

## **BOOK REVIEW**

Title:	In the Land of the Ich- thyophagi.
Author:	M. Beech.
Publisher:	B.A.R .
Published:	2004.
ISBN:	1841715778
Pages:	314, 126 Figures, 232 Tables, 8 appendices.

## Reviewer: Abbas S. Mohammed Ali

As stated by the author, this monograph is an unaltered version of a Ph.D. thesis submitted to and awarded by the Department of Archaeology at theUniversity of York, before it was published in 2004 by the British Archaeological Reports of Oxford, under No. 1217.

The study deals with issues relating to the environmental archaeology of the Gulf (the Arabian Gulf and the Gulf of Oman) with reference to the archaeology of fish bones. It addresses questions such as the role of chronological developments, the influence of space and environment, evidence for transhumance, seasonality, practice of fish processing, fish storage and trade, etc.

The area covered by this study played a significant role in the prehistory, protohistory and history of the Near East. The Gulf was a major trade route between Mesopotamia, Delmon, Ilam, Magan and Maluha. On its coasts, major settlements have developed as ports for international trade and for the hinterlands of the mainland Arabia. It is assumed that those settlements have relied heavily on fish for their



subsistence which would be reflected in the archaeological record and accordingly would shed light on the questions raised.

As stated in chapter 1, the author has chosen to adopt an interdisciplinary approach for the analysis of his data in a framework set spatially by the region of the Gulf and temporally by a phase extending from the 5th mill. B. C. to the late Islamic period.

Chapter 2 provides a geographical and historical background to the area, where the geographical boundaries were defined together with the main characteristics of the physical environment, including climatic changes, variations in air and water temperature, salinity and gradation in sea level, etc. This was followed by a short summary of the history of the Gulf where documentary evidence refers to the Gulf since late Uruk (c. 4th mill. B. C.), showing that it was used as trade route by Babylonians, Assyrians, Persians, Greeks, Muslims and



## Portugese.

The chapter goes on to deal with previous archaeological and palaeoeconomic works in the Gulf. These works were both slim and recent, as serious work did not start there before the 1950s, after which a number of archaeological expeditions conducted surveys and excavations that had culminated in the recovery of sites ranging from the Neolithc to the Islamic Period. No sites predating the end of the Pleistocene were recovered. The earliest component is what is known as 'Group B' at Qatar, dated to the 6th-5th mill. B.C. Shortly after the end of the 6th mill. B. C., exotic influences in the form of pottery of Ubaid type of Mesopotamian origin started to reach the Gulf.

Sites of Ubaid-3 and Ubaid-4 were recovered along the western coast of the Gulf together with sites dating to the following periods: Hafit (early 3rd mill. B. C.), Umm an Nar (C. 2500-2000 B. C.), Wadi Suq (2nd mill. B. C.), Late Bronze and Iron Age into historic period (Late 2nd mill. B. C. to modern times).

Chapter 3 aimed to reflect an ethnographic study of modern and traditional fisheries of the Gulf: How many types of fish? What are their characteristics in each sub-region? Are there any marked seasonal occurrences of fish? What methods are used for catching? ... etc. Here, the researcher was confronted by the lack of adequate information on the fauna of the Gulf; e.g., the number of species vary from 35-361 according to the few publications available on the subject!

The study tends to show variations, diversity and composition of fish taxa along the Gulf. The northern and eastern parts of the Gulf proved to be relatively rich in certain species compared to the other parts of the Gulf.

Regional ecological factors may be responsible for their abundance and/or distribution. Unfortunately no such data nor on seasonality and habitat is available from the Gulf. It was also noticed that winter was not the best season for fishing, as fish migrate to the deep and high waters of the Gulf; moreover, the northern winds create another hindering factor for fishing.

The optimal time for fishing seems to be between late spring to early summer.

The ethnographic study showed that, unlike modern ones, the traditional methods used for catching fish included basket traps, barrier traps, nets, hooks and harpoons.

Chapter 4 considers the chronological developments of fisheries in the Gulf based on previous archaeological, historical, and zooarchaeological evidence to examine the changes in fish fauna, fishing equipments, fishing strategies, and fishing exploitation.

The evidence shows that during the 5th-4th mill. B. C. fishing in the northern Gulf was characterized by small fish of coastal waters compared to the situation in the southern parts of the Gulf where the concentration was rather on the large deep waters fish. During the 3rd-2nd mill. B. C. there was a clear shift towards large offshore types. During the late Bronze and Iron Ages both types, large and small, continued to be exploited, and such was the case for the later periods. It was not clear whether that was due to regional variations or to variability in archaeological recovery. The fact that copper was traded and metal hooks came into use by this time (3rd mill. B. C.) might have had a role to play.

Fishing equipment recovered included net sinkers, shell and metal hooks, harpoons, and traps. The evidence shows some regional differences within the Gulf communities together with differences through time.

The following chapter, 5, presents the fish fauna from 23 archaeological sites in the Gulf and the results of the analysis. It started by describing in detail the methodology utilized (sampling, recording, quantifying, .. etc).



Then, it summarized the major confrontations such as the lack of substantial comparative collections essential for the study. Hence, the author spent great amount of time and efforts to collect specimens to form an adequate reference for the analysis. This, in itself, has resulted in a catalogue of osteological comparative collection of the Gulf fishes that would contribute positively to any similar future studies.

The actual faunal data collected from 23 sites from the Gulf was studied in great details. The study has confirmed the assumption that those communities have relied heavily on marine species. It has shown that there were variations in type and size of fish caught along the Gulf. Whether this was due to preservation, recovery or otherwise remains to be investigated.

Chapter 6 was meant to examine the influence of space and environment by comparing ancient and modern fisheries data. It started discussing some of the inherited problems involved in the data analysis such as preservation of bones which can be affected by the destruction of nature and burning and/or cooking by man; recovery bias caused by different sieving methods; identification caused by the lack of adequate reference collection; ...etc, most of which were rather uncontrollable.

Then the chapter goes on to compare the zooarchaeological evidence versus modern data using various formulae such as NISP, cluster analysis, relative frequency, and percentage similarity. It shows relative diversities and some regional patterns highlighting certain differences within the Gulf.

Chapter 7 deals with the question of seasonality and transhumance of the inhabitants of the Gulf by comparing zooarchaeological and modern fish fauna, together with examining the pattern of mobility between coastal and interior settlements. The author used the ethnographic data relating to fisheries from chapter 3 to contribute to this issue. The author estimated the age of certain species of fish by studying the growth of otolith in zooarchaeological data compared to modern specimens.

The study also tends to support the ethnographic observation that fishing was not a major activity in winter months.

Chapter 8 looks into the possibility of fish processing and evidence for fish storage and trade in the archaeological record. Here, too, ethnographic data was utilized. Fish drying by different methods is still in use in the Gulf countries, and it is transported to the inland oases.

Archaeological evidence seems to argue for drying and storing of fish in antiquity. Fish bones were reported from inland sites, suggesting contacts with the coast.

The last chapter, 9, summarizes the conclusions reached in the previous chapters - the role of environment, social behavior, technology, etc.-- in formulating marine exploitation. The chronological factor proved less significant. The study of the zooarchaeological material tends to show variations in regionality and seasonality of fish in the Gulf in support of the ethnographic data. As of today, fish processing was known among the communities of the ancient Gulf. Fish were dried, stored and bartered or traded with the interior and other parts of the Gulf. Then the chapter concluded with a set of goals for future research.

The eight appendices contain valuable information on the taxonomy, size, and habitat of fish taxa in the Gulf; a catalogue of comparative collection of Gulf fishes; quantification of the studied fish remains, and information on their archaeological assemblages, etc.The long list of cited references reflects a wide coverage of the subject.

This monograph is an interesting contribution to the archaeology of the Gulf, setting the



foundation for future works in its sub-field. It has provided "for the first time a detailed insight into the status of past fisheries resources in the region as well as an insight into the fishing strategies utilized by early coastal inhabitants of the Gulf during the course of 7000 years."

Dr. Beech should be congratulated on a well chosen topic, a remarkable set of objectives, a meticulous collection of data, a proper methodology and a well organized and carried out thesis.

Indeed, subsistence strategies of prehistoric and historic communities, together with seasonality and transhumance have long been of interest to archaeologists. Such a research can best be conducted in areas and phases that have witnessed intensified archaeological works. Though the Gulf provides an ideal environment for such study, due to its marked differences in salinity level and summerwinter temperatures, the information available on its archaeology, not to mention zooarchaeology, is slim. Nonetheless Beech's thesis has "more than doubled the total number of studied fish bone assemblages in the whole of the Gulf".

The reader may notice some sort of disequilibrium, first in the chapters length and second in the spatial representation of the data. As for the former, Chapter 5 contains about 100 pages while the remaining eight chapters do not exceed 80 pages. For that matter I would have preferred a different balance where chapter 1 and 9 remain as they actually are: an 'introduction' and a 'conclusion' respectively. Chapter 7 and 8 might be merged as one. For the latter, 21 out of the 23 bone assemblages analyzed come from U.A.E., one from Saudi Arabia, and one from Kuwait. Temporally 5 assemblages date to the Ubaid period, 4 to the Bronze and Iron Age, and 13 to the Islamic and pre-Islamic eras. Here I find the excuse for the author as this situation was imposed by the nature of the uneven archaeological research in the region.

<u>Prof. Abbas S. A. Mohammed Ali</u>: Department of Archaeology and Museology, College of Arts, King Saud University, P.O. Box 2456 Riyadh 11451, K.S.A. E-mail: sidahmed@ksu.edu.sa