

Introduction

The present work is a fully illustrated field and laboratory manual of practical interest to the experienced fish bone analyst and the student of fish osteology. It was especially designed with regard to the particular problems and requirements of archaeologists. In the field it is intended to be useful for preliminary identification when comparative material is not available. As a laboratory handbook, it will familiarize the user with all the bony elements to be found in archaeological and comparative material. Because the drawings are of disarticulated elements, and organized according to anatomical origin, this convenient illustrated guide will help make sense of the jumble of bones that results from the processing of specimens into a comparative skeletal collection. Above all, the prime objective of this manual is to show basic osteological differences between various fish taxa on the basis of complete osteologies.

Despite the limited number of species depicted, this manual can at the very least help to rough sort archaeological remains into a general category of fish as opposed to other vertebrates. Because it encompasses several of the most common marine forms found in the Northern Hemisphere, it will help to narrow identification in many cases down to the level of family, if not to genus or species. Finally, this manual can help reduce problems of quantification and interpretation by making the user familiar with all identifiable elements of the fish, and not just those most easily recognized. Although it is not practical to produce an exhaustive manual covering all fish species found in this area of the world, it is hoped that this handbook will precipitate further interest and offer practical aid in the generation of osteological collections of different fish species, and emphasize the importance of continued work in this previously neglected area of archaeological analysis.

Fish Identification

For the archaeologist interested in working with fish bones, the availability of published osteologies is very restricted. Those that have been produced are found widely scattered throughout the zoological literature, and are often difficult to obtain. Illustrated osteologies of fish are inevitably general, buried in general works of biological or zoological origin, and picturing mainly articulated skeletons. Most osteological studies were conducted in the early part of this century, and the early works such as Starks (1901), Allis (1909), Gregory (1933), and Tchernavin