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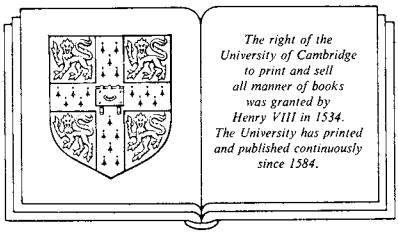

Cambridge University Press
Cambridge
New York Port Chester Melbourne Sydney

CAMBRIDGE UNIVERSITY PRESS
Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo, Delhi

Cambridge University Press
The Edinburgh Building, Cambridge CB2 8RU, UK

Published in the United States of America by Cambridge University Press, New York

www.cambridge.org
Information on this title: www.cambridge.org/9780521105415

First published 1989
This digitally printed version 2009

A catalogue record for this publication is available from the British Library

Library of Congress Cataloguing in Publication data
Wheeler, Alwyne.
Fishes / Alwyne Wheeler and Andrew K. G. Jones: illustrations by
Rosalind Wheeler.
p. cm. – (Cambridge manuals in archaeology)
Bibliography.
Includes index.
ISBN 0-521-30407-5
1. Fish remains (Archaeology) I. Jones, Andrew K. G. II. Title.
III. Series.
CC79.5.A5W53 1989
930.1′028 – dc 19 89-544 CIP

ISBN 978-0-521-30407-8 hardback
ISBN 978-0-521-10541-5 paperback

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ACKNOWLEDGEMENTS

No book is the total unaided work of its authors. We both owe a debt to colleagues and friends who have provided advice, criticism, inspiration and learning which together have added to the knowledge which led to the preparation of this book. Both of us owe much to many friends in archaeology and ichthyology who have often (sometimes unwittingly) added to our knowledge of the two disciplines.

We both wish to acknowledge the effort made by our artist Roz Wheeler who has drawn, patiently discussed, and redrawn the illustrations, often in the small gaps of a busy life.

We have both benefited from the advice of Don Brothwell (Series Editor) and Peter Richards of Cambridge University Press, whose experience in archaeology and publishing respectively have always been at our disposal. Both have been remarkably patient in waiting for us to finish the book.

Andrew Jones would like to thank his colleagues at the Environmental Archaeology Unit, University of York, for numerous discussions and for their help in other ways. In particular, he would like to record his indebtedness to Julie Jones for reading the early chapters of the book (and in the past for tolerating so many unpleasant fishy smells).

Alwyne Wheeler wishes to thank Sita Fonseka for typing his share of the text with her usual accuracy and speed. He is also strongly indebted to Cicely Wheeler for providing the milieu in which thought and constructive writing are possible.

Julie Jones created the index; we would both like to thank her for making so important a contribution to the usefulness of the book.

Together we acknowledge the York Archaeological Trust for photographs of the tank in use in fig. 4.3, R. Hunter, Biology Department, University of York for drafting fig. 4.4, and Mads-Peter Heide-Jørgensen of Danbiu ApS, Hellerup, Denmark, for permission to reproduce fig. 9.1 from T. Härkönen's *Guide to the otoliths of the bony fishes of the northeast Atlantic* (1986). We are also grateful to Johannes Lepiksaar and Alfonso Rojo for helpful comments on bone element terminology.

PREFACE

Fishes have been an important source of food for hominids since at least Upper Pleistocene times. Unlike mammals and birds, their exploitation has mainly been by the capture of free-living individuals, the cultivation of fishes (although an ancient art) having been on only a local scale, chiefly in Asia and Europe, until the middle years of the twentieth century. The capture of free-living animals, often indiscriminately as to kind or size, has resulted in a greater diversity of species being used for food than is the case for other vertebrate groups. As there are more species of fishes than all mammals, birds, reptiles and amphibians worldwide (and generally within local faunas also), the problem of identifying fish remains in archaeological sites is complicated both by the wide range in size of fishes represented and by the number of species involved.

The study of fish remains has much to offer environmental archaeologists, especially those concerned with coastal, riverine and lacustrine sites. Properly handled and analysed, fish bones can provide information on the species exploited, and from a knowledge of the habitats of the fishes, the archaeologist can advance hypotheses concerning the methods used to capture the fish and the level of technology required to sustain such methods. Within limits, fish remains can also be used to establish the numbers and sizes of individuals, their body weight and sometimes seasonality of capture.

This book contains chapters concerned with the anatomy of fishes, in particular the hard structures of relevance to the archaeologist, the preparation of comparative skeletons of specimens and their curation, methods of recovery of fish remains, discussions of taphonomy, and aspects of fish ecology. The second chapter includes a world overview of the families of fishes of potential importance for food. Other topics discussed involve the estimation of size from the hard remains of fishes, the calculation of seasonality of capture from both ecological information and the analysis of fish growth, as well as the interpretation of fishing activity based on the analysis of fish remains.

The main thrust of the book is to give practical information as simply as possible. This is not a manual which puts forward theoretical approaches to fish archaeology using techniques culled from fisheries research. Such techniques are certainly valid in their own discipline but are based on the collection of data from thousands of specimens over a short period of time. Their

relevance to archaeological fish remains, which are often damaged, have a wide temporal distribution, and are rarely available in statistically significant quantity, is dubious. For this reason such techniques and methods are merely outlined here and their potential use to archaeologists is indicated, but the archaeologist is warned not to expect too much of them. While many of the examples used in this book are from European sites and fishes, the application of the information, especially of methods and techniques, is worldwide.

Above all, we hope that this book will prove useful to environmental archaeologists and will encourage and enable others to discover the fascination we have experienced during our dealings with the remains of ancient fishes.