argument on solid data, so he summarizes regional data, such as the result of the Odyssey Marine Exploration Atlas Shipwreck Survey Project covering nearly five thousand square kilometers off of the southwestern United Kingdom: fishing has damaged 112 of 267 identified wrecks.

Work such as Kingsley's can raise public and industry awareness, improve the data in order to assess the extent of the problem, and put pressure on states better to manage the problem. The world needs the food, but new technologies can harvest it less destructively to the sea bottom. We should educate fishermen about the importance of the heritage and compensate them for reporting discoveries. States should designate no-trawl zones, as Turkey has done successfully with its 1971 Fisheries Law (such zones, like marine protection zones in general, protect the marine environment but incidentally protect the marine cultural heritage), devote funds and personnel to mark and monitor wrecks (as has Sicily), and perhaps even utilize anti-trawling devices that impede or damage fishing gear. Kingsley suggests the development of a global Red List of wrecks that need immediate protection. Realistically, though, we probably cannot do more than protect a "minor sample of the most significant" (123).

Kingsley aims at a popular audience in many of his works; this orientation perhaps accounts for a rather off-putting (for an academic reader) fondness for strained metaphors (he especially likes the image of trawling “erasing the hard drive” of information on the sea bottom), imprecise writing, and a prolixity and repetition that make even this short book too long. The editors he thanks for keeping him “on an even keel” should have done so with rather more discipline. The book ends with an extensive and up-to-date bibliography (though surprisingly, given his concern for building a global database of marine wrecks and sites, Kingsley does not mention the Mediterranean shipwreck database of the Oxford Roman Economy Project, which has thus far counted 1784 wrecks: <http://oxrep.classics.ox.ac.uk/>). The index does not include all the places and wrecks mentioned in the text. Nevertheless, this book will educate its readers about this threat to our marine cultural heritage and encourage them to advocate proper protections.

CLAYTON MILES LEHMANN

University of South Dakota, clayton.lehmann@usd.edu